

Academic qualification acceptability and authenticity: a comparative risk assessment of approaches employed by the recruitment and higher education sectors of Australia

Volume 1 of 2

By

George Maxwell Brown B.Bus., Grad. Dip. Ed.(UniSA), M.Ed.(Flin)

Thesis submitted for the requirements of the Degree of Doctor of Philosophy in the School of Education, University of Adelaide

Don't get fleeced. Make sure the sheepskin is real.



Used with permission © Ramiel Papish http://www.rampapish.com

Table of Contents

TABLE OF CONTENTS	111
LIST OF TABLES	XIV
LIST OF FIGURES	XV
LIST OF FIGURES	XV
LIST OF DEFINITIONS AND ABBREVIATIONS	XVII
ABSTRACT	XIX
DECLARATION	XXI
ACKNOWLEDGEMENTS	
CHAPTER 1 – INTRODUCTION AND RATIONALE FOR THE STUDY	1
1.1 BACKGROUND TO THE STUDY	1
1.2 AN OVERVIEW OF ACADEMIC QUALIFICATION FRAUD; TAXONOMIES FOR THE RECRUITMENT AND	D HIGHER
EDUCATION SECTORS	4
1.3 THE GLOBAL INCREASE IN 'NON-OFFICIAL' HIGHER EDUCATION PROVISION	12
1.4 THE GLOBAL INCREASE IN THE FALSIFICATION OF BONA FIDE ACADEMIC QUALIFICATIONS	17
1.4.1 China	18
1.4.2 Russia	19
1.4.3 South Africa	19
1.4.4 North America	20
1.4.5 United Kingdom	
1.4.6 Other countries	
1.4.7 Australia	
1.5 LACK OF SCREENING AND GLOBAL REGULATION PERTAINING TO ACADEMIC QUALIFICATIONS	28
1.6 Past research pertaining to qualification acceptability and authenticity	38
1.7 RESEARCH PROBLEM AND OBJECTIVES OF THE STUDY	
1.8 RISK AND RISK PARADIGMS IN EDUCATION	
1.8.1 Risk perception and levels of trust	
1.8.2 Risk management and higher education provision	
1 O THE RISK MANAGEMENT BROCESS, A ER AMEWORK FOR METHOD	52

1.9.1 Phase 1 – Establishing the risk context	55
1.9.2 Phase 2 – Risk assessment process	56
1.9.3 Phase 3 – Risk treatment process	56
1.10 THE SIGNIFICANCE OF THIS STUDY	56
1.11 SUMMARY AND CONCLUSIONS	58
CHAPTER 2 – THE RISK CONTEXT OF HIGHER EDUCATION: UNDERSTANDING THE	
SOCIETAL PRESSURES FOR ACADEMIC CREDENTIALS	60
2.1 Programs	60
2.1 PREAMBLE	
2.2 THE SOCIETAL FUNCTIONS OF HIGHER EDUCATION AND RECENT CHANGES	
2.3 HUMAN CAPITAL THEORY	
2.3.1 Individual benefits from higher education	
2.3.2 Public returns from higher education	68
2.4 CREDENTIALISM - THE CHALLENGE TO HUMAN CAPITAL THEORY	70
2.4.1 Credentialism and screening theory	75
2.4.2 Screening and signalling in the recruitment industry	<i>79</i>
2.4.3 Screening and signalling in the higher education sector	84
2.5 DEGREES AS POSITIONAL STATUS GOODS – AN APPLICATION OF CLUB MEMBERSHIP THEORY	86
2.6 Satisfying unmet demand	88
2.8 A NEW MODEL FOR ANALYZING ACADEMIC CREDENTIALS	90
2.9 SUMMARY AND CONCLUSIONS	99
CHAPTER 3 – RISK IDENTIFICATION: ACADEMIC DEGREES, THEIR ACCEPTABILIT	'Y AND
THEIR SOURCES	
	100
3.1 PREAMBLE	
3.2 THE ORIGINS OF HIGHER EDUCATION QUALIFICATIONS	
3.2.1 An early history of the academic degree	
3.2.2 A history of the degree parchment/ testamur	104
3.3 CONTEMPORARY MEANINGS OF A DEGREE QUALIFICATION	106
3.4 THE CREDENTIALING PROCESS	107
3.5 THE ACCEPTABILITY OF HIGHER EDUCATION QUALIFICATIONS	111
3.5.1 The university's traditional right to confer degrees	111

3.5.2 Accreditation; the desire to guarantee acceptability	113
3.5.3 Accreditation from a global perspective	115
3.6 DIFFERENTIATING ACADEMIC QUALIFICATIONS FROM ACCEPTABLE AND NON-ACCEPTABLE PROVI	DERS AND
SOURCES	118
3.7 DEVELOPING A NEW TYPOLOGY FOR THE SOURCES OF ACADEMIC DEGREES	126
3.7.1 'Official' sources of higher education credentials	128
3.7.1.1 Virtual front ends	129
3.7.1.2 Collaborative ventures	129
3.7.1.3 Corporate, non-award	130
3.7.1.4 Solely on-line institutions	130
3.7.2 'Non-official' sources of higher education credentials	132
3.7.2.1 Start-up institutions or new areas or study	133
3.7.2.2 Religiously exempt institutions	133
3.7.2.3 Licensed/ authorised but unaccredited	134
3.7.2.4 University companies operating in unregulated jurisdictions	135
3.7.2.5 Degree Mills	136
3.7.3 Sources of falsified academic credentials	136
3.7.3.1 Diploma mills	137
3.7.3.2 'Do it yourself' - Glenn Oakley 'catch me if you can' style	137
3.7.3.3 Claim a degree, without proof	138
3.8 TYING THE MODELS TOGETHER – CONTINUUMS OF LEGITIMACY, ACCEPTABILITY AND RISK	138
3.9 SUMMARY AND CONCLUSIONS	142
CHAPTER 4 – RISK IDENTIFICATION: AN ANALYSIS OF 'NON-OFFICIAL' AND FRAU	DULENT
QUALIFICATION PROVIDERS AND SOURCES	
4.1 PREAMBLE	143
4.2 Non-official academic credential providers and sources	144
4.2.1 Licensed/ authorized but unaccredited	145
4.2.2 University companies incorporated and/or operating in unregulated jurisdictions	148
4.2.3 Degree Mills	153
4.2.3.1 Attempts to define degree mills	157
4.2.3.2 Examples of degree mills in Australia	160
4.2.3.3 Degree Mill Type 1 – University companies selling degrees	162

4.2.3.4 Degree Mill Type 2 - Fictitious universities selling degrees	164
4.2.3.5 Corruption in accreditation and credential evaluation mills	167
4.3 FALSIFIED ACADEMIC CREDENTIAL PROVIDERS AND SOURCES	172
4.3.1 Background to qualification forgery	175
4.3.2 Methods of creating and distributing counterfeit testamurs	177
4.4.3 Diploma mills: providers of counterfeit Australian academic qualifications	183
4.4.4 'Do it yourself': Glenn Oakley 'catch me if you can' style & claim a degree without pro	of188
4.4 International sources of corruption; the heightened risk of academic fraud affects	CTING
Australia	190
4.5 IDENTIFYING THE RISKS POSED BY THE MAIN PROVIDERS AND SOURCES OF ACADEMIC QUALIFIC	CATIONS; A
SUMMARY	195
4.6 SUMMARY AND CONCLUSIONS	197
CHAPTER 5 – RISK CONTROLS: METHODS OF VERIFYING THE ACCEPTABILITY A	AND
AUTHENTICITY OF ACADEMIC QUALIFICATIONS	
5.1 Preamble	198
5.2 CONTROL PROCESSES TO MINIMIZE RISKS IN HIGHER EDUCATION QUALIFICATIONS	200
5.2.1 Legislation as a control measure	201
5.2.2 Accreditation as a control measure	205
5.3 PROCEDURES FOR VERIFYING ACADEMIC DEGREES	208
5.4 METHODS AND TOOLS USED TO DETERMINE THE ACCEPTABILITY OF HIGHER EDUCATION QUAL	IFICATIONS IN
COUNTRIES AROUND THE GLOBE	212
5.4.1 Guidebooks, listings and registers of official providers	212
5.4.1.1 International Handbook of Universities – UNESCO and the International Association of Uni	versities,
France	213
5.4.1.2 Commonwealth Universities Yearbook - Association of Commonwealth Universities, UK	214
5.4.1.3 NOOSR Country Education Profiles - National Office of Overseas Skills Recognition, Austr	ralia214
5.4.1.4 AACRAO World Education Series	215
5.4.1.5 ENIC-NARIC Registers and associated resources	216
5.4.1.6 World of Learning Guide	217
5.4.1.7 Government endorsed listings and other authoritative databases	
5.4.1.8 Register of medical institutions	219
5.4.1.9 Bologna Declaration and the Diploma Supplement	220

223
226
29
230
230
32
233
233
233
234
234
IN
236
236
239
239
244
255
255
257
260
264
787
SY
266
266
267
267
268
270
272

0.4.1 Members of the Recruitment Consulting Services Association in Australia	2/2
6.4.2 Private official providers of postgraduate higher education in Australia	273
6.4.3 Public official providers of postgraduate higher education in Australia	275
6.5 DATA COLLECTION PROCEDURES AND STATISTICAL METHODS EMPLOYED	275
6.5.1 - Stage 1 - Data collection method for subject populations and tests of equivale	nce276
6.5.1.1 Construction of the survey instrument	276
6.5.1.2 Data collection and analysis procedures	278
6.5.1.3 Sample size justification and response rates	281
6.5.1.4 Statistical significance versus practical application	284
6.5.2 Stage 2 - Data collection method for risk assessment; a modified Delphi approa	ach284
6.5.2.1 Overview and characteristics of the Delphi method	285
6.5.2.2 The Delphi approach and choice of expert panel members	287
6.5.2.3 Construction and format of the research instrument	288
6.5.2.4 Data collection and analysis procedures	290
6.6 RESEARCH VALIDITY AND RELIABILITY	291
6.7 RESEARCH CHALLENGES, ASSUMPTIONS AND LIMITATIONS	293
6.8 Summary and conclusions	298
CHAPTER 7 – RISK EVALUATION: ASSESSMENT OF ACADEMIC QUALIFICA	ATION
ACCEPTABILITY AND AUTHENTICATION PROCEDURES UNDERTAKEN BY	
HIGHER EDUCATION AND RECRUITMENT SECTORS OF AUSTRALIA	
7.1 Preamble	
7.2 INVESTIGATING INTERNET PROVIDERS OF AUSTRALIAN COUNTERFEIT QUALIFICATION	
7.3 OVERVIEW OF THE MAIN SURVEY RESPONDENTS	301
7.4 STAGE 1 - TESTS OF EQUIVALENCE	304
7.4.1 Tests of equivalence amongst those that determine the acceptability and auther	nticity of academic
qualifications	305
7.4.1.1 Test of equivalence for Research Question 1A	305
7.4.1.2 Test of equivalence for Research Question 1B	308
7.4.1.3 Tests of equivalence for Research Question 2A	311
7.4.1.4 Tests of equivalence for Research Question 2B	316
7.4.2 Tests of equivalence in perception of the importance and effectiveness of acade	emic qualification
verification processes	320

7.4.2.1 Tests of equivalence for Research Question 3A	321
7.4.2.2 Tests of equivalence for Research Question 3B	322
7.4.2.3 Tests of equivalence for Research Question 3C	326
7.4.3 Reasons for not verifying the acceptability and authenticity of academic qualifications	328
7.4.3.1 Analysis of reasons for not verifying the acceptability of academic qualifications	328
7.4.3.2 Analysis of reasons for not verifying the authenticity of academic qualifications	329
7.4.4 Other results concerning the falsification of academic qualifications	333
7.5 STAGE 2 – THE DELPHI GROUP'S RISK ASSESSMENT	333
7.5.1 Data collection, measurement and analysis	333
7.5.1.1 Results for Delphi Round 1	335
7.5.1.2 Results for Delphi Round 2	335
7.5.1.3 Results for Delphi Round 3	337
7.5.2 Semi-quantitative risk levels for acceptability of academic qualifications	339
7.5.3 Semi-quantitative risk levels for authenticity of academic qualifications	341
7.5.4 Determining the semi-quantitative risk level of acceptability and authenticity of academic	
qualifications for each population	343
7.5.4.1 Overall risk level for Research Question 4A	344
7.5.4.2 Overall risk level for Research Question 4B	346
7.6 DISCUSSION OF OVERALL RISK FINDINGS	346
7.7 SUMMARY AND CONCLUSIONS	351
CHAPTER 8 – CONCLUSIONS: A RISK TREATMENT MODEL FOR ACADEMIC	
QUALIFICATION ACCEPTABILITY & AUTHENTICITY	353
8.1 Preamble	353
8.2 Overview of the investigation for a risk treatment tool	353
8.3 LIMITATIONS OF THE STUDY	
8.4 Practical recommendations from the findings	
8.5 THE PROPOSAL FOR A NEW RISK TREATMENT: BUILDING ON THE UNESCO INFO TOOL	
8.6 AN INTERNET BASED PROCESS FOR COMPREHENSIVE ACADEMIC QUALIFICATION VERIFICATION	
8.6.1 The use of a community of practice as a risk treatment tool	
8.6.2 Rationale for the development of a virtual community of practice	
9.6.2 Cuarting the wish treatment procedure in a sintred environment	366

of Academic Qualifications (GRIPAAAQ)	367
8.7.1 Structure and format of the GRIPAAAQ	
8.7.1.1 Overview of access and operations	
8.7.1.2 Proposed participants	
8.7.2 Resource requirements for the GRIPAAAQ	
8.7.2.1 Human resources	
8.7.2.2 Technical resources	
8.7.2.3 Financial resources	
8.7.3 Role responsibilities for the GRIPAAAQ	
8.7.4 Launch and timing of the GRIPAAAQ	
8.7.5 Performance measures for the GRIPAAAQ	
8.8 CONCLUSION	378
AUSTRALIAN	
AUSTRALIANAPPENDIX 2 – RECOMMENDATIONS FROM INQUIRIES INTO THE FALSIFICAT	ION OF
AUSTRALIANAPPENDIX 2 – RECOMMENDATIONS FROM INQUIRIES INTO THE FALSIFICAT ACADEMIC QUALIFICATIONS IN AUSTRALIA	ION OF 382
AUSTRALIANAPPENDIX 2 – RECOMMENDATIONS FROM INQUIRIES INTO THE FALSIFICAT ACADEMIC QUALIFICATIONS IN AUSTRALIA	ION OF 382 MIC
AUSTRALIANAPPENDIX 2 – RECOMMENDATIONS FROM INQUIRIES INTO THE FALSIFICAT ACADEMIC QUALIFICATIONS IN AUSTRALIAAPPENDIX 3 – EXAMPLES OF INDIVIDUALS HOLDING NON-OFFICIAL ACADE QUALIFICATIONS	ION OF382 MIC386
AUSTRALIANAPPENDIX 2 – RECOMMENDATIONS FROM INQUIRIES INTO THE FALSIFICAT ACADEMIC QUALIFICATIONS IN AUSTRALIAAPPENDIX 3 – EXAMPLES OF INDIVIDUALS HOLDING NON-OFFICIAL ACADE QUALIFICATIONSAPPENDIX 4 – HIGHER EDUCATION INSTITUTIONS CLAIMING ACCREDITATION	ION OF382 MIC386 ON FROM THE
AUSTRALIANAPPENDIX 2 – RECOMMENDATIONS FROM INQUIRIES INTO THE FALSIFICAT ACADEMIC QUALIFICATIONS IN AUSTRALIA	ION OF382 MIC386 ON FROM THE394
AUSTRALIANAPPENDIX 2 – RECOMMENDATIONS FROM INQUIRIES INTO THE FALSIFICAT ACADEMIC QUALIFICATIONS IN AUSTRALIA	MIC386 ON FROM THE394
APPENDIX 1 – WASHINGTON INTERNATIONAL UNIVERSITY ADVERTISEMEN' AUSTRALIAN	MIC386 ON FROM THE394
AUSTRALIAN APPENDIX 2 – RECOMMENDATIONS FROM INQUIRIES INTO THE FALSIFICAT ACADEMIC QUALIFICATIONS IN AUSTRALIA	MIC
AUSTRALIAN	MIC
AUSTRALIAN	MIC

APPENDIX 11 – RESOLUTION BY THE WORLD ASSOCIATION OF ONLINE EDUCATION,
DISAVOWING ACCREDITATION FUNCTION411
APPENDIX 12 – EXAMPLES OF CREDENTIAL EVALUATION WEBSITES412
APPENDIX 13 – EXAMPLES OF FALSIFIED TRANSCRIPT PAPER, SEALS AND OTHER
DOCUMENTATION414
APPENDIX 14 – LIST OF RUSSIAN WEBSITES SELLING ORIGINAL RUSSIAN QUALIFICATIONS 419
APPENDIX 15 – EBAY LISTING OF FALSIFIED QUALIFICATION PROVIDER FOR THE
UNIVERSITY OF LIVERPOOL420
APPENDIX 16 – LIST OF INOPERABLE URLS FOR FALSIFIED ACADEMIC TESTAMUR
PROVIDERS422
APPENDIX 17 – ASHWOOD UNIVERSITY WEBSITE AND THE SALE OF FALSIFIED
AUSTRALIAN QUALIFICATIONS423
APPENDIX 18 – EXAMPLES OF MONASH UNIVERSITY & UNIVERSITY OF MELBOURNE
QUALIFICATIONS AVAILABLE FOR SALE AT HTTP://WWW.REPLICADEGREE.COM424
APPENDIX 19 – FAKE DEGREE REVIEW FROM HTTP://WWW.COUNTERFEITLIBRARY.COM
427
APPENDIX 20 – EXAMPLES OF INDIVIDUALS HOLDING FALSIFIED ACADEMIC
QUALIFICATIONS428
APPENDIX 21 – OVERVIEW OF US STATES WHICH HAVE LEGISLATED ON THE USE OF NON-
OFFICIAL ACADEMIC QUALIFICATIONS438
APPENDIX 22 – RECOMMENDED PROCESS FOR THE VERIFICATION OF ACADEMIC
QUALIFICATIONS439
APPENDIX 23 – LIST OF INSTITUTIONS OF 'DOUBTFUL STANDING' ISSUED BY THE
UNIVERSITY OF WALES (AS AT OCTOBER 2004)442
APPENDIX 24 – PROMOTIONAL EMAIL ISSUED BY DIPLOMASEE449

APPENDIX 25 – CHEA ADVICE FOR COMBATING DEGREE MILLS – RECOMMENDED	
EFFECTIVE PRACTICE4	51
APPENDIX 26 – OREGON EMPLOYER'S GUIDE TO COLLEGE DEGREES4	52
APPENDIX 27 – LIST OF 'WANNABE UNIVERSITIES' AND 'CV TIME BOMBS' PUBLISHED BY	
THE AUSTRALIAN NEWSPAPER4	59
APPENDIX 28 – FAKE DEGREES BROCHURE PUBLISHED BY THE NEW SOUTH WALES	
DEPARTMENT OF EDUCATION4	63
APPENDIX 29 – ADDITIONAL INFORMATION ON THE KROLL MIE DEGREE VERIFICATION	
SYSTEM (SOUTH AFRICA)4	65
APPENDIX 30 – POLICY DOCUMENTS PERTAINING TO THE VERIFICATION OF ACADEMIC	
QUALIFICATIONS ISSUED BY MACQUARIE UNIVERSITY AND THE UNIVERSITY OF	
WOLLONGONG4	69
APPENDIX 31 – OFFICIAL TRANSCRIPT POLICY ISSUED BY THE MICHIGAN ASSOCIATION	
OF COLLEGIATE REGISTRARS AND ADMISSIONS OFFICERS4	80
APPENDIX 32 – PHOTOGRAPHS/ SCANS OF MONASH UNIVERSITY, EDITH COWAN	
UNIVERSITY AND THE UNIVERSITY OF MELBOURNE PARCHMENTS AVAILABLE FROM	
MICHAEL DEMARTINI4	
APPENDIX 33 – RISK PERCEPTION SCALE4	89
APPENDIX 34 – TESTS OF EQUIVALENCE FOR RESEARCH QUESTION 2A	190
APPENDIX 35 - TESTS OF EQUIVALENCE FOR RESEARCH QUESTION 2B	191
APPENDIX 36 - TESTS OF EQUIVALENCE FOR RESEARCH QUESTION 3A	193
APPENDIX 37 - TESTS OF EQUIVALENCE FOR RESEARCH QUESTION 3B	194
APPENDIX 38 - TESTS OF EQUIVALENCE FOR RESEARCH QUESTION 3C	195
APPENDIX 39 – DELPHI PARTICIPANTS GUIDELINES, GLOSSARY OF TERMS AND RISK	
RATING TABLE	496
APPENDIX 40 – SURVEY INSTRUMENT FOR THE RECRUITMENT CONSULTING SERVICES	
	4 0 2

APPENDIX 41 – SURVEY INSTRUMENT FOR PUBLIC & PRIVATE PROVIDERS OF HIGH	ER
EDUCATION IN AUSTRALIA	509
APPENDIX 42 – SURVEY INSTRUMENT FOR THE DELPHI PANEL	518
APPENDIX 43 – THEORY PERTAINING TO COMMUNITIES OF PRACTICE	528
DEFINING A COMMUNITY OF PRACTICE	528
KNOWLEDGE MANAGEMENT; THE KEY ASPECT OF A COMMUNITY OF PRACTICE	529
COMMUNITIES OF PRACTICE AS LEARNING AND RESEARCH TOOLS	530
APPENDIX 44 – THEORY PERTAINING TO VIRTUAL COMMUNITIES OF PRACTICE	531
THE TRANSITION FROM PHYSICAL TO VIRTUAL COMMUNITIES	531
MODELS FOR A VIRTUAL COMMUNITY OF PRACTICE	532
APPENDIX 45 – SAMPLE LIST OF PROPOSED USERS OF THE GRIPAAAQ	534
REFERENCES	536

N.B. Because of the pioneering nature of this research, Appendices 1-32 have been included to give readers examples of how non-official and fraudulent providers of academic qualifications operate in the current global context.

List of Tables

Table 1 - Type of student fraud application detected for Beijing cases (1st July 2002 - 30th June 2003).	_ 18
Table 2 - Liars Index (c) Jude M. Werra & Associates, LLC.	_ 23
Table 3 - Two competing sociocultural perceptions of risk, their relation to education theory and	
contextualisation for the study.	_ 47
Table 4 - Minimum educational attainment required before work experience will be considered.	_ 83
Table 5 - Top ten sources of overseas students for Australia in comparison to the Transparency International	1
Corruption Perception Index (CPI)	194
Table 6 - Top ten countries of birth for migrant settlers from 1st Jan 2004 to 1st Jan 2006 compared to level	of
perceived corruption from the Transparency International Corruption Perception Index (CPI)	194
Table 7 - Identification of risk: a comparison of official, non-official and falsified academic qualification	
providers	196
Table 8 - Summary of responses received from the requested sale of a Sydney University MBA to 'Jong Liu'.	303
Table 9 - Equivalence tests for those that verified the acceptability of academic qualifications.	307
Table 10 - Equivalence tests for those that verified the authenticity of academic qualifications.	310
Table 11 - Summary of requests to Delphi Panel for re-rating or optional rating in Round 2	336
Table 12 - Summary of requests to Delphi Panel for re-rating or optional rating in Round 3	338
Table 13 - Risk levels evaluated by Delphi Panel for resources/ methods to determine acceptability of an	
academic qualification (sorted by levels of risk).	_ 340
Table 14 - Risk levels evaluated by Delphi Panel for resources/ methods to determine authenticity of an	
academic qualification (sorted by levels of risk).	342
Table 15 - Ecology of leadership in a community of practice.	375

List of Figures

Figure 1 - Assessment of inaccurate resume information.	4
Figure 2 - Sectors and institutions most affected by corruption, globally.	7
Figure 3 - Opportunity structure for identity related fraud and dishonesty in higher education.	8
Figure 4 - Higher Education dishonesty and identity-related fraud risk matrix.	9
Figure 5 - Risk Management Process – Overview.	55
Figure 6 – Three-dimensional attribute space model for an official degree	92
Figure 7 - Three-dimensional attribute space model for official, non-official & fake degrees	93
Figure 8 - Pathway to occupational status and economic success via the use of non-official or falsified	
educational credentials	97
Figure 9 - Three-dimensional attribute space model where non-official and fake degrees are equated to off	icial
degrees.	98
Figure 10 - The perceptual continuum models of legitimacy, acceptability and risk of academic qualification	ns.
	_ 141
Figure 11 - Degree Mills around the World.	
Figure 12 - Promotional item for Phonydiploma.com.	181
Figure 13 - Corruption Perception Index - World Map 2006 (Transparency International 2006a).	_ 193
Figure 14 - Verification related procedures to reduce identity-related fraud in higher education.	_ 209
Figure 15 - Schematic outline of the recommended procedure for the assessment of qualifications.	_ 211
Figure 16 - Comparison of strengths and weaknesses of Delphi versus Traditional survey methods.	297
Figure 17 - Number of employment and/or postgraduate places offered per annum (all participating RCS/	4,
Private and Public Higher Education Providers).	304
Figure 18 -Percentage breakdown of response by population for those that verified/ did not verify the	
acceptability of academic qualifications	307
Figure 19 - Percentage breakdown of responses by population for those who verified/ did not verify the	
authenticity of academic qualifications.	309
Figure 20 - Percentage use of selected paper based resources to check acceptability of academic qualifica	tions
(all respondents).	312
Figure 21 - Percentage use of non-print based resources to check acceptability of academic qualifications	(all
respondents)	314

Figure 22 - Percentage use of resources/ methods to check authenticity of academic qualifications (all	
respondents) - Part A.	318
Figure 23 - Percentage use of resources/ methods to check authenticity of academic qualifications (all	
respondents) - Part B.	319
Figure 24 - Importance placed on the characteristics of an academic qualification verification system (all	
respondents).	323
Figure 25 - Perceived effectiveness of a range of academic qualification verification procedures and method	ls
(all respondents).	325
Figure 26 - Preferred communication methods for the verification of academic qualifications (all responden	ts).
	327
Figure 27 - RCSA members' reasons for not verifying the acceptability of academic qualifications (%'ages).	330
Figure 28 - Reasons for not verifying the authenticity of academic qualifications (all respondents).	_ 332
Figure 29 - Overall risk level for determining the acceptability of academic qualifications (all respondents).	345
Figure 30 - Overall risk level for determining the authenticity of academic qualifications (all respondents).	347
Figure 31 - Continuum of perception of risk for the RCSA, Public and Private providers of postgraduate hig	her
education qualifications in relation to determining the acceptability of academic qualifications.	_ 351
Figure 32 - Continuum of perception of risk for the RCSA, Public and Private providers of postgraduate hig	gher
education qualifications in relation to determining authenticity of academic qualifications.	_ 351
Figure 33 - Risk Management Process - Overview.	_ 354
Figure 34 - The Global Resource Information Portal for determining Acceptability and Authenticity of Acad	lemic
Qualifications (GRIPAAAQ) – overview.	_ 369
Figure 35 - Stages of Development of a Community of Practice.	376

List of Definitions and Abbreviations

A range of important terms and definitions are used throughout this study. It is therefore important to understand the appropriate use of these terms/ definitions.

- Acceptability of an academic qualification the process of determining the suitability and standing of an academic credential and the *bona fides* of the conferring institution.
- Authenticity of an academic qualification the process of determining if a qualification has been earned legitimately and has not been falsified.
- Degree title bestowed an individual upon attainment of a certain level of academic achievement.
- Diploma a document attesting to the attainment of a qualification.
- Diploma mill an organisation or individual selling replica testamurs of *bona fide* higher education institutions.
- Justice of the Peace the functions of a Justice of the Peace may be seen as comparable to that of a Notary Public
- Non-official higher education institution/ qualification institution and/ or qualification that does not belong to a formal higher education system.
- Official higher education provider An institution which holds GAAP equivalent accreditation.
- Parchment a document attesting to the attainment of a qualification.
- Sheepskin as above.
- Testamur as above.
- URL Universal Resource Locator (i.e. website domain name e.g. http://www.fakedegree.com)

The following acronyms are used extensively throughout the study:

- AACRAO American Association of Collegiate Registrars and Admissions Officers
- AACSB Association to Advance Collegiate Schools of Business
- ACPET Australian Council for Private Education and Training
- AEI Australian Education International
- APQN Asia Pacific Quality Network
- ARTS Automated Results Transfer System
- AUQA Australian Universities Quality Agency
- AV-CC Australian Vice-Chancellors' Committee
- AQF Australian Qualifications Framework
- AOFAB Australian Qualifications Framework Advisory Board
- ACU Association of Commonwealth Universities
- CHEA Council for Higher Education Accreditation
- CUY Commonwealth Universities Yearbook
- DETC Distance Education Training Council
- DIAC Department of Immigration and Citizenship
- ECA European Consortium for Accreditation

- ENIC-NARIC European Network of National Information Centres/ National Academic Recognition Information Centres
- EQUIS European Quality Improvement System
- ENOA European Association for Quality Assurance in Higher Education
- FAIMER Foundation for Advancement of International Medical Education and Research
- DEST Department of Education, Science and Training
- DIMIA Department of Immigration, Multicultural and Indigenous Affairs
- GATE Global Alliance for Transnational Education
- GAAP Generally Accepted Accrediting Principles
- IAU International Association of Universities
- IEAA International Education Association of Australia
- ICAC Independent Commission Against Corruption
- IHU International Handbook of Universities
- INOAAHE International Network for Quality Assurance Agencies
- ISANA International Education Association Inc.
- MCEETYA Ministerial Council on Employment, Education, Training and Youth Affairs
- NACES National Association of Credential Evaluation Services
- NARIC National Academic Recognition Information Centres
- NOOSR National Office of Overseas Skills Recognition
- NTEU National Tertiary Education Union
- NOOSR National Office of Overseas Skills Recognition
- ODA Office of Degree Authorisation, Oregon, USA
- OECD Organisation for Economic Co-operation and Development
- PIER Professional International Education Resources
- UNESCO United Nations Educational, Scientific and Cultural Organisation
- VTE Vocational Training and Education
- WHO World Health Organisation

Abstract

At a time when academic qualifications are in great demand worldwide, the risk posed by non-official and falsified academic providers has increased considerably. Human capital theorists argue that acquiring degrees is an individual's investment for greater employability. Credentialist thought contends that qualifications are merely convenient screening tools. Although academic qualifications are recognised as poor proxy measures of ability, employers, human resource recruiters and higher education providers still mandate these for entry into their respective sectors. One result of this demand has been the emergence of a confusing marketplace of online provision which has created opportunities for non-official and fraudulent providers to operate alongside official institutions. The resulting risk levels appear unnecessarily high because of poor verification of qualification acceptability and authenticity. To assess the risk posed by this quandary, a comprehensive typology of academic credential providers is developed and all available verification tools and resources used to mitigate this risk are reviewed.

To investigate the extent of this problem in Australia, the study used two approaches under the theoretical framework of risk management. Firstly, the author assessed the potential risk of Australian academic qualifications being falsified and available on the Internet, through an exploratory research question. An anonymous email account was used to solicit the purchasing of an Australian academic qualification. Secondly, equivalency testing was used to assess how far existing verification tools were being employed by three separate but equally important users of academic qualifications in Australia; the Recruitment and Consulting Services Association, official Private and Public Providers of postgraduate academic qualifications. A Delphi Panel was used to provide a semi-quantitative risk level

for the key verification tools. Their measures were then applied to each population to generate a risk profile.

The findings from the exploratory research question found 46 falsified providers operating on the internet during the period of this study. Up to 54.4% offered to sell the author a counterfeit Australian academic qualification. These findings suggest that Australian higher education qualifications are subject to substantial risk of falsification. For the main research questions, an equivalent low level of moderate risk resource use was found; conversely an equivalent high use of high risk items was found amongst the three populations. As an overall risk position, public providers of post-graduate higher education placed themselves in the lowest risk position for determining both the acceptability and authenticity of academic qualifications. With regard to determining acceptability, private providers of postgraduate qualifications were less prone to risk than members of the RCSA, whereas when it came to determining authenticity, RCSA members employed better risk minimisation strategies than private providers of postgraduate qualifications.

While the semi-quantitative risk levels should be interpreted with caution, this study is the first of its type to address the problem from an Australian perspective. The study's findings point to the need for a systematic and comprehensive approach to the verification of academic qualifications, and an online risk treatment tool is proposed as a means of achieving this. Further research in the area of screening practices and quantification of non-official providers of higher education is recommended.

Declaration

This work contains no material which has been accepted for the award of any other degree or

diploma in any university or other tertiary institution and, to the best of my knowledge and

belief, contains no material previously published or written by another person, except where

due reference has been made in the text.

I give consent to this copy of my thesis being made available in the University Library.

The author acknowledges that copyright of published works contained within this thesis (as

listed below) resides with the copyright holders of those works.

Brown, G. M. (2005). Three 'Controversial' Virtual Universities: Lessons from the Australian Experience. Issue 33, August, 2005, The Observatory on Borderless Higher

Education. Association of Commonwealth University and Universities UK.

Brown, G. M. (2006). "Degrees of doubt: legitimate, real and fake qualifications in a global market." Journal of Higher Education Policy and Management 28(1): 71-79.

George Maxwell Brown

Date: June 29th 2007

-xxi-

Acknowledgements

To my wife Angela and my children Chris, Alex and Ella. Without your love and encouragement, this study would never have been possible.

To my supervisors, Professor Geoffrey Crisp and Dr Margaret Secombe; my sincere thanks for their guidance, support and encouragement during the development of this work.

To members of the Delphi Expert Panel who participated in the research and who have consented to be named:

- Ms Amanda Gordon, Senior Specialist Advisor, Overseas Qualifications Recognition Unit, Australian Education International, National Office of Overseas Skills Recognition (AEI-NOOSR)
- o Mr Yves Beaudin, National Coordinator, Canadian Information Centre for International Credentials (CICIC)
- o Ms Kitty Wigleven, Senior Credential Evaluator, Centre for International Recognition and Certification, NUFFIC, Netherlands
- Mr Herman de Leeuw, Senior Verification Officer, Informatie Beheer Groep, Netherlands
- o Ms Jessica Stannard, Senior Credential Evaluator, NUFFIC.
- Mr Rolf Lofstad, Senior Adviser, Norwegian Agency for Quality Assurance in Education (NOKUT)
- Mr Stefan Löfkvist, Credential Evaluator, Swedish National Agency for Higher Education
- o Dr Carita Blomqvist, Counsellor of Education, National Board of Education, Finland.
- o Mr Duncan Hamshere, Divisional Manager, Qualifications and Skills, UK NARIC
- Mr Michael Ringer, Administrative Manager, Global Credential Evaluators Inc. USA
- Ms Ann M. Koenig, Southwest Regional Director, Credential Evaluation Services— AACRAO International Education Services, USA

The following are but a few of the important individuals with whom I have communicated while undertaking this research. I owe them a sincere debt of gratitude for providing invaluable information which assisted in the development of this study (in alphabetical order):

- o Dr John Bear
- o Mr Chris Carstens
- o Mr Alan Contreras
- o Mr Greg Des Elms

- o Dr Ronald Dore
- o Dr Rich Douglas
- o Mr Allen Ezell
- o Mr Peter French
- o Dr George Gollin
- o Mr Dale Gough
- o Ms Elizabeth Jones
- o Mr Nuwan Kalpage
- o Professor Nikos Kokosalakis
- Ms Melenna Krennmayer
- o Mr Joel Lucas
- o Mr Ron Marchant
- o Dr Gary Marx
- o Ms Julie Mills
- o Mr Ramiel Papish
- o Mr Geoff Stockton
- o Mr Jude M. Werra

Particular thanks are extended to:

Mr Herman de Leeuw, for his valued networking assistance.

Dr Craig Zimmitat, for his kind use of SurveyMaker http://www.surveymaker.com.au.

Mr Brent Taylor, Director, Values Bank Research for access to the online RCSA survey system.

Dr Arthur Hughes for his proofing assistance.

Chapter 1 – Introduction and rationale for the study

1.1 Background to the study

Higher education has become, over the last century, one of the few truly global industries. Nothing can stop, let alone reverse, the stampede into higher education (Wolf 2002, pp 169 & 170).

The world of higher education has changed rapidly over the last twenty years, with globalisation coming to the fore as a major force (Altbach 2006). Although it has become almost cliché to continually cite the massive expansion in both traditional and transnational tertiary programs, their increase is quite phenomenal. Between 1999 and 2004, global tertiary enrolments grew by 40%, with the number of mobile students worldwide increasing 41 percent from 1.75 million to 2.5 million (UNESCO 2006b). A report commissioned by the Organisation for Economic Co-Operation and Development (OECD) determined that an increasing number of individuals sought to enter higher education courses, with over half of all young adults in OECD countries participating in post compulsory higher education (OECD 2004b). In quantitative terms, this represents over 100 million students worldwide (one in five globally), envisaged to increase to 125 million students by 2020 with expenditure exceeding \$US40 billion per year (Daniel 2006).

In Australia, forecasts suggest that over 8 million higher education student places will be in demand by 2025, a rise from 1.8 million in 2002 (IDP 2002; DEST-AEI 2005, p.ix). With this exponential rise in higher education participation, there is also a concurrent rise in mobility of both students and institutions. According to statistics generated by the Department of Education, Science and Training (DEST), the total number of students undertaking courses outside of their home countries has doubled since 1980 (DEST-AEI 2005, p.1), with close to 3 million students studying through an overseas institution (OECD

2006). Whilst these figures are positive, there is still a paucity of rigorous data in relation to the tracking of transnational delivery of higher education providers (Knight 2006a, p.5) and this raises concerns in relation to quality and the authority of providers delivering programs outside national boundaries.

Whilst this growth has been a significant provider for opportunities to all stakeholders, it has also brought with it inherent threats to quality standards expected of the higher education sector (Zeleza 2005). In the United Kingdom, employer groups are critical of the government's move towards the 'massification' of higher education. A study undertaken by the Association of Graduate Recruiters found that six out of ten firms viewed the expansion of higher education as detrimental to graduate quality ('Too many graduates', bosses say 2004). Relevance has also been questioned, with 46% of all IT graduates claiming that their qualifications did not provide them with the requisite job skills (Oates 2006). These opinions have been mirrored in Australia, with the Business Council of Australia critical of the education and training system and its capacity to provide graduates with relevant workplace competencies, innovation and teamwork skills (Business Council of Australia 2006, p.25). Despite these criticisms, empirical research shows that 95% of Australian university graduates are employed within 3 months of leaving university (Maiden and Kerr 2006).

The contemporary higher education landscape has challenged existing institution's policies, funding arrangements and regulatory frameworks (OECD 2003, p.2; UNESCO 2003; OECD 2004g, p.2; Hallak and Poisson 2005) and has become a fast moving, complex, single worldwide interrelated hierarchy (Marginson 2006a; b). This lucrative, complex and essentially confusing market, in the author's view, provides an optimum platform for fraud, the major focus of this study.

The role of postsecondary education, both as an agent and reactor to globalisation is seen as a critical area of debate and study (Knight 2006b, p.208), all primarily fuelled by the insatiable demand for degree qualifications (Chen 2006). The blurring of jurisdictional boundaries and the movement of individuals intra and inter country has posed distinct challenges in relation to qualification acceptability and authenticity (Hallak and Poisson 2005, p.4).

This study is being conducted at a time when concerns surrounding the acquisition and use of non conventional qualifications have begun to loom large. In Australia, academic qualifications are highly valued by employers for recruiting individuals about whom they have limited information (Ridoutt, Smith, Hummel and Cheang 2005, p.6). These same credentials are also highly valued by higher education providers for admission into their postgraduate programs. A certain level of trust is placed in this documentation, similar to that of passports and other personal identification attesting to individual *bona fides*. The reliance on the integrity in academic documentation is of paramount importance in a knowledge-based economy, with higher education qualifications the dominant currency for employment and mobility (DET 2005, p.18; Garrett 2005, p.2). If fraud is allowed to be perpetuated within an educational framework, this promotes distrust about the academic enterprise at large, and can put at risk the education export industry of a given country (Hallak and Poisson 2007, p.234).

False academic credentials and degrees from unaccredited colleges and universities are now commonplace (Aumann 2006) creating heightened concern. So-called homeland security is of paramount importance due to the burgeoning menace of international terrorism and the potential issuance of student visas based on falsified documents including academic credentials. This study explores these issues and provides for an in-depth inquiry into approaches designed to minimize the risks they create.

1.2 An overview of academic qualification fraud; taxonomies for the recruitment and higher education sectors

Fraud is endemic within a range of industries. In relation to higher education, research suggests that the public tends to be unaware of both the nature and extent of dishonesty, particularly with reference to the supply of and demand for fraudulent qualifications (Noah and Eckstein 2001). In 2004, the Australian arm of KPMG determined that fraud, in various forms, cost businesses over \$450 million dollars annually, with identity fraud becoming an increasingly serious problem (KPMG 2004, p.4 & p.27). Traditionally, academic fraud has been associated with examinations or tests, however the scope of this activity also covers credentials and diplomas (Hallak and Poisson 2007). In specific relation to resume fraud and the falsification of academic qualifications, studies conducted around the world have been varied, and the methods of data collection debatable. In an attempt at an indicative figure, Aamodt (2003, p.7) undertook a brief review of overall resume fraud from a sample of 15 studies, outlined in Figure 1, below:

Сотрату	Year	Resumes Examined	Sample	% with inaccurate information
ChoicePoint Asset Company	2001		 	67
Risk Advisory Group	2002			54
ADP Screening & Selection	2001	2.600,000		14
Infocheck	2000	1,000		33
Edward Andler	1998			33
Monster.com		555	27	
Kroll Inc	2002			25
Kessler International	1998	1.000	IT Professionals	25
Accenture Canada	2002	350	IT Professionals	25
AAIM Management Association	2002	65,000		25
Jude Werra & Associates	2001			24
Avert, Inc.	2001	1.800,000	24	
Christian & Timbers	2001	7,000	Executives	23
Preemploy.com	2002	2,000		16
Jude Werra & Associates	2002		Executives	11

Figure 1 - Assessment of inaccurate resume information.

Source: Aamodt (2003, p.7)

Based on the above data, Aamodt concluded that the percentage of resumes containing false information was approximately 25%.

Other areas of academic fraud have received particular attention. In seeking to combat the apparent rise in dishonesty, universities have allocated significant resources and research into addressing the problem (Brimble and Stevenson-Clarke 2005). Academic plagiarism continues to be commonplace. Proactive measures such as Turnitin http://www.turnitin.com seek to curb its rise, yet an increasing number of students are turning to online companies to provide academic papers, including PhD theses (Contractor 2007). In a bid to curb the rise in use of such companies, Google, the largest internet search engine recently banned advertisements for essay-writing services (Blair 2007) however this will arguably do little to solve the problem. Revelations of prominent figures such as Dr Martin Luther King who allegedly plagiarized over one third of his PhD thesis (Pappas 1998), and Russian President Vladimir Putin, accused of falsifying his PhD thesis via a thesis writing service (Corwin 2006), do little to assist the credibility of higher education credentials and the institutions that confer them.

Within Australia, The Independent Commission Against Corruption (ICAC) in New South Wales reported over 133 falsified diplomas being issued through altered records on the TAFE student management system, consisting of fraudulent building, electrician and computer science qualifications (ICAC 2005b). Other global revelations, including the issuance of falsified transcripts, alteration of grades, and higher grades being provided in exchange for sex and money (Jaschik 2005b; a), further erode the credibility of higher education.

The words 'fraud' and 'higher education' are not comfortable partners. Unfortunately, the global age of higher education necessitates research in this area if only to protect higher education as a socially important value. Higher education and the institutions that provide such a service have as their primary function, the pursuit of truth. It is therefore disheartening and, indeed, concerning that fraud in higher education, or fraud perpetrated against higher

education, needs to be addressed. Historically, higher education providers have not openly addressed the issues within and affecting their institutions (ICAC 2002a, p.8), but there has been an increasing interest in a number of fraud areas (Stavisky 1973; Martin 1989; Winchester 2003; ICAC 2005c) and these are well documented.

Altbach (2004) and Eckstein (2003, p.46) suggested that higher education institutions turn a blind eye to checking credentials, in the belief that such 'lower instincts' as falsification were not part of the academic ethos. Furthermore, they contended that the public perceived higher education institutions as 'special', imbued with virtues of integrity and trust, which were valued and expected within the sector. The independent corruption 'watchdog' in New South Wales, the Independent Commission against Corruption, made similar claims to Altbach and Eckstein for Australia, determining that some academics found accountability 'at odds with' academic independence (ICAC 2002a, p.5). The report surmised that this attitude was not conducive to cultural or systematic change in the sector.

The problem of fraud perpetrated within and/ or against higher education has only come to the fore in recent years (Noah and Eckstein 2001; Hallak and Poisson 2002; Hauptman 2002; Eckstein 2003; Hallak and Poisson 2005; Temple 2006; Hallak and Poisson 2007), yet most would argue that it is not a new phenomenon and is a global problem. Transparency International, an international organisation dedicated to uncovering global corruption in all areas of society (covered in more detail in Chapter 5), confirms these concerns. This organisation researched the global perception of corruption in relation to 14 major sectors of common industry. In 2006 the report reflected the findings of 59,661 people in 62 low, middle and high income countries. The study found that education was perceived, throughout the world as the ninth most affected by corruption, equal to the military and utilities

(Transparency International 2006b, p.4). The mean scores, as outlined in Figure 2, below are interpreted as 1 being not at all corrupt to 5 as extremely corrupt.

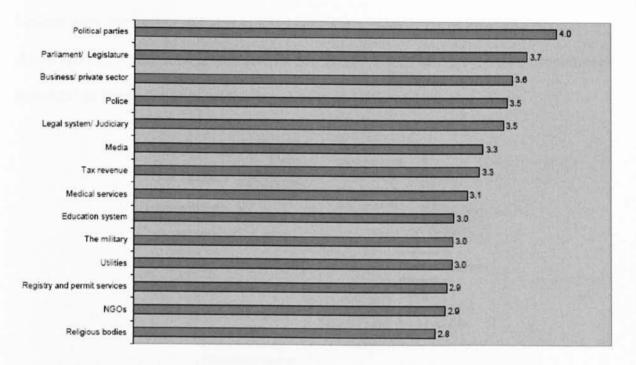


Figure 2 - Sectors and institutions most affected by corruption, globally.

Source: Transparency International (2006b)

Research pertaining to the allied areas of fraud such as plagiarism and substandard quality (Riley 1991; Savage 1994; Pappas 1998; Winchester 2003; Curry 2004; ICAC 2005c) elicited important parallels to the study's purpose. Perhaps more importantly, there have been some recent contributions into the taxonomies of fraud affecting higher education, both within institutions and across the sector (Garrett 2005; Rumyantseva 2005; Smith 2005). These taxonomies are important foundations for the study and assist in explaining how non-official higher education and falsified qualifications can be conceptualised.

In relation to corruption in higher education administration, information is slowly being gathered on the problem. Recent work by Stetar, Panych et al. (2005) critiqued 175 accredited private and public providers of higher education in the Ukraine. They found 43 rectors who admitted that for a bribe of only \$US200, licensing could be secured for private

providers and full accreditation for only 10 to 20 times more. In Australia, recent allegations of 'soft marking' and plagiarism (Bretag 2007) are forcing higher education institutions to become more transparent and alert to fraudulent issues. The nature of fraud affecting Australian higher education is best described by Smith (2005), who provided an 'Opportunity Structure' in Figure 3, below, addressing identity and dishonesty related areas:

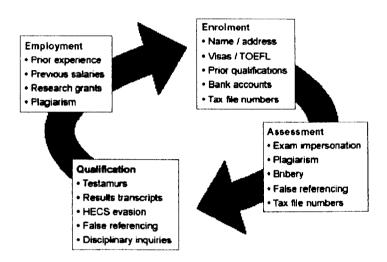


Figure 3 - Opportunity structure for identity related fraud and dishonesty in higher education.

Source: Smith (2005)

This structure highlights the fact that along with the opportunity for some individuals to commit fraud, a concurrent risk for other stakeholders evolves. It is apparent that there has been little systematic work addressing the nature and extent of the risk in relation to the verification and authentication of student's qualifications. These concerns were mirrored by Knight (2005a, p.176):

Additional efforts are needed at institutional, national and international levels to keep the various stakeholders cognisant of new opportunities for education and professional mobility, while at the same time maintaining awareness of the new risks attached to rogue providers, diploma and accreditation mills and the more subtle issues related to alternative and new providers and new qualifications....This is a major challenge currently facing the national and international higher education sector.

In order to identify particular risk areas, Rumyantseva (2005, p.85) argued that it was imperative to develop a deep and solid understanding of educational corruption in order to

determine causes and develop models to counter its activity. To this end, she deconstructed the phenomenon and provided a new framework for analysis. This analysis was, however, focused primarily on internal corruption in administration within established official higher education providers. Whilst this is important, the author is interested primarily in external fraud risks posed to the sector. In a more pertinent study from the Australian Institute of Criminology, Smith (2005, p.3) posited a range of risk related areas currently affecting Australian higher education:

	Student		Staff		External
	Victim	Offender	Victim	Offender	Offender
Entry					
Enrolment fraud		×			X
TOEFL certificate fraud		X			X
Student Identity card fraud		X			X
In-Cour se	······································				
Loan fraud		X			X
Examination fraud		X			X
Essay fraud		X			X
Database fraud	X	X	X	X	X
Qualification					
Qualifications fraud		x		X	X
Testamur fraud		X		X	X
HECS debt evasion		X		X	X
Employment (post-qualific	ation)				
Employment application fraud				X	X
Administration fraud				X	
Research grant fraud				X	
X Indicates presence of risk					

Figure 4 - Higher Education dishonesty and identity-related fraud risk matrix.

Source: Smith (2005, p.3)

The author finds this matrix most useful in highlighting two key areas for this study, namely the external victims and offenders in the areas of academic qualification acceptability and testamur authenticity fraud.

Perhaps the most comprehensive typology of fraudulent, sub-standard, illegal and/ or criminal activity related to higher education has been provided by Garrett (2005, p.17). He maintained that there were six areas of fraud perpetuated within, and against, higher education as follows:

Fraudulent/misleading higher education <u>provision</u> – eg by 'Diploma Mills' or some Internet only institutions offering non-traditional higher education 'courses'

- False/ misleading claims for accreditation of courses/ qualifications (e.g. quality control)
- False/ misleading claims for recognition of qualifications (e.g. value)
- False/ misleading advertising of educational processes/ facilities (e.g. teaching quality)

Fraudulent/ misleading <u>accreditation</u> of higher education provision ('Accreditation Mills')

• False/ misleading claims for official recognition by unofficial accreditation bodies

Fraudulent entry into 'legitimate' higher education

- Fake/ falsely obtained study visas
- Fake/ falsely obtained qualifications
- Fraudulent claims about the nature/ outcomes of provision for the purposes of recruitment
- Misconduct by university administrators (e.g. admitting non qualified students for money)

Fraud related to the 'legitimate' higher educational process

- Academic dishonesty (e.g. plagiarism/ falsification of research results)
- Study requirements/ paths (e.g. illegitimate shortened study time/ activity)
- Academic misconduct by staff (e.g. dishonest grading/ rigged examinations)
- Misappropriation of funds by staff
- Accounting fraud

Fraud related to educational **outputs** (certification/qualifications)

- Supply/ use of fake qualifications for use in CVs/ applications for employment
- Supply/ use of amended/ falsified qualifications for use in CVs/ applications for employment
- Supply/ use of fraudulent licenses for professional practice
- Theft of research and other educational outputs for commercial/ professional gain

Fraud <u>associated</u> with higher education activity/ students

- Kidnapping/prostitution
- Taxi/ accommodation fraud (e.g. 'tourism' related scams)
- Use of student bank accounts for money laundering
- Misuse of educational visas (i.e. for inappropriate, illegal and/ or criminal activity)

The areas presented by Garrett reaffirm that there are a myriad of complex issues surrounding academic qualification verification.

Perhaps the leading vehicle for assisting the exponential rise in academic fraud has been the Internet (Hallak and Poisson 2007, p.244). Academia is not alone in this problem, with a range of industries such as banking and other online services continually being subjected to fraud and misleading practices. The author's earlier research focused on unauthorized or unrecognized providers, issuing qualifications with little or no approval, using the Internet as the main medium of delivery (Brown 2001b; 2002; 2004; 2005i). This research was instrumental in spawning new benchmarks for higher education approval processes in Australia. While legislation may be one solution, the unregulated nature of the Internet is perhaps the greatest challenge. Recent research conducted by Adams and Eveland (2007) found little difference between the online promotional presence of unaccredited and online accredited higher education institutions. This creates significant confusion for the layperson seeking to pursue a degree qualification and delineating between the myriad of choices available online.

Another growing problem which also operates primarily online is the rise of 'diploma mills' - organizations or individuals providing 'novelty' or replica degrees (testamurs) from *bona fide* institutions. The persistent growth in demand for higher education, coupled with the multitude of different offerings and lack of regularization will sustain the pressure for more distorted practices (Hallak and Poisson 2007, p.244) This study seeks to address these burgeoning issues which threaten the integrity of the higher education and employment sectors both in Australia, and across the globe. It will be demonstrated that there is a need for the development of a systematic and clear approach to the verification and authentication of qualifications presented by individuals for entry into employment and/ or higher education study.

Notwithstanding this, it is important to state from the outset that the present study does not argue that 'official' higher education providers and the credentials they confer are beyond reproach. As will be outlined in Chapter 3, a degree qualification (earned or obtained by whatever means) is a highly debatable indicator of quality and individual competence, and some level of risk is involved in acceptance and utility of any higher education qualification. Certainly, as the above discussion clearly demonstrates, fraud within official higher education providers is a challenge; nonetheless this study does not focus on this aspect. The aims of this study revolve around the heightened risk of fraud being perpetrated against *bona fide* academic qualification providers and the activity of unknown non-official providers providing qualifications which hold debatable value in the academic world.

1.3 The global increase in 'non-official' higher education provision

Globalisation and the massive expansion of higher educational opportunities have created a changed environment for higher education systems across the world (Anderson, Johnson and Milligan 2000, p.2). Whilst the move toward new Internet technologies and changing delivery arrangements is seen as crucial to increasing participation rates, it is precisely this unregulated environment which has brought with it inherent risks (Hallak and Poisson 2007). According to Knight (2005a, p.176), these risks indicated a 'clear and urgent need' for a consolidated approach to the recognition of academic qualifications, an approach which would be understandable to students, employers and the public at large. Knight's concerns were reaffirmed in an International Association of Universities Report, finding that the burgeoning problem of foreign degree mills was the second most concerning risk surrounding the internationalisation of higher education over six continents (International Association of Universities 2006; Knight 2007).

In order to grapple with the varied forms of provision, initial efforts have been made to categorise higher education providers into 'official' and 'non-official' (Kokosalakis 1999). For the purposes of this study, the author adopts this nomenclature, with 'official' higher education providers possessing recognised accreditation and authority to operate from a competent authorising body. However, as will be shown in Chapters 4 and 5, this is far from a precise definition, and requires significant expansion in order to identify the inherent risks some of these non-official providers pose.

Whilst there has been much concern raised about the proliferation of non-official higher education provision, there are virtually no studies dedicated to quantifying the problem. Kokosalakis (1999, p.31-33) has collated perhaps the only known research measures from nine European countries:

- Greece: 130 non-official higher education institutions with over 28,000 students enrolled;
- Italy: 62 unofficial institutions, not including unapproved brokerage agreements and alleged 'diploma mills';
- Spain: Over 100 unaccredited, non-official higher education providers saturating primarily the postgraduate market;
- UK: In 1992, 5% of all higher education students in the UK were pursuing degrees with non-official providers this equated to over 33,000 students;
- Ireland: 8 'rogue universities' identified, creating concerns for consumer protection:
- France: 42 non-official providers conferred 654 Masters and 282 MBA degrees in 1995. The degrees were termed 'bogus' with no official recognition.

In a review of current non-official higher education provision, Ezell (2007, p.109-116) profiled a range of cases spanning Australia, Canada, China, Africa, India, the Middle East, Europe, Philippines and the United Kingdom. The Indian Minister for Education recently announced that action should be brought about to control a significant increase in non-official provision in the country (FIRs against fake varsities ordered 2006), arguing it was capitalising on the diminishing provision of state based provision. Moves to regulate online provision are to be introduced in India in order to stop institutions from circumventing the existing laws

(Pandey 2006). Figures in Canada reported over thirty two providers were identified as operating without authorisation to deliver (Beaudin 2005). Other countries such as the UK (Dowd 2005), Ireland (Walshe 2006), Vietnam (Ashwill 2006), Japan (Kojima 2007) and Kenya (Kamotho 2002) all reported significant increases in the operations of non-official providers. Non-official higher education is now such a concern in Kenya, Tanzania and Uganda that they have developed a new register of official providers and created the East African Higher Education Regulatory Agency. This agency is designed to issue significant penalties to non-accredited providers (Ayodo 2006; Kigotho 2006; Muiruri 2006).

Due to Australia's historically fragmented Commonwealth and State based legislation in relation to the regulation of non-official providers, a significant number of non-official providers have operated in Australia as well (Lawnham 2002d; e; b; 2003). In the absence of any firm empirical data, the author researched these concerns and found that from 1999 to 2004 more than twenty seven non-official providers directly offered programs or used Australia as brand leverage for its programs (Brown 2004). Institutions such as the unaccredited Washington International University (http://www.washint.edu) went so far as to advertise their program in the Australian Higher Education Supplement in 2001. This caused significant concern at the Senate Estimates Committee level (Brown 2001b, pp. 142-143). Despite these concerns, the university again advertised in 2004 (See Appendix 1, Volume 2 p.380 for advertisements). The question as to whether these alternative providers were sincere in their intentions, to provide a legitimate alternative source of higher education or sought to defraud the sector is highly debatable. What is evident is that they purposely chose to remove themselves from any external scrutiny and, due to the unknown nature of their activities, posed a perceived risk to the Australian higher education sector.

Since non-official providers fall outside of standard statistical collection, little empirical research has been undertaken in the area. A modest assessment of non-official provision is offered by Douglas (2003, p.53) who analysed the entries in the series of Bears Guides (a resource profiled in Chapter 5) from 1982 to 2001. He found the number of non-official programs in the United States increased by 304% in that period; on a global level, he estimated a worldwide increase in non-official institutions of 867%. Dr John Bear, author of these guides and a world-renowned researcher in non-official higher education, maintained the only known historical listing of non-official higher education providers. He currently lists over 2,800 names of institutions on his personal database, suggesting that the actual figure is much higher. In relation to provision of qualifications from these institutions, there are again, no official statistics; however, he recently made the following disturbing hypothesis, purely in relation to the PhD degree (John Bear pers comm.):

- There are fewer than 50,000 properly accredited PhDs awarded each year in the US.
 There are well over 100,000 fake degrees bought each year in the US. Very likely, more than 200,000. The University Degree Program in Romania alone was selling
- more than 50,000 a year to Americans. If even 25% of these fakes are PhD degrees (and that wouldn't surprise me) that would suggest that half of all new PhDs are fake.

Whilst it can be argued that the ratio of non-official to official higher education provision is not high, it is the momentum and the risk implications for the higher education sector that arguably need to be assessed (Kokosalakis 1999, p.34), risks which range from the lack of information provided to prospective students as to the status of non-official institutions, through to the lack of recognition of the titles they claim to offer. Current evidence to be provided later in this study suggests that little has changed since Kokosalakis' report, both in the growth of non-official provision and the lack of easily accessible recognition information. The socioeconomic development of non-official higher education and its consequences for official higher education across the globe have made non-official higher education a special issue of concern (Kokosalakis 1999, p.43), and these concerns are explored in the study.

It is without question that the Internet has clearly blurred the jurisdictional issue and clouded the actual responsibilities in relation to regulation and maintenance of standards in transnational delivery of educational programs. Technology, according to Keyes (2004, p.197) aided and abetted a climate of deception so that a vast and confusing diversity of choice now existed. This, coupled with a lack of global regulation, has led to the emergence of a myriad of doubtful providers. In the US state of Wyoming alone, over 14,530 students were enrolled in unaccredited institutions in 2005, with less than 200 actually living within the state; the rest were believed to reside in the Middle East and other countries (Neary 2005). With over 200 unrecognised accreditation agencies operating across the globe (Ezell and Bear 2005), this confusion has the potential to mislead academic institutions and employers into accepting qualifications of unknown quality (dos Santos 2002, p.104). In a recent assessment of quality issues surrounding transnational delivery, Woodhouse (2006, p.11) posited six possible monitoring agencies for this type of activity:

- The student (caveat emptor)
- The institution (the market will sort things out)
- The quality agency in the country where the institution is located
- The quality agency in the country where the course is presented
- The two quality agencies jointly
- A 'transnational', multi-national or international quality agency

Woodhouse regarded the first two options as inappropriate, a sentiment mirrored by Altbach (1999) and Lieven & Martin (2006). To date there is no consensus on the remaining options, with global confusion surrounding the term 'to operate' in a certain jurisdiction. This confusion has subsequently enabled non-official providers to prosper, as they vie for market share alongside official providers. Increased cross border activity of higher education providers has brought a new level of complexity surrounding the recognition of academic qualifications (Knight 2005b). The confusion surrounding the various forms of higher education will be explored in detail in Chapter 4.

1.4 The global increase in the falsification of bona fide academic qualifications

In addition to non-official higher education providers, determining academic document authenticity is a growing problem, arguably fuelled by credential inflation and an increasingly tight labour market (Keyes 2004, p.65; Cook 2005b, p.1; Ezell 2007). Grolleau, Lakhal et al (2005, p.16) argued that the identification of counterfeit academic qualifications was a pressing issue that called for immediate allocation of resources to combat their socially damaging spread. According to Allen Ezell, a former FBI investigator in areas of fraudulent testamur activity, the falsified testamur industry is worth millions of dollars, a lucrative industry which is steadily increasing (AP 2007). As early as 1998, when the Internet was becoming an accepted tool of communication, academics such as Sauter (1998, p.27) warned the higher education community of the dangers of increased academic qualification fraud. Even some twenty years earlier, Miller & Boswell (1979, p.219) had argued that given the long-established economic and social cachet of educational credentials, it was critical that some form of high level of assurance accompanied these documents. Despite these warnings, it is evident that both the provision and use of fraudulent qualifications is an ever-increasing, global problem.

Garrett (2005, p.3) claimed that students with fraudulent qualifications posed a significant risk to the reputation of legitimate academic and professional qualifications. Furthermore, he argued that employers faced serious legal and financial ramifications if they recruited unqualified staff with falsified qualifications. These concerns were mirrored by the Organisation for Economic Co-operation and Development (OECD) which, in a policy brief, argued that fraud in relation to the selling (or buying) of fake degrees was increasingly becoming an issue of concern as it lowered the overall perception of the quality of cross border higher education (OECD 2004d, p.6). The constant revelations of fraud pertaining to

individuals in significant positions of power and influence which appear in the media not only compromise the confidence people may have in the individual concerned, but force society as a whole to reexamine others that were previously trusted (Keyes 2004, p.228).

Unlike the lack of substantial, empirical information pertaining to the operations of nonofficial higher education providers, some documented analysis has been made of the falsified
qualification issue. The following body of evidence (based on primary and secondary
sources) gives some indication of the current reach of the problem.

1.4.1 China

A 2002 official Chinese census estimated that over 600,000 individuals held falsified qualifications purporting to emanate from *bona fide* institutions (Luk 2002; Ryan 2005b). In order to combat the problem, verification centres set up to monitor fraudulent activity reported a 22% falsification rate (Luk 2002), a figure confirmed by the Director of a Beijing verification centre (Fake Diplomas Flood China 2005). A recent study by the Australian Department of Immigration, Multicultural and Indigenous Affairs (DIMIA) of documentation fraud by Beijing-based Chinese students who sought entry into Australia found that educational qualifications were the third most common area of fraud (see Table 1 below):

Type of Fraud	Number of Cases	Proportion
False Work Docs	1010	65%
False Bank Docs	422	27%
False Edu Qualifications	98	6%
False Relationships	11	1%
False IELTS Scores	6	0%
Age Changed	2	0%
COE Altered	1	0%
Total	1550	100%

Table 1 - Type of student fraud application detected for Beijing cases (1st July 2002 - 30th June 2003).

Source: DIMIA (2004, p.43)

It should be noted that the study looked at only half the case load for the Beijing area; as such, the report acknowledged *de facto* rates would be significantly higher than those quoted above. It also noted the significant incidence of fraud in work documents was due to the higher level of scrutiny paid to checking these items, as opposed to academic qualifications. China recently stepped up its screening process of Chinese nationals using qualifications obtained abroad in order to reduce the risk of falsified documents (Xuequan 2006).

1.4.2 Russia

With qualification parchments easily attainable from a variety of street stalls in front of Russian universities (MacWilliams 1999; Murphy 2006), and over 47 Internet sites (see Volume 2, Appendix 14, page 419) the problem of academic credential fraud in Russia is viewed as a major concern. According to the Deputy Director of InterEducation, an office of the Russian Ministry of Education, every second applicant applying for a verification request of their qualification (60,000 requests per year) presents a false diploma. Recently the Minister for Education relaxed strict rules regarding the issue of blank pre-printed diplomas to Russian universities due to complaints from a group of rectors. Since then, the universities have ordered 200,000 more blank diplomas than they have graduating students (pers comm. Allison Hawley). One can only assume that a significant number of those will be sold on the black market. Of particular and recent concern has been the increase in 'ghost-written' theses, (companies writing the thesis on behalf of the candidate) with estimates suggesting that up to 30% of all postgraduate students in Russia were using this service (Yablokova 2006).

1.4.3 South Africa

The background screening company Kroll MIE (http://www.mie.co.za) is based in South Africa and performs qualification verification services for a variety of stakeholders in the

employment and education sectors. Of the 500,000 cases referred to Kroll since 2001, verifications showed a steady increase in negative results (pers comm. email Liebenberg 11th July 2005), as outlined below:

2001: 9.4% 2002: 12.87% 2003: 14.44% 2004: 14.69%

South African employers cited academic qualification verification as an administrative burden, with universities unwilling to assist in the verification process (Faniso 2005).

1.4.4 North America

As part of its investigations into a range of fraudulent qualification provision, the US Select Committee on Fraudulent Credentials conducted a study of university registrars' experiences with fraudulent credentials. A questionnaire sent in May 1985 yielded a 60% response rate from over 3,200 universities and colleges across the country. Of those that responded, 85% routinely received either complaints or enquiries related to the verification of conferred academic credentials with 45% of registrars fielding over 500 enquiries per year. Sixty percent of respondents had discovered individuals who had falsely claimed a qualification. Of the types of fraud discovered, 60% of Registrars found regular documentation of false credentials consisting of counterfeit or reproduction documents, altered transcripts, stolen parchments/ transcripts, computer manipulation of student records, identify theft and claims of degrees without supporting documentation. Forty percent of claims were for undocumented degrees, with no documentation to support the claims. A 24% increase in falsified claims over the previous year (1983) moved 45% of Registrars to consider fraud as an increasing and continuing problem (Fraudulent Credentials 1985, pp.39-45).

Further research by the committee estimated in 1985, that upwards of 500,000 or 1 in every 200 working Americans held a fraudulent qualification, whilst 30 million, or 1 in 3 working

Americans obtained employment based on altered credentials (Fraudulent Credentials 1985. pp. 3 & 5). The following year, The Opinion Research Corporation published a study entitled "Experience with Resume Inflation", surveying over 500 businesses and manufacturing firms. The results suggested that resume misrepresentation in the area of qualifications held was excessive, particularly in the case of new employees (Shutt 1986). In 1987, a study found that up to 30% of all educational claims were false (Backus 1987), a figure in stark contrast with a 1999 report, suggesting that only 9% of job applicants lied about their educational credentials (Koehn 1999). The companies 'Credential Check' and 'Personnel Services' reported that 20% of individuals checked claimed 'something untruthful' about their academic qualifications (Stewart and Spille 1988, p.79), whilst Scrip-Safe, a US based provider of security paper determined that between September 1994 and February 1995, 40% of executive personnel had lied directly about their education (Scrip-Safe 1995; Wah cited in Prater and Kiser 2002; Foster 2003). Snow (2001) confirmed this 40% non-verification rate, citing the use of the new paradigm of Internet access as leading to the rise in the use of fake degrees. Research by Askins (1996, p.2) found that one in fifty doctors employed in hospitals and private practice in the USA obtained their positions on the strength of altered or embellished qualifications. One in three individuals, it has been claimed, engaged in lying when seeking employment, with candidates for executive positions just as likely to lie as those seeking lower-level positions (Underwood cited in Ford 1996, p.5).

In 2002 the Society of Human Resource Management determined that one out four job candidates materially misrepresented their educational attainment (Bean 2002). Edverify, a specialised educational verification service found in a 2002 study that 25% of all claims of educational qualifications submitted for authentication were misrepresented (ITNews 2002), a figure commensurate with projects undertaken by Kessler-International (2000) and A.C. Coy, a Cecil-based recruitment firm (Fuchs 2004). Similarly, an investigation by the executive

search firm, Christian & Timber, revealed that of the 7,000 resumes it assessed, 52% of all individuals cited partial degrees as full degrees (McGee 2002).

A New Jersey firm which conducted 2.6 million background checks in 2002 reported that 41% of candidates made false statements regarding their educational achievement and 23% had falsified their actual documentation (Eisenschenk and Davis 2004; Hoyt 2004). Research completed a year later by ADP Screening and Selection Services found that over 50% of the individuals on which it conducted employment and education checks had submitted false information, compared to 40% in 2002 (Allen 2004; Fuchs 2004; Johnson 2004; Reuters 2004). This figure increased to 52% in 2004 (ADP 2004), with falsifications about educational credentials ranked as the most common misrepresentation in resumes by outplacement firm Challenger, Gray & Christmas (Sahadi 2004). Of the 17,000 qualifications vetted by Educational Credential Evaluators in Milwaukee each year, up to 420 or 2.5% of qualifications were determined to be fraudulent (Mindlin 2004). Andler (2003, p.17), in a study conducted by a screening organisation, found one out of ten applicants reported a bogus degree, with one out of eight claiming degree that was not earned.

A Canadian reference screening company found one third of a thousand candidates for top management positions in Canada had misrepresented their academic qualifications (Keyes 2004, p.64). With up to 30% of job applicants falsifying their academic qualifications, Jacobs (2004, p.158) argued that credentialism was one of the main fuelling factors. In a recent case in Texas, two individuals were found to have produced over 14,000 replica degrees from *bona fide* US based higher education institutions, including six people who used them to obtain government positions (Lezon 2005). In June 2005, staff of ResumeDoctor.com verified the dates of employment, job titles and education of 1,133 resumes. These resumes covered candidates from entry-level to executive-level. It was found that in the area of education,

credentials misrepresentation occurred in 24% of all resumes assessed (Brad Fredericks, CEO, ResumeDoctor.com, pers comm.).

Empirical research which closely monitored the falsification rate encountered in the USA since 1995 has been conducted by Jude M. Werra and Associates, a recruitment firm based in Wisconsin. As outlined in Table 2, below, over a ten-year period to mid 2006, 16.07% of executive candidates falsified information regarding their education claims. The figure for 2006 was at its highest mark since 2001. The Director, Jude Werra maintains that with one in six resumes found to misrepresent academic qualifications, it is more imperative than ever to verify these claims (Jude M. Werra & Associates 2006).

Data Point	Index (%)	Rolling
		Average (%)
1995 – 2 nd half	13.60	
1996 – 1 st half	14.63	
$1996 - 2^{nd}$ half	14.43	
1997 – 1 st half	14.30	14.24
1997 – 2 nd half	14.53	14.47
1998 – 1 st half	21.65	16.23
$1998-2^{nd} \text{ half}$	7.80	14.57
1999 – 1 st half	16.70	15.17
1999 – 2 nd half	16.70	15.71
2000 – 1 st half	23.30	16.14
2000 - 2 nd half	13.60	17.60
2001 – 1 st half	20.40	18.50
2001 - 2 nd half	12.04	17.33
2002 – 1 st half	11.19	14.31
2002 - 2 nd half	11.19	13.71
2003 - 1 st half	10.59	11.25
2003 – 2 nd half	6.06	9.76
2004 - 1 st half	9.82	9.41
2004 – 2 nd half	11.88	9.59
2005 - 1 st half	10.73	9.62
2005 – 2 nd half	11.61	11.01
2006 - 1 st half	16.07	12.57

Table 2 - Liars Index (c) Jude M. Werra & Associates, LLC.

1.4.5 United Kingdom

A study by Pitman Training in 1999 found that 67% of all 18 to 25 year-olds and half of all 56 to 65 year olds admitted to making false claims about their academic qualifications on their CVs (News 1999). Experian, a recruitment and screening company determined that lying

about higher education qualifications accounted for 21% of all false information presented in CVs, second only to lies about previous employment (Venables 2000). A 2001 study by Market and Opinion Research International found that seven and a half million of Britain's twenty five million working population had lied to their potential employers when applying for positions; 5% lied about their educational history (MORI 2001). Similarly, a study conducted by the UK Job Channel on behalf of Multimedia Television Plc found that 27% of applicants for positions lied about their qualifications (Guardian 2002). In relation to higher education admissions, the Universities and Colleges Admissions Service (UCAS) discovered that in 2004 alone, over 1,000 cases of fraudulent qualifications were used for attempted admission into United Kingdom universities by overseas students (Sharma 2004).

1.4.6 Other countries

A number of other countries have also reported significant levels of qualification falsification. In New Zealand, over 120 immigrants used falsified academic qualifications over an 18-month period to seek residency in New Zealand (NewsBoss 2002; NZPA 2002). In mid June 2004, law enforcement officers seized fifty Massey University academic parchments, including fake stamps and seals in raids on fraudulent qualification providers. Media reports suggested 'thousands' were in circulation, as part of an alleged immigration racket operating at the time (Universities on alert for fake degrees after arrest for fraud 2004; Authorities on alert for fake documents 2004; Document forgery causing concern 2004; Forgery bust doesn't surprise consultants 2004; Police Bust Fake Document Operation 2004).

Mandatory screening of academic qualifications for all individuals seeking to work in the United Arab Emirates was introduced in September 2005. Since this time, 421 falsified academic qualifications have been discovered (Issa 2006). In Angola, it was recently alleged

that over 80% of all doctors had falsified their academic documentation to obtain licensure (80 Percent Of Physicians From DR Congo Fake - Association 2006). Malaysia has reportedly documented over 10,000 individuals with falsified academic qualifications (Hamshere 2005), with the Malaysian Ministry of Education reported to be concerned about the increased proliferation of 'bogus university degrees' (Bernama 2006). The Nepalese Commission for Investigation on Abuse and Authority suspects that over 10% of the Himalayan kingdom's 140,000 schoolteachers used diplomas purchased from India in order to secure their positions ("Web Site Promotes Free College Education in Sweden; Nepal Cracks Down on Fake Degrees" 2003). In Vietnam, a 2004 audit of qualifications by the Vietnamese Ministry of Public Security found 1,704 staff members had used falsified academic qualifications in order to obtain promotions and higher salaries (Over 1,700 Vietnamese policemen use illegitimate degrees, certificates 2004). A recent raid in Hanoi revealed a range of fabricated overseas academic qualifications, including over 1,000 pre-printed degree qualifications (Phat 2006). In India, over 5,000 school teachers recently obtained falsified qualifications from an established university, in order to obtain their positions and/ or higher salaries (Pathan 2006). In Iraq, it has been estimated that over 50% of all academic credentials held by individuals were either forged or altered, due to the fact that during the Iraq-Iran war of 1980-1988 it was illegal for any university to issue documentation unless they received government approval. In these circumstances, most students resorted to creating their own documentation or purchasing replica/ falsified documentation from third parties (Cook 2005b, p.1) in order to verify their educational qualifications.

1.4.7 Australia

A series of reports has created heightened awareness of academic qualification fraud in Australia. In 2000, KPMG and PRM reported findings suggesting up to 25% of executives falsified information in their resumes, including academic qualifications (Robinson 2000;

Stockton 2000). The reports argued that fake university degree websites were partly to blame for the increase in the problem. In 2002 Australian universities became concerned when a site offered to sell 'verifiable' degrees from Monash University, University of Queensland, Curtin University of Technology, University of Newcastle and University of Western Sydney (Online buy-a-degree scam targets Asians 2002; Internet scam offers fake degrees from Melbourne universities 2002; Cox 2002; Heinrichs 2002a; Lawnham 2002i; Maslen 2002; Page 2002). In the same year the Australian Vice-Chancellors' Committee commenced exploring the creation of an online verification system designed to combat the 'verification' claims and minimise potential risks to universities' graduation databases (Cohen 2002; Lawnham 2002a). Meanwhile, media releases issued from a range of universities, announced that their systems were secure and could not be breached (University Secure From External Security Breaches 2002; Monash student records systems secure 2002). Despite these calls for increased diligence, it was still estimated that close to 25-35% of applicants for employment positions falsified their academic qualifications (False CVs 2005; More than meets the eye 2005) with education history seen as one of the most commonly falsified areas of information on an applicant's resume (Eisenschenk and Davis 2004). Subsequent research by KPMG found that significant falsification of academic qualifications in a range of disciplines was a distinct concern (Lucas 2004). Substantiated in an annual KPMG report, research suggested that identity fraud and the use or claim of non-existent falsified academic qualifications was one of the most pervasive forms of fraud to affect Australia in recent years (KPMG 2004, p.27).

In 2005 concern was raised in relation to migration and education agents operating within Australia, with the Department of Immigration discovering some agents promoting the use of fraudulent academic records when lodging visa applications (DIMIA 2004; Jopson 2005).

The NSW President of the National Tertiary Education Union, Stuart Rosewarne, argued that

universities had turned a blind eye to the ease of obtaining falsified qualifications. The Vice-President of the Australian Vice-Chancellors' Committee, Gerard Sutton, vehemently denied such accusations. Meanwhile, concern has also been raised at the utilitarian approach taken by some overseas students to obtaining Australian qualifications for permanent residency requirements (Birrell, Healy and Kinnaird 2007). Claims that '...thousands of foreign students are attempting to use fake qualifications to get into Australian universities because a degree is a successful form of back-door migration'(Jopson and Burke 2005) emanated.

Despite these claims, little empirical evidence existed to substantiate the problem. One particular case surrounded a Chinese student who enrolled in an Australian Masters degree program, based on a falsified Bachelor's degree purchased from an agent for \$2,000 (Bogus document does not stop stay 2005). Interestingly, the student appeared to have passed the Masters degree, and was only found to have held the falsified document after a Migration Review Tribunal hearing.

In efforts to both measure and curb the use of falsified Chinese qualifications in Australia, Macquarie University entered into a 'Qualification Verification' project with Hobsons, which finished Stage 1 on January 31st 2006. From the period July 2005 to January 2006, the university found a 12% falsification rate from a random sample of qualifications presented by Chinese students for its programs (Macquarie University 2006). The results indicated that the risk of falsified academic qualifications not only affected employers, but higher education providers as well.

Concerns have also risen as to the national security of Australia, and those that visit using falsified documents, including qualifications. In 2005 Sheik Khalid Yasin, a Muslim preacher, filed an application to the Department of Immigration for travel into Australia and submitted a resume with a variety of claims, including the claim of a Bachelor degree. The

degree could not be verified; however, the Sheik was admitted to Australia, with much debate (Ferguson 2005). While degree qualifications are not normally used as a form of personal identification, such revelations do lead to uneasiness about misuse. This is due, in part, to lack of vigilance and inadequate screening methods on the part of some stakeholders. This issue is addressed in the following section.

1.5 Lack of screening and global regulation pertaining to academic qualifications

Whilst the previous sections sought to measure the extent of the problem surrounding nonofficial higher education provision and falsification of qualifications, a logical line of enquiry
would question how this activity was permitted to occur. Perhaps one of the most significant
problems arising from the literature is the lack of due diligence undertaken by those that
mandate academic qualifications from individuals for employment. Research suggested that
whilst due diligence in relation to background screening was poor, qualification verification
was one of the easier areas to check (Prater and Kiser 2002), and the author is intrigued as to
why screening has been so limited.

Research in the United States indicated that 32% of employers always performed background checks, 17% checked 'sometimes', and 51% admitted that they 'never checked' (Holzer, Raphael and Stoll 2002, p.12). These figures were confirmed by Andler (2003, p.9), who found that only 48% of employers verified claimed academic qualifications. Further research by Askins (1996, p.2) found 35% of all businesses did not routinely check an applicant's academic records or references, with less than 15% of educational qualifications being checked due to difficulties in the verification process (Bean 2002). According to John Challenger, CEO of Challenger, Grey and Christmas, one of the largest outplacement companies in the United States, only 15% of resumes were thoroughly checked (Challenger

2004). The same study found that of the top five areas falsified on a resume, 'education' was one of the most common.

This lack of attention to screening is also apparent in Australia, with employers appearing to place considerable trust in these documents. Close to half of all employers in Australia used qualifications in their selection process, with most regarding them as important assets for potential recruits (Keating, Nicholas, Polesel and Watson 2005, p.8; Ridoutt et al. 2005, p.23). These findings mirrored other studies, determining that qualifications were an important part of the recruitment process (Jackson 2001), although not the central criterion for a hiring decision. Despite the importance placed on these documents, a study undertaken by KPMG Australia, found that many organisations failed to perform basic background checks on the people they hired. As a result they called for increased due diligence in the verification of certificates and credentials presented by applicants (KPMG 2001). A more recent study of education and training providers within the hospitality industry found that a number of Registered Training Organisations (RTOs) failed to verify the bona fides of their training and assessment staff (TVET 2006, p.42). With 34% of Australian employers not concerned about the status of the institution that conferred a prospective employee's qualification (Keating et al. 2005, p.32) and a similar number accepting 'certificates of attendance' as qualifications (Ridoutt et al. 2005, p.22), serious questions need to be asked about the screening process and the true value employers actually place on these qualifications.

Brett Warfield, Senior Manager of Australia's KPMG Forensic Accounting Section, confirmed these concerns, suggesting that companies should undertake more checks before employing staff (Fenton-Jones 2001). In the case of those that were found to falsify their qualifications, according to Qualsearch CEO Elizabeth Jones, the common response was 'no one has ever checked' (Lane 2006). It was therefore argued that if all employers took the time

to check the legitimacy of educational credentials, then the market for degree mills would reduce significantly (CHEA 2005).

In response to all of these heightened concerns in Australia, a number of Australian Standards were developed to act as guides and assist in the screening process. In 1999, a draft standard for Pre-employment screening entitled 'DR 99025, Human Resources Management Part 1: Pre-employment checking' was released, designed to provide a series of procedures for checking and evaluating the suitability, probity and reliability of potential employees (Australia 1999). This was followed by the Australian Standard on Fraud and Corruption Control (AS 8001-2003; p35) which recommended the verification of claimed formal qualifications as part of the pre-employment process (Australia 2003). In seeking to determine the awareness of these standards, a 2004 KPMG study found that 60% of surveyed companies had taken steps to minimise risk in relation to pre-employment screening, with 53% of respondents aware of the previously presented Australian Standard pertaining to Fraud and Corruption Control (KPMG 2004, p.28). Despite this positive research, heightened concern in the recruitment sector saw an updated review of background screening in 2005, with the development of a new draft standard entitled 'DR 05024 - Employment Screening'. This standard was specifically designed to:

....provide guidelines in the Employment Screening process of verifying the identity, integrity and credentials of any person entrusted with resources and/or assets in an organization, and can be utilized as a basis for industry or organizational specific screening policies and procedures. It applies equally to organizations in both the private and public sector (Australia 2005b).

The final version, entitled 'Employment screening', released in 2006, strongly recommended that 'All of the entrusted person's declared academic qualifications...' should be verified (Standards Association of Australia 2006, p.7). In relation to the Australian higher education sector, a recent review of the National Protocols for Higher Education Approval Processes

required that all private higher education institutions should '...verify the *bona fides* of the qualifications of its staff' (PhillipsKPA 2007, p.17). Unfortunately, both of these standards failed to provide any practical guidelines on what was entailed in a verification procedure, and did not highlight the risk issues surrounding the acceptability and authenticity of claimed academic qualifications. In the absence of this information, this study's aim is to shed light on these important aspects and highlight the significant risk issues surrounding the lack of effective screening processes.

Much of the problem surrounding the academic qualification issue was, according to Shutt (1986), due to the general acceptance, at face value, of resumes presented by candidates. Educational certificates were not always requested in a prospective employment situation (Bowes 1984, p.7), and little evidence existed to demonstrate that grades or class standing were given any weight by employers in their applicant screening process (Pfeffer and Fong 2002, p.85; Keating et al. 2005, p.22). Stewart & Spille (1988, p.165) also found that potential employers failed to check the authenticity of presented academic documents, and generally accepted claims of qualifications, even if undocumented, in a resume. In addition to this, there was little evidence to suggest that many employers conducted preadmission testing to ensure competence of individuals before hiring (Keating et al. 2005, p.22).

Such 'naïve acceptance' is one aspect. An increasingly difficult problem to address, according to Fielden (2005), is the fact that false certificates and credentials are tradable throughout the world with many governments and employers lacking the necessary resources, information and, moreover, desire to detect and follow up fraudulent claims. Twenty one years ago the US Select Committee on Fraudulent Credentials (1985, p.6) identified this core problem.

Many cases of persons using bogus credentials go unreported or undetected. Each year private employers and consumers discover thousands of fraudulent credentials but take no action. Private employers, during the course of pre-employment screening of job applicants, often identify people who don't have the credentials they claim to possess. Many simply do not hold graduate or professional degrees as claimed on their resumes, while many others do not hold their degrees from highly esteemed universities, which they claim, but rather from one of the hundreds of "diploma mills". However, because of embarrassment, pride, lack of time and resources, it is common for companies simply to refuse to hire the phony. With no public notification or punitive action, the phony is left undetected by the rest of the world and is free to go on to find work with a less inquisitive employer.

Despite such a laissez-faire approach to the verification of academic credentials, employers still demand them. A study conducted by Malizio & Whitney (1985) found that 90% of surveyed companies placed either a major or moderate emphasis on academic credentials, an emphasis which affected over 95% of credentialed employees. Regardless of the claimed importance placed on the academic credential, the study found that only 25% of employers requested a copy of the candidate's academic parchment, and 40% requested a copy of the transcript of results in order to verify the claims. Even more concerning was the fact that only 10% of employers verified the claimed credential directly with the conferring institution. No statistical significance between company size and emphasis on credentials or credential documentation practices was found in this study. A further analysis of this study by AACRAO found that 35% or more of businesses asked for no information in order to verify an employee's academic qualifications (AACRAO 1987, p.6).

In Australia, there have been some significant studies which criticised the lack of screening both in the recruitment and higher education sectors. Research conducted by the Independent Commission Against Corruption (ICAC) in New South Wales in 2002 found most of the ten universities in the state suffered from an absence of document authenticity checks in relation to prior academic qualifications presented for exemptions by students or staff (ICAC 2002b, p.36; 2002a). Of particular concern were the erroneous perceptions of the universities, when

surveyed on the issue of records management, with eight not seeing the area as a risk concern. The ICAC's 'Operation Tudor' audits found the converse; it reported a lack of adequate record keeping as being 'wide-spread' in the university sector (ICAC 2002a, p.45). This included the poor screening of academic qualifications. In response to these concerns, the New South Wales Department of Education argued that the Commonwealth should take more responsibility in monitoring the prevalence of fake degrees and be more vigilant in safeguarding the sector (DET 2002, p.8). Whilst some alerting mechanisms were put in place (covered in more detail in Chapter 5), a promising study into the problem of falsified academic qualifications was mooted by the Australian Vice-Chancellors' Committee in 2003. A media release included the following comments:

Universities themselves continue to look for ways to prevent the use of false degrees; and once identified, attempt to close down sites offering degrees in their name. However, with the on-going proliferation of internet sites promoting fake degrees, academic transcripts and associated documents for a fee, there is a heightened need for a consolidated picture of the measures individual Australian universities employ to verify qualifications using their name, to protect the use of their awards and academic transcripts...(AV-CC 2003).

Despite this proactive announcement, the author has found no evidence to suggest that this study was ever commenced.

In the same year, the ICAC released a report on perhaps one of the most significant cases of falsified academic qualifications to affect Australia, the case of Glenn Oakley. Oakley was a senior executive who falsified his entire set of academic qualifications; Bachelor, Master and PhD (profiled in more detail in Appendix 20, Volume 2, page 428). This one case created significant angst amongst human resource recruitment agencies (ICAC 2003b) and sparked an inquiry into the falsification of documentation for building and trade licenses (ICAC 2003a). Later in 2004, the University of Sydney was audited and found to have inadequate procedures for assessing the authenticity of academic qualifications required for pre-requisite entry into

its academic programs (ICAC 2004b); similar findings were determined for the screening of assessors for WorkCover (ICAC 2004a).

In Western Australia, the case of Denis Smith, the CEO of the Joondalup Council, who falsely claimed a range of academic credentials (despite the use of a recruitment agency), questioned the role and credibility of the entire recruitment process (Government of Western Australia 2005). The investigation found that:

It may not be reasonable for a client of a recruitment consultant to expect that the veracity of documents evidencing academic qualifications be checked with the issuing institutions, but to require a candidate for a position which specifies the desirability of "tertiary qualifications in an appropriate business discipline" to provide documentary proof of such qualifications would appear, as a matter of observation, to be one of the most basic elements of due diligence. Local governments and their officers ought, therefore, in future ensure that relevant certification is attached to any CV, resume or consultant report for consideration (Australia 2005a).

All of the above-mentioned enquiries led to a range of recommendations concerning due diligence; these are provided in Appendix 2, Volume 2, page 382. Despite these comprehensive findings, it is unclear how these have been communicated and if any of these have been implemented.

One of the most recent, and perhaps most alarming, cases of inadequate background screening involves the highly publicised findings of the 'Dr Death' investigations of Jayant Patel and other medical practitioners in Queensland. Patel was directly related to the deaths of 87 patients in Queensland, with blame being placed squarely at the lack of depth and adequacy of credential checks performed on Australia's General Practitioners (Caldwell 2005; Thomas 2005; Thomas and Papps 2005). Commissioner Davies, who investigated the Patel case, made the following revelations:

In none of the relevant cases at Bundaberg, Hervey Bay, Townsville, Charters Towers or Rockhampton were the relevant doctors credentialed or privileged. This was astonishing for two reasons. The first was that the obligation to do so, and the manner

of doing so, was clear and simple. Even though Mr Berg in Townsville, and Dr Maree in Charters Towers were appointed before the Queensland Health Guidelines came into effect in 2002, there were requirements in much the same terms before then. And the second and more important reason why this failure was astonishing was that it was so obviously vital for patient safety to have a doctor's skill and competence adequately assessed before he or she commenced work. There was no excuse for not doing it (Davies 2005, p.344).

The above case prompted states such as Victoria to address the risk of fraud, with the Auditor General (Wayne Cameron) arguing that more rigorous methods should be developed in checking the authenticity of degree qualifications (Noble 2005). More recently, South Australia launched a Parliamentary inquiry into both unregistered and deregistered medical practitioners purporting to offer *bona fide* medical services. The ease by which one may use the prefix of 'Dr' and purchase internet degree parchments has been cited as an issue of major concern (Shepherd 2007). Whilst this study does not concern itself with the professions, the above cases highlight the fact that basic paperwork and claimed credentials have been accepted on face value even within such a highly regulated profession as medicine.

The blame for the increase in credential fraud lies not only with poor screening. The increase in casualisation and turnover of administrative staff is partly to blame for some of these problems (ICAC 2002a), whilst much criticism has been levelled at the lack of significant government intervention and legal instruments to address the problem (Johansson 2005a; Risen 2006). This is sometimes not due to lack of interest, but the inability of legislation to keep up with change. In the foreword to a work by Stewart & Spille (1988), analysing the problem of degree mills in the United States, Fred Hechinger (a journalist for the New York Times) wrote that in the 1960's he documented, annually, thousands of diploma mill degrees being sold and millions of dollars being generated. He was concerned that in 1988, over twenty-five years later, nothing had changed in the USA. These concerns were mirrored in Europe, and some promising new moves were mooted in 1997, when the Council of Europe

ratified *Recommendation 97 of The Committee of Ministers To Members States*. Recognising the burgeoning increase in non-official higher education providers capitalising on distance learning and the confusion surrounding jurisdictional issues, the agreement recommended a range of measures which included:

- The recognition that it is often difficult for both national and non-national experts, applicants, and other interested parties to assess correctly the exact status and value of institutions, programs and qualifications;
- Due to the growing mobility of stakeholders involved in academia, the need for a reliable information system;
- The introduction of legislation for the protection of academic terms and titles, including the word 'university';
- A major recommendation stating that if institutions are not authorised in their country of origin, they should not be authorised in other countries;

The main aims of these recommendations were to protect:

- the legal and academic value of recognised higher education qualifications, as well as their value on the labour market:
- reputable institutions of higher education, both public and private, from unfair competition;
- students and their families from being attracted by institutions not recognised as part of higher education, using misleading names and titles and delivering non-recognised qualifications;
- employers from judging applicants on the basis of non-recognised qualifications. (Council of Europe 1997b, pp. 12-14; Farrington 2001, pp 67-68)

Despite these promising moves, it is evident that most European jurisdictions chose to ignore these recommendations and the problem of non-official higher education and falsified credential providers still appears to pose significant problems. As Mr Phil Vine of the Higher Education Governance Section, Department for Education and Skills in the United Kingdom recently asserted:

The majority of these degree mills, although superficially 'UK based', still actually have no physical presence whatsoever in the UK. Trading Standards and other UK enforcement agencies can only secure a successful prosecution against an individual or a company in this country. They do not have international powers of enforcement.

Only through international cooperation, where overseas authorities tackle offenders at source, can we really start to do something about this issue (Vine 2006a).

Similar sentiments were voiced across the Atlantic by Rev. Michael Sheeran, President of Regis University, Colorado, USA. His testimony to the US Roundtable Discussion on Higher Education and Corporate Leaders argued:

I would suggest that one way for the federal government to encourage quality in educational innovation is to make sure the marketplace is protected from deceptive practices. For example, we need updated federal protection of educational brands. Regis University has been fighting for years against an organization of similar name that sells diplomas through servers outside the country. A recent applicant wrote along the following lines, "After looking at your online course offerings, I concluded your degree fit my interests perfectly. However, I am not going to sign up because I don't want to have to convince every new employer for the next thirty years that my diploma is from the real Regis University and not a degree mill of similar name" (Sheeran 2005, p.37).

This labelling effect not only appeared to affect credible institutions, but jurisdictions which were seen as harbouring institutions of substandard provision. For example, Wyoming in the United States has long been labelled a 'haven' for online providers of higher education which choose not be subject to regulation. Recent discussions regarding the mandating of recognised accreditation in place of its lax licensing laws are still being negotiated.

Meanwhile, the state is home to over ten purely online universities, whose students are spread across the globe (Headwaters News 2006).

The overwhelming consensus through the literature is that the problem of credential fraud is exacerbated by the lack of systematic networking at an international level, which would enable all stakeholders in higher education to address the issue of qualification recognition and authentication. Revelations of fraud within academia were generally downplayed and rationalised via some external factor, resulting in little action being taken (Keyes 2004, p.134). Some initiatives such as the Bologna Declaration (discussed further in Chapter 5) have been seen as important steps forward and UNESCO and the OECD have started the groundwork for this at the policy level. However, there is little or no firm devolution of this

policy across nations in order to translate this into action. Governments are financially restricted, and offices of higher education generally receive little funding in relation to the area of auditing, assessment and policing of qualification fraud. This, coupled with a high turnover of staff due to low levels of pay at administrative levels, creates the problem of tacit knowledge not being kept, captured and maintained within organisations. It is apparent that more emphasis needs to be placed on the verification of credentials using a screening process (Adam 2001a, p.7), however just what this screening process is has not been explored. The following sections concentrate on reviewing research in the area and consolidating the above issues into the core research problem and objectives of this study.

1.6 Past research pertaining to qualification acceptability and authenticity

An extensive review of the literature reveals that, to date, there has been little formal investigation of qualification acceptability and authenticity as it applies to Australia. A surprisingly small body of research pertaining to recruitment practices and the use of academic qualifications in employment has been undertaken (Parkes 1985; Wooden and Harding 1997; Long 1999; Keating et al. 2005; Ridoutt et al. 2005). However, none of this research addresses due diligence processes surrounding the verification of academic credentials. In relation the higher education sector, the only work that has been undertaken in the area is that of the author (Brown 2005g; c; a; 2006). Some research has been offered by Abela and Ozog (2000), however this centred primarily on the recognition of Australian qualifications overseas. Other *ad hoc* professional development by the National Office of Overseas Skills Recognition (NOOSR) / Australian Education International (AEI) has been carried out, but it is not widely available.

By contrast, a significant amount of work has been undertaken in the areas of academic qualification recognition at an international level, mainly pertaining to the Lisbon and Bologna processes (Adam 2002; Knight 2004; Rauhvargers 2004b; c; a; Reichert and Tauch 2004; Tauch 2004; Wachter 2004). Recent concerns surrounding Australia's lack of understanding and participation in this process (DEST 2006b) has highlighted an urgent need for research in the area of qualification recognition. With relation to qualification authentication, much of the available research has been undertaken in the USA (Askins 1996; Devlin 2002; Koenig and Shephard 2002; Twenge 2003; Adán 2004; Cook 2005a; b; AACRAO 2006b). Considering the value and effort that is placed upon individuals to obtain academic qualifications, and the reliance placed on these claims by the recruitment industry, the author is intrigued as to why there is a void in the literature regarding this important issue in Australia.

In relation to research surrounding the operations of non-official providers, the author is only one of a few academics to have written in the area. The works of Reid (1959, 1963); Brown (2001b); Calote (2001); Bear and Bear (2003); Douglas (2003) and Ezell and Bear (2005) have made significant contributions in creating an awareness of this new form of provider. However, none of this work addresses, in any detail, the provision of falsified academic qualifications, purporting to be from *bona fide* providers. Furthermore, no proactive models or solutions have been forthcoming to address the problems.

The literature to be explored as the basis of this study consists of a range of sociological studies, industry reports and statistical information pertaining to qualifications, salary levels and credential fraud within a range of countries. Industry reports, including those of organisations such as KPMG and leading indicators from Australian Education International, provide the relevant, current frameworks within which credentials are in demand, for further

education and employment purposes. A final body of literature, lacking an educationally rigorous focus, but essential to the study, is the myriad of newspaper and magazine articles, which have profiled the problems at hand. The media is one of the few sources of information that have, over the past six years, been actively following the problem of falsified academic qualifications, and this is an indispensable source of information for this study.

At the educational policy level, there has been some recent and important work undertaken. During the development of this study, UNESCO via the OECD released a set of guiding principles for stakeholders involved in transnational delivery of higher education. Although these are important, little has been provided in relation to tangible tools, which may be used in order to address the problem. Notwithstanding this, the author is aware of the UNESCO Info Tool which forms an important, practical foundation upon which this study could build. Finally, a study by Grolleau, Lakhal et al. (2005) is perhaps the only research effort of its type that provides an invaluable conceptual model which is modified for this study. Their economic rationalist approach to the problem provides interesting insight into the quandary and forms an important basis for the theoretical position of the study.

1.7 Research problem and objectives of the study

A review of the literature finds a considerable amount of research has been focused on higher education program delivery. Quality assurance of tertiary teaching, accreditation issues and academic misconduct have all been seen as important research areas. The creation and implementation of the Australian Universities Quality Agency (AUQA) and the National Protocols for Higher Education Approval processes in 2000 levelled the playing field in relation to higher education standards and admission of new providers (Brown 2001b). The recent review of the protocols and their ongoing maintenance (MCEETYA 2006;

PhillipsKPA 2007) suggested that the protection of academic qualifications was an important issue for Australia. This study seeks to complement these initiatives by significantly contributing to the small body of knowledge available in the areas of qualification acceptability and authenticity in higher education and employment settings.

Although the use of qualifications by tertiary education providers in Australia as a prerequisite for entry into postgraduate programs is well documented in policy, little is known
about the actual screening practices that take place. Similarly, little is known about the
screening practices in the recruitment sector, with only limited research investigating the
value Australian employers place in qualifications (Keating et al. 2005, p.7 & 30; Ridoutt et
al. 2005). As Garrett questioned, if the student higher education experience is so valuable,
why are fraudsters not so easily unmasked? (2005, p.15). This study addresses these issues
and proposes a framework for considering the risks associated with accepting non-official or
fraudulent qualifications in a range of settings.

Based on the above, the main objectives underpinning this study are to investigate the risks associated with using academic qualifications as a selection criterion in employment and postgraduate higher education settings within Australia. Academic documents are not only used within the higher education sector, but other sectors such as recruitment, where the knowledge of the features of such documents may not be so apparent (Leeuw 2007). The focus of this study is therefore the use of academic degrees as an occupational/ organisational *entry* criteria, because it is here where the greatest amount of uncertainty (risk) exists about a candidate's desirability (Brown 2001a, p.30). Whilst the study concentrates primarily on Australian practice, the recommendations and subsequent model proposed as a risk treatment solution has a global application.

Research in the area of risk management has contended that the ultimate objective was the removal of all risk (Adams 1995, p.30). Whilst, from the outset, it was the author's objective to develop a model that would enable higher education institutions and employers to remove all risks associated with qualification acceptability and authenticity, evidence presented in this study shows that this is not possible. This study demonstrates that due to a range of perspectives on higher education, the broad sociological pressures, and the myriad of new non-official and fraudulent providers of higher education, the removal of all risk cannot be achieved. Despite these problems, this research represents the first holistic attempt at minimising credential fraud at the global level.

The area of unregulated academic credential evaluation is seen as very complex, as recognition has varying meanings to different stakeholders, especially for employment in the private sector, where credentials may be recognised in some cases, but not by the state or the public sector (Kokosalakis 1999, p.39). This study will take the first steps in unravelling this complexity, and determine what types of resources and methods recruitment agencies (advocates for employers) and both private and public providers of postgraduate higher education qualifications in Australia use for this process. Whilst seeking to determine if there is any equivalence in their approaches, the researcher's underlying aim is to ascertain what level of risk each population may be placing themselves in when using a range of methodologies vis a vis acceptability and authenticity.

As a theoretical backdrop to the research aims of this study, the importance of higher education as a societal imperative and as an economic investment (for both the individual and society) is discussed. The origins of higher education qualifications and the importance of the credentialing function are critiqued, with the author arguing that degree qualifications are seen as equivalent to monetary currency in the labour and higher education markets. Research

conducted by the author on the demand side of academic qualifications hypothesises that human capital investment and the positional and functional screening effects of credentialism contribute to the demand for degree qualifications so that individuals may remain competitive in the employment and postgraduate study markets.

In order to delineate between the diverse offerings of academic qualifications available, the author investigates the various types of higher education qualifications and providers currently available worldwide. This part of the study documents how an individual may obtain a degree qualification ranging from *bona fide* to illegitimate sources. In developing a classificatory framework, the author demonstrates how the problems of acceptability and authenticity surrounding qualification recognition lead to the assessment of claims on continuums of legitimacy, acceptability and risk. As a deterrent to non-official and fraudulent qualification activity, the study then assesses ways to address these respective concerns globally. These approaches range from legislative policy to fully functional academic qualification verifications systems.

The final part of the study demonstrates, via empirical evidence, the current level of attention which is being paid to assessing the acceptability and authenticity of undergraduate qualifications presented for employment and postgraduate study in Australia. Extending the risk management approach, the author investigates if there is equivalence in the levels of risk each population places itself *vis a vis* determining qualification acceptability and authenticity. Based on these results, the author proposes the development of a new, proactive risk minimisation model, drawing upon both the findings of this study, and global best practice approaches to academic qualification verification. The study's objectives are designed to advance the paucity of knowledge in the areas of qualification recognition and authentication within Australia.

1.8 Risk and risk paradigms in education

In most advanced industrial societies, education is provided by the state as a matter of right for all its citizens, and formal institutions such as universities, are organised for this purpose (Haralambos and Heald 1980, p.172). The provision of higher education is seen as a high risk function as individuals are empowered with the authority to issue qualifications to indicate individuals' proficiency and/or level of knowledge to undertake certain activities (ICAC 2002b, p.40; Hallak and Poisson 2007). In relation to post-compulsory education, there are those that believe this provision should not be subject to the common laws that govern other industries. The tension between 'state' and 'non-state' higher education provision is observed by Kokosalakis (1999, p.29), who citing the work of Neave (1997, para: 107, 9.5.2) found, "...a powerful ideological alignment between private sector business and 'non-state' higher education", further asserting that:

...such an amalgam between 'the freedom of belief' and the 'freedom of trade' has restored private sector higher education from its position of inner exile or semi-peripheral status vis a vis its public counterpart...

One position suggests that the imposition of regulation is seen as a form of control, '...designed to ensure that institutions of dubious merit do not become established as *bona* fide higher education institutions' (Harvey 2004, p.210). Conversely, there are those that believe that the issues of risk in choosing and undertaking a course in higher education should be left to the individual, and there should be no interference in the choice of post compulsory education. Such impositions are seen to restrict the autonomy of higher education institutions and the individual pursuit of education for its own sake.

The debate surrounding the General Agreement on Trade and Services (GATS) and the inclusion of higher education has similar analogies (McBurnie and Ziguras 2001; Zeleza 2005). Altbach (2006, p.137) recently questioned whether education could be treated the

same as automobiles and bananas, by removing national borders and allowing a free flow of providers. Can trust be placed in transnational providers to do 'the right thing', or is a level of regulation to reduce the risk of possible exploitation by for-profit providers required? Lieven and Martin (2006) maintained that the latter was required, as even UK official providers could not help but lower standards in order to capitalise on new, lucrative overseas markets. These new initiatives brought with them both opportunities and new risks (Knight 2006b, p.217), and these were perceived as either beneficial or threatening through a clash of rationalities.

The ideological conflict surrounding regulation can be best explained through cultural theory, with differing perceptions of risk being formed through people's values and belief systems forming cultural biases or ideologies (Jaeger, Renn, Rosa and Webler 2001). These debates can be seen as embedded within the classical theories of power. In order to explain these different positions, Bourdieu and Passeron (1977, p.153) critiqued the differing approaches and argued that the competing positions concealed social selection under the guise of technical selection, thereby legitimating the reproduction of social hierarchies and transmuting them into academic hierarchies. Understanding the mechanisms that produced the empirical association between educational credentials and job assignment fell at the heart of the theory and research into social stratification (Bills 2003b, p.462). According to Kokosalakis (1999, p.42), there was a significant number of people who either could not, or did not wish to follow the official higher education route, but still wished to study. Those that chose this path risked falling foul of 'bogus institutions offering bogus titles'. Just how such people can be protected, and whether they should be protected, or want to be protected represent distinct challenges.

In order to explain these competing educational perspectives, the author has reviewed a range of social and cultural viewpoints pertaining to risk and compared these to commonly accepted

theoretical frameworks of education. Cultural patterns can influence the mindset of individuals and social organisations to adopt certain values, and reject others (Renn 1998, p.62), leading individuals to hold certain beliefs that influence perceptions. These areas were investigated by Durkheim and Catlin (1966), Douglas (1986), Rayner (1992), Renn (1992), Adams (1995, p.36 & 40-41), Beck (1999) and Lupton (1999) who assessed the differing perceptions of risk, and how they related to the educational perspectives. The author then analysed a range of rationalities identified by Adams (1995) and found two of these rationalities (individualist and hierarchist) to be the most applicable contending paradigms. These rationalities are chosen to help explain the separate and competing perspectives individuals may have in relation to 'official' and 'non-official' higher education providers, and are best described in Table 3, below.

The analysis of these two separate perspectives leads to one key question: Who is going to decide which social construction of reality has more validity compared to the other competing construction (Renn 1998, p.65), and how can this be applied to the perception of risk? There is no clear answer. Lupton (1999, p.25) argued that despite these varied schools of thought, there were four broad insights which were common to all paradigms:

- Risk has become an increasingly pervasive concept of human existence in western societies:
- Risk is a central aspect of human subjectivity;
- Risk is seen as something that can be managed through human intervention;
- Risk is associated with the notions of choice, responsibility and blame.

Much of the debate surrounding risk in higher education centres on the compliance vs. autonomy dimension (Stensaker and Harvey 2006, p.78), which becomes the central theme in the analysis of non-official higher education providers conducted in Chapter 3. For the interim, the two competing perspectives (individualist vs. hierachist) are seen to be powerful filters and are reinforced by the levels of trust maintained within sociocultural groups

Perspective	Application of Risk Theory	Application of Education Theory	Comment and application to study
Individualist	Sometimes termed critical structuralists, individuals	Those who ascribe to the individualist paradigm assert that	Individuals should have a broad range of
	favouring this approach have a Marxist perspective on risk	market forces should prevail re-the provision of higher	choices in relation to higher education.
	and focus on social conflict and the need for social change	education and the sector should self-regulate (Kersey	Funding should not be tied to accreditation,
	in order to address risk. Individual consumers are	2004). Adopting a counter-cultural stance (Capogrossi	and accreditation should not be used as a
	responsible for making their own discretionary choices,	2002, p.483), they tolerate state funded providers, but	means of authorising providers to operate.
	with advocates of this perspective'hostile to the	consider a diverse range of other higher education	Accreditation, from an individualist
	regulators of the "nanny State" (Adams 1995, p.40). They	providers should be able to operate freely in an open	perspective, is fundamentally about a shift of
	would like the government to refrain from regulation of risk	market. Individuals who pursue higher education in this	power from educators to managers and
	management (Renn 1998), believing that it can be managed	open market trust themselves to make an informed decision	bureaucrats (Harvey 2004, p.222)
	through natural processes. The pervading legal and	in relation to choosing a provider for their higher education	
	economic systems reduce an individual's capacity for	requirements. The state's role is confined to ensuring that	The quality of education is what the
	agency and autonomy in continually striving to exert	all participants in the market have information that allows	participant derives from the process, and if
	control over their own destiny. Work undertaken by Beck	informed choices to be made (McBurnie and Ziguras 2001,	this is substandard, then the risk is born by
	(1999) is seen to fall under this construct.	p.92), not a process of selective protection. A level of	the individual. Providers of education are not
		regulation to protect individuals from purely fraudulent	subject to external review. Employers and
		providers is tolerated (Kersey 2004).	others will be the ultimate accreditors of
			qualifications and should be interested more
			in the competencies of the individual, not the
			status of the claimed credential.
Hierarchist	Often referred to as functional structuralists, or bureaucrats	People belonging to this school of thought believe that	Individuals have limited choices with regard
	(Renn 1998) those who support this perspective are	education should be regulated and bound by accepted	to higher education. All institutions, both
	respecters of authority, and believe in regulation in order to	societal rules (Durkheim and Catlin 1966). Key concerns	public and private, are controlled and
	protect them from possible risk situations (Douglas 1986).	are to ensure control of "for-profit" institutions (Harvey	regulated by the state in order to ensure
_	Rules and regulations are necessary to assist in coping with	2004, p.210) and to protect students as customers from the	quality and protection from substandard
	uncertainty. Social rules are hierarchical and strong social	risks of misinformation, low quality provision and	providers. Funding is tied to accreditation.
	boundaries prevail; they are interested in how social and	qualifications of limited validity (OECD 2003, p.6).	External, supposedly impartial third parties
	cultural rules deal with 'deviance' from the norm. Rules	Hierarchists trust themselves to make an informed decision	ensure the quality of education, and this
	and regulations, implemented by capable institutions,	about a higher education provider because they are guided	minimises risk re substandard education.
	coupled with enforcement, manage risk and protect	and guaranteed a quality outcome by the state which adopts	Employers and others are reassured as to the
	individuals and minimise perceived and potential risks	a protectionist and marketist approach (McBurnie and	quality and standard of the credential held by
	(Renn 1998)	Ziguras 2001, p.98)	the individual based on accreditation and
			guarantees from the state.
Table 3 - Tw	Table 3 - Two competing sociocultural perceptions of risk, their relation to education theory and contextualisation for the study	elation to education theory and contextualisation for	the study.

(Adams 1995). Trust in relation to risk is an important aspect to this study, and is explored in the following section.

1.8.1 Risk perception and levels of trust

In a review of the relevant literature, Cvetkovich and Löfstedt (1999, p.157) found that trust accounted for a significant percentage of the variance in risk perceptions. To explain this they argued that individuals perceived something as safe or dangerous depending on whether they trusted or distrusted the authorities or regulators of industry that maintained the status quo. As previously discussed, education has come to be entrusted to the state for implementation and regulation. Accreditation (discussed in Chapters 5) generally emanates from state control and is seen as a form of 'trust provider', designed to establish and maintain a minimum level of assurance within society. As the previous section has asserted, there are those that do not trust this centralised approach, and advocate a free(er) market with less, minimal or no regulation and argue for 'non-official' higher education to exist. Although education provided by non-official providers might be of a good standard, and could be trusted, there was no way of ascertaining this (Kokosalakis 1999, p.43). As such, trust from the 'official' side of higher education was diminished, as it had no way of measuring or balancing the merits of the non-official sector. Fear of the unknown therefore bred control, and accreditation was seen as a tool to minimise risk in this area.

Whilst these competing perspectives in relation to independence from, or dependence on, the state are important issues, the author argues that all higher education qualifications, be they official, non-official or falsified, are tokens of trust. Like other forms of documentation used to authenticate the claims of *bona fides* and personal origin (Lyon 2002), higher education qualifications were regarded as a confirmation of professional identity and accomplishment

(Woody 1997, p.337). The faith or trust in these claims was put at risk when revelations of fraud or lack of standards came to the fore. Accurate information provision could be seen as increasing trust and minimising risk (Hawkins 2002), with accreditation deemed the ultimate and only 'trust provider' available. This study explores these basic premises of trust, and in particular, the levels of trust (or conversely, risk) which educational administration and recruiters subject themselves to when determining the acceptability and authenticity of academic qualifications. Before this is addressed, it is important to ascertain the level of trust (or risk) that is pervasive within the higher education sector as a whole.

1.8.2 Risk management and higher education provision

It has been argued that decisions made about risk are essentially decisions about social priorities and the values by which societies wish to be guided (Irwin 1985). In Australia, and indeed throughout the world, higher education is valued not only as an economic imperative, but also as an important indicator of social status (an issue of importance explored further in Chapter 2). With the onset of internationalisation and globalisation, existing national regulatory and policy frameworks have been compromised (Damme 2001); this is due in part to the lack of international regulations in relation to the cross border provision of higher education. This issue has been identified as an area of concern in Australia since circa 2000, when new legislation was introduced to control the rapid increase in non-official higher education (explored further in Chapter 5), and the potential threats it posed to traditional provision. In addition to online warning sites and a new online credential verification system to address the problem of falsified Australian university qualifications, these initiatives clearly suggested that Australia valued its provision of higher education credentials and saw the problem of non-official and fraudulent qualifications as an area of significant risk.

Much of the research reviewed in this study suggested that the 'reputation and seriousness' of higher education was being put at risk (Eaton 2001, p.17), so that the responsibility of authoritative bodies for providing information to the public was seen to be vitally important. Woodhouse (2006, p.13) saw this problem at a transnational level, asserting that cross border delivery brought with it a heightened awareness of inherent risks. These risks were also identified at a global level by Damme (2001) and dos Santos (2002). This global concern resulted in significant work being undertaken by the OECD, through UNESCO creating a set of policy guidelines addressing the inherent risks of transnational education. In their draft work, the Expert Panel Meetings of the OECD partner countries put forward the following:

Of course, risks do exist. The national and regional case studies of quality assurance, accreditation and recognition of qualifications systems and other recent expert papers point to a number of risks associated with cross-border and for-profit delivery of higher education:

- National systems for the recognition of qualifications may have limited experience to deal with for-profit and cross-border providers. Thus, graduates of those institutions and programs even when they are of good quality are faced with qualifications of limited validity and usefulness.
- The increasing need to get national recognition of foreign or private qualifications may put a great pressure on the existing systems leading to unnecessary bureaucratic problems and personal difficulties for the individuals and families concerned.
- The high probability that cross-border and for-profit provision is not covered by national systems for quality assurance, accreditation and recognition of qualifications may increase the risk that students/learners are victim of rogue providers ('degree mills'), offering low quality educational experiences and qualifications of limited validity.
- An additional risk is the emergence of non-trustworthy accreditation systems ('accreditation mills'), which can provide misleading approval to educational providers, students, employers and the public.
- The professions and the skilled segments of the economy largely depend on trustworthy and high quality qualifications. Consumers of professional services want to have full confidence in the knowledge and skills of qualified professionals. Increasing risks to obtain low-quality credentials in the long run may affect the confidence in professional qualifications and in the quality of professional labour as such (OECD 2003, p.6; 2004g, p.3).

These perceptions of risk and concerns related to trust were then drafted into a set of international guidelines for the delivery of transnational education. Endorsed in 2005 by over 33 higher education organisations and countries, they were issued by UNESCO via the

International Association of Universities (IAU). The policy statement sought to establish a common platform regarding the burgeoning phenomenon of transnational education and identified, (amongst other important matters) the following issues:

This document is based on the belief that market forces alone are inadequate to ensure that cross-border education contributes to the public good. Therefore, it lays the groundwork for fair and transparent policy frameworks for managing higher education across borders that are underpinned by a set of guiding principles and a process of dialogue among stakeholders. These frameworks should address the challenges we face in developing and sharing quality higher education across borders for the benefit of all, and ensure that cross-border higher education's contribution to the broader public interest is not sacrificed to commercial interests (UNESCO 2005b).

Similar concerns were expressed by Woodhouse (2006) who firmly places UNESCO's policy perspective within the hierarchist sociocultural view of higher education. Furthermore, the UNESCO statement outlined a range of concerns and principles which are pertinent to this study:

Principles for Cross-border Higher Education

 Cross-border higher education should be accountable to the public, students and governments

Recommendations for Higher Education Institutions and other Providers

• Obtain the proper authorization to operate as a higher education institution from government or other competent bodies in the home and host countries. For the purposes of this statement, the term "competent bodies" is used in order to take into account the fact that in any given country, authority for higher education rests with different levels of government, non-governmental organizations, and institutions.

Recommendations to Governments

- Cooperate with relevant governmental and non-governmental bodies to ensure that foreign higher education providers operating within their countries are appropriately authorized and monitored.
- Cooperate with relevant governmental and non-governmental bodies to make widely available accurate, timely, and user-friendly information on the country's higher education institutions and quality assurance and accreditation practices.
- Cooperate with relevant governmental and non-governmental bodies to improve information tools that ensure the information referred to above is shared internationally in a systematic fashion (UNESCO 2005b).

The above statements reiterated the hierarchist perspective and lack of tolerance for nonofficial higher education provision that operated outside of established regulatory guidelines.

In relation to falsified academic qualifications, many countries have varied legislation in place in an effort to prevent such activity. Notwithstanding this, little academic research has been conducted in the area, except for a brief economic risk perspective of falsified academic qualifications provided by Grolleau, Lakhal and Mzoughi (2005, p.16). They suggested that whilst a zero level of fraudulent qualifications was optimal, it might not be desirable from an economic risk versus return perspective. This was because the marginal cost of removing all falsified qualifications was significantly high for the last units of falsified documents, with the corresponding marginal benefits being very low. In order to address the problem, they contended that the resources allocated to reducing the number of fake degrees should be set equal to the pecuniary value of the marginal social damage caused by the existence of fakes, at a point of optimal level of fakes. This was not zero, but at a level where the cost of reducing the number of fake qualifications in use outweighed the social and economic benefits being received. It was at this point, they argued, that net benefits to society would be at their optimum.

The above sociocultural (and economic, as applied to fake degrees) approaches are useful analytical tools; however, the author maintains that an acceptable level of falsified or non-official qualifications is close to impossible to determine. The main issue at hand is that these types of risks (surrounding qualification forgery and non-official provision) are difficult to manage (ICAC 2002a, p.11). These difficulties are due in part to the differing perceptions of acceptability of qualifications issued from a variety of providers that sit either within, but mostly outside, normal regulatory frameworks. It is perhaps Aumann who has provided one of the most comprehensive risk summaries pertinent to this study. He asserted:

Although the risks associated with degree fraud are not traditional financial risks, they include real threats such as public embarrassment, damage to brand image, inefficient and substandard work by under-trained staff, and legal liability. Degree fraud risk comes from individuals who falsely claim a degree from an accredited university, claim a degree from a false university, or hold a degree that does not meet the organization's minimum acceptable standard. The delayed discovery of a questionable degree may bring into question all actions performed by that employee on behalf of the organization. In a worst-case scenario, the fraud may be discovered and publicly reported by an external party who is reviewing company reports or executive bios (Aumann 2006, p.83).

By using risk assessment, this study aims to ascertain the possible risk affecting key stakeholders and to reduce the undesirable effects of this risk through appropriate modification of causes or, though less determinable, mitigation of the consequences (Renn 1998, p.51). The following section details the framework for how this is to be achieved.

1.9 The risk management process: a framework for method

Evidence suggests that humans can, and will, make causal connections between risk events and their effects; these undesirable effects can be avoided or mitigated if the causal event is avoided or modified (Renn 1992). A risk management process model underpins this notion, as it is seen by the author as the most appropriate framework to analyse non-official and fraudulent academic qualifications. Risk management is an integral part of the education sector (Perry 2007); the purposeful choice of a risk framework by the author allows for an interpretive format with the capacity to draw upon appropriate sociological theorems pertaining to higher education. The Australian Standard addressing Risk Management has defined the process as:

...establishing an appropriate infrastructure and culture and applying a logical and systematic method of establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risks associated with any activity, function or process in a way that will enable organisations to minimize losses and maximize gains (Standards Association of Australia 2004, p.v)

The standard further maintained that for risk management to be effective, it must be embedded in an organisation's philosophy, practices and business processes (Standards Association of Australia 2004). This study adopts this systematic approach to analyse the current risk minimisation processes employed by recruitment agencies, private and public providers of postgraduate higher education qualifications in relation to determining the acceptability and authenticity of higher education qualifications. This risk is assessed by an expert Delphi panel which determined the semi-quantitative level of perceived risk each of these populations could be subjecting themselves when evaluating the outcomes of these business processes. Once these levels of risk are identified, the policy implications recommend a modification to current approaches through a new risk minimisation strategy to treat the identified risks. The aim of this new strategy is to increase trust, maximise community stakeholder involvement and fully inform the qualification verification and authentication business processes.

Figure 5, below, outlines the risk management process which was adopted as the analytical framework for this study. The cyclical process prescribed by the model is built upon a continuous improvement approach. Each chapter of this study follows the process embedded within the framework, logically explaining each level, reviewing earlier studies and developing the research investigation. The risk management process model not only provides a useful framework for the study, but also acts as an explanatory construct for the phenomena being researched.

In order to manage the development of this study, the analysis is broken down into three distinct, but equally important phases which follow the Risk Management process:

1.9.1 Phase 1 - Establishing the risk context

Chapter 2 is designed to establish the context of the risk assessment framework adopted for the study. Explanatory discourse on the context and background to the problem is provided, to identify the social factors which have created risk in relation to the demand and supply of academic qualifications.

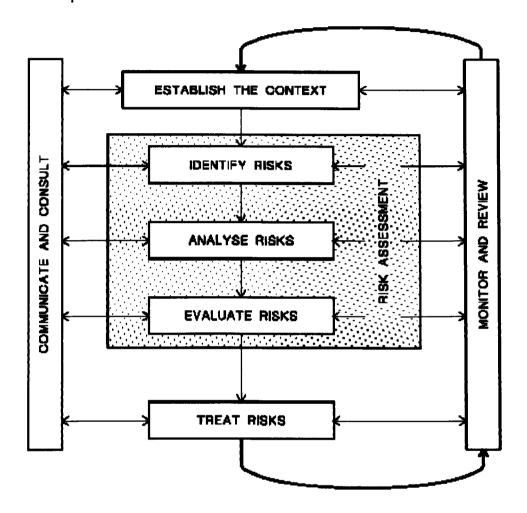


Figure 5 - Risk Management Process - Overview.

Source: Standards Association of Australia (2004, p.9)

The underlying argument for this section of the study is that degree qualifications are valuable items that can be used in both the labour and higher education markets. As such, this section seeks to determine what value these stakeholders place on these qualifications and how this value is perceived from a theoretical perspective.

1.9.2 Phase 2 - Risk assessment process

This section addresses the Risk Assessment Phase of the framework and forms the main part of the study. Within this phase, the study seeks to:

- Identify Risks Chapters 3 & 4 Discourse within these chapters reviews the traditional academic processes and the potential risks posed by the different forms of non-official and fraudulent qualification providers and their users;
- Analyse Risks Chapter 5 This chapter profiles a range of commonly available and currently under development control measures and tools designed to assess and minimise the risk consequences of non-official and fraudulent qualifications;
- Evaluate Risks Chapter 6 & 7 An evaluation of risk in relation to use of the above reflexivity responses is undertaken in these chapters. Chapter 6 outlines the research method and Chapter 7 assesses the approaches to quantifying the levels of perceived risk which the recruitment agencies and private/ public providers of higher education may be placing themselves in.

1.9.3 Phase 3 - Risk treatment process

This final section of the study, Chapter 8, provides recommendations on a new global risk treatment for non-official and falsified academic qualifications. Communication is seen as a prerequisite for effective risk management and policy implementation (Renn 1998, p.64; Standards Association of Australia 2004). As such, the risk treatment plan outlined in this chapter proposes a new communication tool in order to inform the risk management process surrounding academic qualification acceptability and authenticity.

1.10 The significance of this study

A significant amount of resources is regularly allocated towards developing higher education in most countries. At the same time, research has been channelled towards investigating corruption in a range of academic areas (ICAC 2004b; 2005c; a; b), however, little has been allocated towards the problem of replication of testamurs and/ or recognition problems of non-official higher education entities. Records of higher education qualifications are now

used by public sector agencies to determine the identity of individuals (ICAC 2006, p.10) and, historically, they have been used as a major decision-making tool in the process of selection for either employment or higher education admission. The author therefore argues that academic testamurs and transcripts are valuable tokens of identity and their integrity deserves to be investigated and, if required, strengthened via this research.

This study is the first of its type designed to address the complex issue of non-official and falsified qualifications, and to assess the potential risk these may pose to the Australian higher education and recruitment sectors. According to the Association of Commonwealth Universities, the growth of mass higher education coupled with international IT-enabled providers means that degree fraud and corruption will "increase in scale, sophistication and significance" (Fielden 2005, p.22). The author's research into fraudulent and unrecognised qualifications as a risk to Australia, and the possible ways of managing this risk can be seen as an important contribution to an area which has not been investigate before.

Ezell & Bear (2005, p.304) observed that the author of this study was one of only four researchers to have investigated the phenomenon associated with the largely undefined and ambiguously used terms, degree/ diploma mills. They were rightfully concerned about the distinct lack of meaningful academic research in the area. In their search of over a million theses since 1861, they found only three doctoral works (Reid 1963; Calote 2001; Douglas 2003) and the author's past Masters research and subsequent publications in the area (Brown 2001b; 2002; 2004; 2005h; d; b). This research acknowledges these previous studies and complements them by providing new knowledge in the area of credential fraud and the risk this poses for both the higher education and recruitment sectors of Australia.

It should be noted that at the time of writing this study, significant global projects which seek to address the issue of qualification recognition and authentication have commenced. These are important and timely initiatives which are critiqued in this study, within the limits set by their 'commercial in confidence' nature and the ability of the author to source relevant information. It is hoped that the recommendations and the new model proposed in Chapter 8 will further improve these proposed ventures, and provide a best practice approach to academic qualification verification and authentication.

In commending this study to the reader, the author acknowledges the pertinent observations of Noah and Eckstein (2001, p.21):

- 1. Educational credentials serve as evidence, even guarantees, of competence. Those who complete their training and studies in a given field are assumed to be competent to enter a society's workforce and perform their responsibilities at given levels of effectiveness. A complex modern economy depends on such assurances. If they are false, all aspects of the functioning of a society suffer.
- 2. Assessments of individual competence and certificates, diplomas, and institutional imprimaturs go beyond guarantees of individual competence. They serve, too, as guarantees of a working system of education and training. Diploma mills devalue the academic currency represented by credentials. Revelations of fraud erode confidence in the system and the trust upon which it rests.

1.11 Summary and conclusions

This chapter has introduced the research study, demonstrating that the problem of qualification acceptability and authenticity is a global problem, and Australia is not alone in the quandary. With unemployment rates declining, employers are faced with a tighter candidate pool; as such, the temptation for candidates to falsify their academic qualifications and for employers to hire based on a minimal amount of screening is high. Profiting from an individual's naivety is a strategy for those prepared to circumvent established education processes (Garrett 2005, p.2), and it is apparent that there is a need to educate and heighten public awareness in these important areas.

Confidence in both a qualification and the institution that confers it is eroded when revelations of fraud come to light. The study of this fraud is a relatively new area of research, with no previous, substantial work being dedicated to the area of academic qualification falsification. This study is designed to highlight and investigate the possible risk consequences this phenomenon may have for three major stakeholders; the private and public postgraduate higher education sectors and the recruitment sectors of Australia.

The following chapter provides the context of the research study and identifies the main sociological theories that contribute to understanding the demand and concurrent supply of higher education qualifications. A comprehensive review of the literature demonstrates how higher education serves important social and economic imperatives, and how it is imbued with trust and an expectation of integrity. In order to address the underlying source of risk factors associated with the evaluation of qualifications, the view of an academic credential as an important commodity which can be subjected to fraud is explained.

Chapter 2 – The risk context of higher education: understanding the societal pressures for academic credentials

It could be argued that one of the main sources of structural weaknesses in the Australian education and training system is in the unusual scope given to the accumulation of educational credentials in this country (Ashenden 1992, p.246).

Education is not merely a means for earning a living or an instrument for the acquisition of wealth. It is an initiation into life of spirit, a training of the human soul in the pursuit of truth and the practice of virtue Vijaya Lakshmi Pandit (nd).

2.1 Preamble

This chapter commences by reviewing the functions of higher education and the societal pressures that create demand for it. The chapter discusses the theories of human capital and credentialism which help to explain why individuals seek academic credentials. Because the demand is greater than the supply of places in official institutions, the higher education sector has been placed at risk through the emergence of non-official and fraudulent credential providers. A model for understanding the difference between official and non-official and fraudulent providers is discussed in order to clarify the level of risk involved in the higher education context. Failing to distinguish between the sources of academic qualifications, due to the potentially misleading attributes exhibited by official, non-official and falsified academic qualifications, creates a risk context that needs to be explored.

2.2 The societal functions of higher education and recent changes

Education, at the higher level in particular, is an important medium whereby an individual's innate talents and skills are nurtured and brought forth (Harris and Troutt 1978, p.48), so that participants are provided with opportunities to succeed and function effectively in society.

Davis (1981, p.651) saw education as falling within certain 'traditions' of thought, particularly those that centred on the desire for the upgrading of credentials. Those that subscribe to the 'productive' tradition argue that education improves the growth of the economy and benefits its citizens as a whole. Within the scope of this tradition, Marginson (2004c, p.450) considered education as a self good, a process whereby individuals 'build knowledge, confidence, and relationships, to acquire tastes, sensibilities, language and patterns of behaviour'. This description was perceived by Marginson as part of the liberal education ethos, which seeks to shape minds and cultivate sensibilities.

The second tradition highlighted by Davis (1981) was that of education as an economic distributor. He argued that this school of thought perceives education as a filter, apportioning out labour roles and income. Proponents of this theory view higher education as a societal mechanism, a system of sorting, selecting, regulating and guiding eligible members into the workforce of their respective countries (Stodt and Thielens 1985). With education increasingly being viewed as an international 'commodity' (Altbach 2002), the question of whether people learn vocationally or occupationally useful things in school, or schools simply sort people (Bills 2003a, p.443) is a relevant and challenging one. This issue is explored further within this study.

From a wider societal perspective, higher education can be seen as an important economic and social imperative for all countries, providing the knowledge and skills deemed vital for the wellbeing of a given society. The Australian Business Council recently argued that education and training was the 'cornerstone for the knowledge economy' (Business Council of Australia 2006, p.49). Most regard the higher education sector as the guardian of knowledge and professional/ social advancement, with a vital role to play in the maintenance of an equitable social order (Garrett 2005, p.3).

Perhaps one of the most fundamental and recent changes in the higher education landscape has been the move away from labour intensive production markets towards increased investment in intellectual human capital (DEST-AEI 2005, p.ix), strategies all targeted towards the creation of a 'knowledge nation'. This transition was flagged by Kokosalakis (1999, pp 19-20, 25), who predicted a general global reduction in state funding of higher education, and more of a focus on private investment/ user-pay approaches. In his view, the move from an industrial to a post-industrial world driven by 'globalisation' appeared to have triggered a rapid socioeconomic change which has resulted in the:

...sociological compass...point(ing) to a deep structural problem located at the incongruence between nation/ state-controlled formal higher education systems and the needs of contemporary society (Kokosalakis 1999, p.20).

This general trend from state to private funding of higher education, accommodating a shift from elite to mass higher education, is continuing to increase (Knight 2006b; Moodie 2007), and can be seen as helping to intensify the debate between the individualist and hierarchist perspectives outlined previously in Chapter 1. These contending paradigms are reflected in the alternative sources for higher education provision, to be discussed in greater detail in Chapter 3. It is useful at this point to review a number of theories which seek to explain the importance of higher education qualifications for individuals and society. These are helpful in understanding the societal factors influencing the increased demand for academic credentials.

2.3 Human capital theory

Society thinks there is some magic in four years with a diploma. It would be a step in the right direction if the public were to understand the more subtle meanings of an education; that it isn't related, one-to-one, to a set of courses culminating in a degree. Anonymous university professor (Keats 1965, p.80).

Over the centuries two different principles of status and advancement in society can be distinguished: the principle of selection by family and birth (ascription) and the principle of

selection by merit (achievement) (Young 1958). The former was prevalent throughout Europe in the feudal system of aristocracy, where promotion in society was dependent on 'who you were' rather than 'what you knew'. Over the last two centuries higher education has come to be seen as a means of breaking down the social barriers of birth. The academic institution facilitates this process and is seen as a 'neutral authority', which over generations has fostered social selection by merit, with hereditary transmission gradually removed from the process (Bourdieu and Passeron 1977, p.167).

While it is widely acknowledged that various forms of social stratification exist, it is evident that 'proof of ancestry' has now been superseded by the patent of education (Weber 1968; Jacobs 2004). Modern society has evolved from ascription and a system of privilege to a technical meritocracy based on achievement (Collins 1979). The 'education for all' philosophy since World War 2 can be seen to have generated a merit system whereby individuals have been identified by the education and training they pursued and/ or claimed to possess (Eckstein 2003, p.73). The opportunity to participate in higher education has provided important benefits to the individuals concerned. These are discussed in the section that follows.

2.3.1 Individual benefits from higher education

The really good jobs now require a college education. Bill Gates, Harvard University dropout (Times Tech Staff 2006).

The choice of participating in higher education is purely voluntary. As such, many researchers have sought to determine the underlying rationale(s) behind this choice, some of which range from the joy of learning and self fulfilment, to the burgeoning demand for certified education (Hernes 2005, p.6). In seeking to explain some of these reasons, Wolf (2002, p.201) argued that the rise in higher education participation had more to do with an

individual's economic prospects, rather than an interest in or concern for any national economic 'need'. A basic tenet of our current culture, according to Fallows (1985, p.2), is that 'who goes further in school will go further in life', an approach encouraged by government policy and the calculated rates of return on higher education.

The interest in private investment in education has been capitalised on by some private investors seeking to invest in university students. A New York company called 'My Rich Uncle' offered a form of human capital as an investment, setting up mutual funds for investors to provide students with funding for college, in exchange for a percentage of future earnings. Loans were paid to students, and an assessment of their possible future earnings was calculated to determine a payback period when the student commenced work. Whilst it was seen as attractive to students in the short term, it has since been argued that the over inflated pay back requirements were unethical, with no concern for the students' welfare (Schevitz 2003).

At an individual level, the immediate earnings foregone by individuals in attending higher education, as opposed to directly contributing to the social system, has been seen as a form of investment in human capital (Schultz 1971). Becker (1975) undertook a major empirical study in the United States designed to quantify the economic rate of return which education gave on human capital. Arguing that economists had historically concentrated on investment in physical resources, he maintained that similar returns could be quantified for human resources and applied to the economy as a whole. Individuals who invested in self-education created economic property that had the capacity for rendering valuable services to the wider economy (Schultz 1971). This was a central argument of the theory that workers with higher investments in education, generally, earned higher wages (Mgobozi 2004).

In Australia, Marginson (1995, p.67) observed the steep increase in the number of post-school credential holders since the early sixties, with the 'penalties' for those not holding such qualifications being lower economic benefits than those who were degree qualified. In 2004, 80% of all Bachelor degree graduates in Australia found full time employment within four months of graduation, with a median starting salary of \$38,000 (A-VCC 2005, p.3). This figure rose to 80.9% in 2005, a 6.8% increase since 2000 (Graduate Careers Australia 2006). Research has demonstrated that salary levels undergo incremental increases commensurate with each further qualification attained (Andler 2003); as such, it is argued that higher education participation by individuals is an investment, in order to create themselves a form of human capital, a valuable commodity since education raises their perceived productivity level and increases their future earning potential (Marginson 2004a; Mgobozi 2004).

A statistically positive correlation between earnings and education has been consistently substantiated by the worldwide reports published by the OECD. These studies have found that graduates of tertiary level education received substantially more earnings than upper secondary and post-secondary non-tertiary graduates (OECD 2004b, p.163), with a private rate of return of 8% or more when comparing future earning prospects to the private cost of studying (OECD 2006, p.4). Earnings for graduates in countries such as the USA have been reported as close to 86% higher than those with only secondary education, with Hungarian graduates earning almost double (OECD 2004c).

Many other countries demonstrate similar high correlations between higher education qualifications and earnings. In a study of the use of credentials for employment within government in China, Zang (2001, p.189) determined that university graduates were statistically over represented in legislative and administrative positions by between ten and twenty to one. Her research also found that college education was one of the most important

recruitment criteria for leadership positions within government departments (Zang 2001, p.191). A more recent study in Germany found that 88% of surveyed participants valued 'good qualifications' as the most important criteria in relation to life's aspirations.

Qualifications were rated far higher than finding a life partner, financial security in old age or having children (Allianz 2005). This was perhaps due to influences such as the focus on academic credentials during hiring practices, observed in Germany by both Bills (2004) and Eisenhammer (1992), who argued that academic titles were one of the most valued and respected areas taken into account. In Italy, another recent study found a positive and significant relationship between scores on educational performance and the wages of Italian university graduates (Castagnetti, Chelli and Rosti 2005).

For Australia, Ashenden (1988, p.8) maintained that qualifications issued by higher education institutions provided an important defence to individuals, attesting to their skills and knowledge and providing a form of egalitarian control over their work conditions. Those who held academic credentials possessed significant advantages over the unqualified (Marginson 1995), providing a cognitive investment, engendering mental ability along with social attitude and skills necessary for functioning in the upper levels of a given society (Dore 1976b, p.90). These were all significant factors which attracted individuals to invest in education and identify themselves as more valuable to interested parties, such as employers or postgraduate higher eduction providers.

Higher education is often viewed as a significant determinant of an individual's position in the labour queue. It provides both an opportunity to undertake a professional role and a proxy measure to indicate an individual's potential earning capacity (Rumberger 1981; Fallows 1985). By extension, education has come to be regarded as a social imperative at all levels. Hersh (2005, p.229) offered the following advice to parents:

To guarantee your children's future, enrol them in the best preschools and follow that with the best of elementary and secondary schools. They must earn good grades in advanced placement classes, participate in tons of extra-curricular activities, get into a prestigious college or university, obtain that degree, and, *Voila!*: money, prestige and the good life are sure to follow.

Some forty years earlier, Keats (1965, p.14) pre-figured Hersh's sentiments, contending that the parental thinking of the time was that:

...if a child does not go to a good nursery school, they cannot get into a good grade school. Without a good grade school they cannot get into a good high school and without that, they cannot get into a good college. And the parents' concerns were not about the education process – it was about jobs.

The fact that parental perceptions do not appear to have changed over the years was recently highlighted in an Australian study by APM Institute, a private provider of education in New South Wales. The research found that 83% of career advisers believed that parents played an extremely important role in determining aspirations for higher education. The study also found that 85% of parents thought their children would pursue higher education studies, as they believed employers preferred to hire university graduates (APM 2005).

Other pressures for participating in higher education come from social forces which are not immediately apparent. Early work by Keats (1965, p.34-36) argued that American society did not have a socially acceptable place, except for college, where bright individuals aged between eighteen and twenty two years of age could go. Wolf (2002, pp 176-8) agreed with Keats' observations, arguing that young people saw participation in higher education as the main indicator of intelligence, ability and achievement. She provided the following scenario to illustrate her point:

The way things are progressing, let's assume three quarters of the young population stay at school to 18 and a quarter to a third go on to university. These are present day statistics. The rational 17 year old sees this trend and is conscious of the competition. The pressure to obtain these qualifications is placed upon them by society. Where the majority have degrees, the pressure builds. If you don't get the qualification it is an indication that you are in the lower percentile, and employers will have no reason to look at you. The demand for the degree is therefore there. This is reason for the

sudden acceleration in university participation. At a certain point, large numbers of people have felt that they need to get a degree, because not to do so would be a bad move. This wave set off another, and so on.

Keats and Wolf's useful explanations of the social pressures encouraging the mass participation of individuals in higher education are discussed further in this chapter.

2.3.2 Public returns from higher education

...(I)n a society based on educated merit the siren call of the career brings most students back to earth in the advanced countries where paper qualifications for most determine destiny (Perkin 2006, p.200).

According to Dennison (cited in Mgobozi 2004, p.777), the success and ultimate economic growth of any advanced, industrial capitalist economy could be explained by the growth in its educational systems, and not only its investment in traditional capital items. A recent study by the World Bank affirmed the broader, societal benefits of higher education and its returns on investment for the economy at large. It found that 80% of the world's wealth was actually vested within human capital, and not tangible, traditional capital products found in normal production markets (Where is the Wealth of Nations? Measuring Capital for the 21st Century 2006). Education has been seen as a major economic contributor that prepared students in the skills necessary for work, with those skills being the major determinants of both the individual's occupational success and the prosperity of a nation (Collins 1979, p.7).

Based on the view that contemporary societies were primarily centred around production markets, Rumberger (1981, p. 21) postulated that firms no longer employed capital and labour, but physical and human capital. He saw human capital embodied in individuals, with a firm hiring individuals possessing certain amounts of potential human capital. Labour supplied in the market place came in the form of services, which were differentiated by their

respective embodiments of human capital. A decision was then made as to the type of worker required, based on relative price (wage) and respective marginal productivities. Furthermore, he asserted that an 'elasticity of substitution' existed in the skilled education labour market. This operated by reactions to the relative price differences that must be paid for each unit of educated labour (eg university graduate versus high school graduate). Recruitment decisions were therefore based on the perceived contribution each additional unit of labour made to production (marginal product). The general consensus was therefore that education was positively correlated with marginal productivity and rewarded correspondingly with higher wages (Rumberger 1981, p.22).

Reid (1963, p.55) also observed this effect, suggesting that as the industrial revolution progressed through the nineteenth century, a premium was placed on special and technical knowledge which enhanced the social and economic pressures for higher degree qualifications. As such, he argued that the requirements for jobs changed, with unskilled positions being reduced, first in industries such as agriculture, then in heavy manual labour. This was counterbalanced by an increase in the requirement for skilled technicians, clerical workers and professional specialists. This upward movement of investment in human capital has become, according to Blunkett (cited in Wolf 2002, p.14), the foundation for success in the knowledge-based economy of the twenty first century.

The Business Council of Australia has mirrored these assertions, arguing that investment in human capital was crucial since a skilled workforce was necessary for innovations in business (Business Council of Australia 2006). These skills were evidenced by academic qualifications, which, according to Harris and Troutt (1978, p.59), provided certain social and educational needs such as:

- Assistance to help people achieve their social and economic potential regardless of inherited advantages and disadvantages;
- Belief that education could be an independent facilitator and sorter of individual aspirations and attainment;
- A proxy for human merit because, for most jobs, the distinctions between competent and incompetent work performance was difficult to establish.

Criticism has been levelled, however, at the generally accepted equation that a higher education qualification automatically equates to higher wages. The heated discourse surrounding the ambiguity of measuring human merit was, according to Wolf (2002, p.24), the main reason why wages were used as the only real measure of productivity and economic value of individuals in a given society and the sole determinant of their value. The traditional thesis posited that higher wages for educated individuals were their reward for greater productivity. It therefore followed that if graduates were paid double the salary of nongraduates, then they were seen as twice as productive and representing more human capital than non-graduates.

As it currently stands, human capital theory does not provide a persuasive argument as to why those who have significant levels of education have become highly placed in job hierarchies (Bills 2003a, p.444). This has led to a range of competing theories which question the *prima* facie acceptance of human capital, and suggest other social forces are at play. The following section addresses the various theories included under the heading of credentialism.

2.4 Credentialism - the challenge to human capital theory

We have become such a credentialed society that even the lesser among shopkeepers now holds an MBA and is considering a doctorate in accountancy (Gubser and Millard 1982, p.16).

When we leave the (educational) institution, like carcasses coming off a packing plant's assembly line, an anonymous hand affixes an indelible stamp ("drop-out," "high school," "college," "advanced degree") which thereafter determines what we can do and how we shall be rewarded (Hapgood 1971, p.10).

If it is so hard to get a good job with a degree, what hope is there without one? (Wolf 2002, p.179).

Proponents of human capital theory argue that the educational experience and the underpinning skills and knowledge it provides give individuals an investment value, and the flow-on effect is apparent within society. Questions arise as to whether education makes individuals more employable, or whether the mere possession (or claim) of a higher education qualification makes an individual more appealing to the wider employment industry. Significant debate surrounds this important issue. According to Dore (1976b), the answer was polarised around the defenders of two main theories; the proponents of human capital theory who saw education as an investment in increasing productivity in individuals (Mgobozi 2004), and those who theorised that the forces of credentialism and screening were stronger, with stakeholders using educational records as the main signals of potential ability (Bills 2003a, p.448). Buon (1998) suggested the latter was stronger, with an educational credential measuring the relative power of the individual, not his/ her potential productivity and the return on investment to the economy.

Credentialists have argued that the years of study in a higher education institution are not important in developing knowledge and skills. All that matters is the degree parchment and associated academic transcript gained at the end, since it is these documents which appear to have a direct correlation with ability. This approach posits that educational certification is the historical legitimation of advantages that empower degree holders in occupational and organizational recruitment (Brown, 2001a, p.20). The role of credentialing in society thus appears to be dependent on prevailing cultural norms which accept qualifications, in the form of the testamur and transcript of results, at face value (Harris and Troutt 1978, p.44). The

focus on the educational credential as a means of personal advancement appears to be a stronger incentive than the social betterment of individuals.

Much of the organisation of an education system has been built around the ranking and classifying of merit, measuring assessment and attainment (Bourdieu and Passeron 1977).

Dore (1976b, p.99) argued that school systems were built on the premise that paper certificates represented 'bread-and-butter' value, a value process which subsequently spread throughout the higher education and employment sectors. It was for these reasons that Marginson (1995) argued that human capital theory did not fully explain the current trend of rising education demands. Credentialism, the demand for a piece of paper which guaranteed acceptance of the possessors ability, better explained the current trend of qualification acquisition in contemporary society (Faia 1981, p1093-1094; Green 2006).

Whilst the provision of qualifications by higher education institutions is important, researchers such as Nonis and Swift (cited in Brimble and Stevenson-Clarke 2005, p.21) have suggested that students regard universities as credentialing institutions rather than educational experience providers. Farago (cited in Stodt and Thielens 1985, p.251) claimed that credentialism, as a pragmatic, utilitarian approach to higher education study, was alive and well in the halls of academe. He suggested that many students were '...not interested in education: they want accreditation, certification, credentials and glowing letters of recommendation to ease their way into the marketplace'. In the case of international students in Australia today, the qualifications are often used for the purposes of migration, with students having no intention of working in their chosen vocations (Birrell et al. 2007). The University of Canberra Pro Vice Chancellor (Academic), Marie Carroll, hypothesised that this credentialist attitude was perhaps one of the main factors which was creating a cheating culture within Australian society (Milligan 2002), with students desperate to pass and obtain

the requisite qualifications mandated by society. These recent observations mirror Ashenden's (1992, p.247) past concerns, when he argued that the rapid expansion of formal education in Australia was fuelled primarily by the escalating competition for credentials among students and jobseekers.

Among many researchers and educators the push for credentials has been seen as an empty pursuit that may not be directly related to job requirements (Diamond and Bedrosian 1972; Dore 1976a; b; Dore and Little 1981; Arnstein 1982, p.551; Stodt and Thielens 1985; Ashenden 1988; Taylor and McGugan 1995; Evans and Kelley 1998). Ashenden (1992, p.246) provided perhaps the most succinct explanation of the negative effects of credentialism when he wrote that:

Over time, occupations and individuals compete with one another to get higher status qualifications, and therefore demand longer and more abstruse courses of study (credential inflation) as the price of entry. Educational resources are wasted and, worse, distorted as the link between workplaces and learning places grows longer and thinner.

This loss of resources was what Davis (1981, p.650) defined as 'wasteful credentialism'.

From an economic perspective, increasing the number of graduates does not necessarily equate to an increase in the number of professional positions (Marginson 1995, p.74).

Furthermore, Gregory (cited in Marginson 1995, p.74) demonstrated, based on empirical evidence, that the rate of return to education for Australia fell during the period 1969 to 1990, thus undermining human capital theory and supporting the credentialism side of the debate.

Wolf (2002) concurred with this, arguing that the demand for a valuable person, evidenced by a credential, did not rationalise the view that, because something is valuable, more of it is a good idea. She continued:

What we must understand is that grades, credits and diplomas are the coin of the academic realm. In addition to making it easier for the bureaucracy to select and sort students, particularly when thousands apply for admission, academic coin has marketable value in the "outside" world. It can be used to buy jobs, create higher

income, and acquire status. In an acquisitive society that looks upon schooling (aka: education) as just one more commodity, little wonder that as one more acquisition it should have an easily identifiable marketing value (Wolf 2002, p. xi).

Wolf (2002), one of the most vociferous, contemporary writers in the credentialism area, has argued that more education does not necessarily equate to improved economic wealth. Whilst she does not deny that education can lead to both individual and broad economic prosperity, she considers that the 'bubble will burst' and that more education is not necessarily better. Addressing the topic from a UK perspective, she has argued that the rate of return studies cited by human capital theorists are spurious, and that the use of earnings as a measure of an individual's productivity is entirely imperfect (Wolf 2002, p.27).

From an Australian perspective, Norton (2002) has concurred with Wolf's criticisms, and argued that Australia's policy position on higher education is equally untenable. He has criticised the AV-CC's vision for 2020 which forecast that 60% of all Australians would possess a higher education qualification. With only just 30 percent of all 19 year olds currently participating in higher education, he maintained that the AV-CC target was more than optimistic. In addition, his research found that 20% of graduates in Australia were currently in positions that did not require a degree. Whilst the AV-CC's vision could hold merit for some, the question of whether 60% of all future employment positions in Australia would require a degree remains unanswered.

Other challenges to human capital theory come from those who believe education cannot be quantified. Schultz (1971, p.8) argued that the concept of human capital was repugnant, contending that it should not be used to quantify society and people, and that cultural and economic effects were also consequences of education. Hag (1994) sought to ameliorate the debate by providing a continuum, according to which individuals rationalised their desire and

need for qualifications. At one end, an instrumental reason is given – that is, where the credential is regarded as a means to an end and the content is superfluous to the needs of the individual. This is an attitude to education which Dore (1976a, p.8) described as being, '...the pupil not seeking mastery, but being certified as having mastered'. At the other extreme, an expressive, intrinsic reason is provided, such as the motivation to seek a qualification for one's own personal self-development, where the learning is cherished for its own sake. Whilst the latter remains important for some, the former instrumentalist motive and the use of a qualification purely as a screening mechanism is one of the main components of credentialist theory.

2.4.1 Credentialism and screening theory

The credential is not a passport to a job, as naïve graduates sometimes suppose. It is more basic and necessary: a passport to <u>consideration</u> for a job (Jacobs 2004, p.154).

Qualifications are the best available proxies or measures of skills (Keating et al. 2005, p.10).

The origin of the screening effects of credentialism can be traced to the medieval feudal system and craft guilds. This has been likened to a Durkheimian society, whereby a stratified system of occupation evolved with governments controlling occupational groups (Lukes cited in Olson 1983, p. 295). Such a system is the antithesis of a capitalist structure where, according to Marx (1936), credentialist frameworks such as medieval guilds would be removed and a free labour market created so that workers competed equally in order to minimise wage inflation.

One extreme model of screening suggested that expenditure on education was a pure waste of money, since all it did was rank individuals (Arrow 1973; Quiggin 1999). As such, it provided society with the perfect vehicle (and to critics, excuse) to assist the functionalist theory of social stratification i.e. a hierarchy, with levels of power and prestige. One of the

earliest opponents of credentialism and screening in society was Adam Smith who saw the creation of guilds as a restraint on trade (Smith 1880). Education, under a stratified system, was valued and rewarded, and provided social mobility to move beyond normal social confines with the promise of a prosperous future.

One of the most vociferous opponents of credentialism and its screening effect was Hapgood (1971), who argued that whilst some saw society as built on a meritocracy, it was still a stratified system, with each layer sealed off from progression, unless an individual held the requisite qualification (Hapgood 1971, p.73). His position on credentialism and screening theory was akin to what Tyler (1982, p.163) deemed, the 'radical', 'neo Marxist' view, placing credentialism (or 'diplomaism') within the realms of control imperatives subsumed under the capitalist labour process. For Hapgood (1971, p.9), a 'diploma is the measure of the man, a diploma which usually bears no relation to performance'. Indeed, he went so far as to suggest that using qualifications as a method for selecting human beings was similar to, '...the neat, monotonous values found in a suburban zoning code' (Hapgood 1971, p.10).

More recently, and from an Australian perspective, Quiggin (1999) argued that Australian education policy had been historically shaped by screening theory models. He vehemently opposed the work undertaken by other Australian commentators, such as Maglen (1990) who embraced these approaches, arguing that higher education merely sorted individuals and screened them into appropriate levels. Despite the opposition of its detractors, it has been argued that a combination of screening and credentialism is seen to exist in contemporary Australian employment circles (Keating et al. 2005).

One of the earliest citings of the screening and credentialism phenomenon is that of the Dutch scholar, Erasmus (1466-1536), who had the following to say about a doctoral degree he was working on in Turin, Italy (Dodds 1935 p.35, cited in; Lady 1967, p.198).

I must acquire the absurd title of "Doctor". It will not make me a hair the better, but as times go no man can be counted learned, despite of all which Christ has said, unless he is styled "Magister". If the world is to believe in me, I must put on the lion's skin. I have to fight with monsters, and I must wear the dress of Hercules.

While many authors such as Hapgood (1971), Wolf (2002) and Marginson (2004a) have freely admitted that there were studies correlating increased earnings with increased education, much debate still surrounds another standard assumption that a degree qualification equates to ability to perform a specific job. The increased salary, according to Dore (1976b) was not due solely to the 'brightness' of individuals who increased their human capital through education, but was helped along strongly by employers sighting the educational records they produced. As such, employers *expected* them to be bright and provided opportunities to those that held these credentials (Dore 1976b, p.85). More recently, Castagnetti et al. (2005) referred to screening with credentials in line with Weiss'(1995) assertions that they acted as a filter, separating the more from the less able.

According to Hui (2004, p.3), who concurred with Dore's earlier assertions, the wage or earnings differential associated with education did not reflect improvements in individual productive capacity; wage or earnings differential came from the employers' use of educational attainment as a proxy for pre-existing differences in talents. These recent findings correlated with Berg's (1970) ground breaking and pioneering work in the area. He found that there was no significant connection between degrees and job performance; indeed, to the detriment of some employers, educated employees were more likely to be dissatisfied with their jobs and changed jobs more frequently than less educated individuals, suggesting

that education could be seen primarily as a status symbol (explored further in 2.5) by those that possessed it.

Dore and Little (1981, p.29) argued that employers used degree qualifications as a proxy measure of ability and aptitude for given tasks, a term they coined 'the stick-to-it-ive-ness'. Interestingly, the exact same term was used by personnel managers surveyed by Bear who conducted an empirical analysis of human resource managers of twenty airlines within the United States. At the time, each of these airlines required a minimum of a Bachelor degree for pilots to be admitted to their programs. Bear found that most of the airlines did not require the degree to be in a related field such as aviation, science or engineering; the requirement was a degree in any discipline. This requirement, according to Bear's research, demonstrated to the airline that the candidate held, '...a certain level of gumption, of ability to follow instructions, play by the rules, and complete a major endeavour'(Ezell and Bear 2005, p.126 & 127). Some surveyed respondents were, however, less than impressed with the airlines' policy at the time:

I've flown four-engine jets for the Air Force for ten years, and I'm passed over for a Cessna-flying kid with a bachelor's degree in English poetry (Ezell and Bear 2005, p.126).

A viewpoint similar to that of the airline companies was expressed by an employer interviewed by Keats (1965, p.16):

If a kid shows me an OSU (Ohio State University) diploma that tells me he's spent four years plugging away at *something*. He's serious. I don't expect him to be a truck driver all his life. But if he's spent four years at one thing, chances are that he'll stick with me for a while, and while he does, the chances are that he won't be a wise guy, or goof off, or hand in fake gas bills, or join the union.

Much of the literature has argued that job skills cannot be assumed to have a direct linear relationship to educational attainment, and has even questioned how employers have been inappropriately persuaded that higher education qualifications should be rewarded with higher

wages (Haspel 1978; Collins 1979; Ezell and Bear 2005). Despite arguments for not using them as a measure of perceived ability, it is evident that they are still valued as a practical and easily accessible indicator. The following section explores these situations further.

2.4.2 Screening and signalling in the recruitment industry

It (having a degree) doesn't signal anything in itself or what it means. Some (degrees) have low standards and some have high standards but it is impossible to know on the face of it. Dr Clive Hamilton, Executive Director, Australia Institute (Gough 2006).

An early report undertaken by Wiener (1968) found that the requirement for qualifications had become a form of shibboleth in recruitment practices. Some researchers suggested that a qualification was really little more than a 'union card' and that little attention was paid to the rationale for using degrees as a selection tool for positions (Porter 1972, p.11; Gubser and Millard 1982, p.16). Ugbah & Majors (1992) found that employers valued the academic credentials of candidates as one of the most important criteria for hiring decisions, second only to an applicant's behaviour and social skills. The reverse was found in a more recent study in Australia, although qualifications were still rated as an important component in the selection process (Keating et al. 2005). A study by Cole, Field & Giles (2003) indicated that the majority of employment evaluations were based primarily on information provided in the resume. They concluded that there was a distinct paucity of empirical research examining the relationship between resume content and other predictors of job performance, such as mental ability and personality.

Work undertaken by Ashenden (1988, p.8) and Lee & Miller (2004) found that recruitment practices in Australia relied on academic qualifications as they provided a 'marginal economic benefit' to employers, by distinguishing between large numbers of candidates for a position. In this sense, screening theory appeared to be integral to recruitment practices, yet during the process of selecting graduates for work positions, employers did not appear to seek

out the intangible human capital within the individual. The possession of the status good (an academic qualification), particularly from a high-status institution (Jacobs 2004, p.154; Marginson 2004a, p.185), was seen to assist employers in simplifying the screening process. Employers placed significant reliance on these documents as 'passports' into a range of positions (Bowes 1984; DET 2005, p.18; Keating et al. 2005, p.8). Academic qualifications represented a formal information system operating in labour markets designed to assist employers make their human resource management decisions (Ridoutt et al. 2005).

Despite much anecdotal evidence, there appears to have been little research undertaken into the recruitment behaviour of employers in Australia (Keating et al. 2005). A study undertaken by Boudville (1985, p.34) determined that of thirty-seven employers in Western Australia, thirty-two referred to prospective candidates' qualifications as a major deciding factor in the short-listing process. Where the short list was substantial, after all other factors had been considered, candidates with lesser qualifications (even if these were above the minimum entry requirements) were removed from the shortlist until the required number had been reached.

An academic qualification used in such a screening or sorting process could be described as an index of competence (Jencks & Riesman cited in Hag 1994, p.53), which Dore (1981) hypothesised was used by society as a tool to determine what sort of work an individual was likely to be permitted to undertake. Dore and Little (1981, p.33) argued that graduates moved further down the hierarchy of entry jobs, thus disallowing the next-ranking high school graduates entrance to the hierarchy. For this reason Hapgood (1971, p.23) asserted that individuals valued the credential, the piece of paper, as the important aspect of education, not the learning that had taken place. Powell (cited in Hapgood 1971, p.23) went as far as to suggest that the role of higher education was 'job accreditation', whereby students were

taught that securing degrees indicated that one was 'accredited' and ready to take on jobs reserved for such credentialed positions, with form more important than content. As a symbol of perceived ability, an academic qualification was regarded as holding continued value, even when it was not a major or current requirement for a position. How this could be measured, however, was still a topic of debate and had yet to be resolved (Bills 1992). According to Habermalz (2003), many researchers have contended that the use of academic qualifications as a signal of ability (what has been called the sheepskin effect) reduced over time as employers learned more about their staff and their abilities. His research claimed to disprove this, with evidence that the academic credential remained a strong signal of perceived performance.

This reliance on paperwork as a measure of competence could be seen as certification 'gone mad' (Bowden 1993, p.51). Buon and Compton (1990) in assessing the Dawkins 1989

Australian Workforce Plan and the introduction of the Training Guarantee Levy, argued that each initiative contributed to employers' reliance on credentials for the ranking of staff. The setting of levels of prescribed academic achievement, without paying due attention to the content and requirements of positions, could lead to tertiary institutions becoming mere 'diploma mills...providing a credentialed workforce for unthinking employers' (Buon and Compton 1990, p.127).

Those that adhere to screening theory accept that individuals with more formal education (hence more credentials) are more productive in an organisation and should therefore be rewarded by higher remuneration (Blaug 1972; Dore 1976b; Rumberger 1981; Boudville 1985). The argument rests on the assumption that those who possess more qualifications *ipso* facto have higher ability. With employers looking for the most able and intelligent people, the credential gained after years of education is deemed to be a good proxy for the type of

general intelligence that school and university reward (Wolf 2002, p,29). This use of an academic credential as an uncritical means of sorting and rewarding people in the workforce was, according to Harris and Troutt (1978, p.55), an understandable, but serious problem. Where academic credentials were used by society as an 'independent assessor', they provided talented people with credence to their implicit claims of competence or initiative. For those in a recruitment situation where there was minimal information available about an individual, it was easy to place more reliance on external, overt cues (Bills 1990; Keyes 2004). A 'screening-by-credentials' process was seen as an attractive alternative (Harris and Troutt 1978, p.55), given the lack of other information in an individual resumé. Its attractiveness was also due to its cost effectiveness as the candidate has already borne the cost of providing this information as a signal of their ability to the employer (Haspel 1978).

While much criticism has been levelled at the use of an academic credential as a screen, few attempts have been made to assess the reliance placed on the credential in an employment situation. A study by the US Company Jude M Werra and Associates (2002) sought to determine employer's opinions on qualifications. The question posed was straightforward: 'What is the minimum education qualification required, *before* you will look at any other relevant criteria such as work history for a position?' As depicted in Table 4, below, well over 60% of respondents required a minimum of a Bachelor degree for a range of senior to lower level management positions, before any other criteria for the position would be considered.

				Non-Degreed	High	
OCCUPATION	Graduate Degree	Bachelor Degree	Associate Degree	Post H. S. Study	School Diploma	No H.S. Diploma
CEO/COO/President/ Executive Director/Administrator	34.7	62.5			2.8	
Division General Manager/ Business Unit Executive/P&L Exec.	18.1	77.8	1.4	1.4	1.3	
Senior Executive Officer (VP of Function/Discipline -	19.4	75.0	1.4	2.8	1.4	
CFO/Top Financial Executive/ Controller	31.9	65.3	1.4	1.4		
Top Human Resources Executive	23.6	0.89	4.2	2.8	1.4	
Middle Manager: (Director/Manager over Supervisors and Professionals)	1.4	66.7	19.4	5.6	6.9	
Supervisor (over Professional, Technical, Production, Office, Service employees)		23.6	38.9	16.6	18.1	2.8
Professional (Non-Supervisory) (Salespeople, Marketers, e.g., Engineers, Accountants, R.N.s, Scientists, Programmers, Analysts)	2.8	61.1	15.3	9.7	8.3	2.8
Technicians (Supporting Professionals)		1.4	50.0	18.1	26.4	4.1
Inside Sales/Customer Service		2.8	18.1	15.3	58.3	5.5
Office and Clerical			7.6	16.6	68.1	5.6
Factory or Service Employees		-	1	8.3	63.9	27.8
T. 1. 4 Mi. i Aducational attainment		required before work experience will be considered.	perience will	be considered.		

Table 4 - Minimum educational attainment required before work experience will be considered.

Source: Jude M. Werra & Associates (2002)

Similar findings have been reported in Australia, with a study calculating that only 15% of surveyed employers consistently valued skill and experience above qualifications. A similar proportion of respondents believed strongly in the value of qualifications, whilst the remaining respondents, the majority, valued qualifications conditionally based on their enterprise's particular circumstances (Ridoutt et al. 2005, p.9).

Although academic credentials obtained by individuals continue to provide a form of guidance in the selection process, with ever increasing retention rates in employment and access to higher education open for those that can pay, the use of a credential as a selection tool has become severely affected (Hag 1994). Just why the academic qualification is valued so much in employment circles has yet to be fully understood. Similarly, whilst there is clear evidence demonstrating a strong correlation between formal educational credentials and socioeconomic attainment, just how this occurs and why they are rewarded has yet to be fully explained (Bills 2003a). The following section investigates how far screening and signalling issues are prevalent in the higher education sector.

2.4.3 Screening and signalling in the higher education sector

It is not the degree that makes a great man; it is the man that makes the degree great (Nicolo Machiavelli).

Screening and signalling in academic institutions appears to play a role which is similar to that in the employment industry. Ashenden (1988) considered credentialism and screening to be a valuable explanation for the recent evolution of higher education in Australia. In the late eighteenth and early nineteenth centuries, a credentialist approach assisted in linking the disciplines of medicine, law and engineering with institutions of higher learning in England and Scotland. He argued that Australia inherited this tradition, which in time filtered through

to the vocational education and training system. The massive expansion of education seen in the United Kingdom in the early 1920's took off in Australia after the Second World War, partly due to the 'scramble for credentials' (Ashenden 1988, p.8), and the higher education sector has continued to cater to this market. Currently, the admission criteria to postgraduate courses and employment within the sector demonstrate that prerequisite qualifications are an important and mandated criterion in the selection process for both faculty positions and admission into postgraduate programs.

Marginson (2001) has pointed out that the demand from Australia's main source countries of overseas students has increased mainly due to the perceived value of Australian qualifications as international credentials, and their high level of recognition throughout the world. This recognition and prestige, undoubtedly assisted by the recent rise in institutional ranking systems, have had a positive correlation with student earnings (Armstrong 1995, p.103). These new ranking approaches have created a halo effect, enhancing the benefits to be gained for the whole of Australia's higher education system (Marginson 2001, p.8) and led to yet more demand for academic qualifications.

Other studies have endeavoured to ascertain the way the demand for credentials has affected students. In the UK, recognition of the significant signalling role of academic qualifications was found to influence secondary school students' intended participation in higher education. The qualification and the screening advantages it promised in the labour market appeared to be of more importance than the future productivity it promised to impart (Killeen, Turton, Diamond, Dosnon and Wach 1999). The increasing demand for higher education credentials in the USA was illustrated by Fallows (1985, p.5) who found that in the United States, not one state required its lawyers to have attended law school before World War 1. By the Second World War, professionals without advanced degrees were becoming an oddity. This was

claimed to be the result of increased automation and technological advances, whereby many employers became 'convinced' that higher credentials were essential (Diamond and Bedrosian 1972, p.22). At a postgraduate level, Stodt and Thielens (1985) found that credentialism was not as prevalent within the select range of universities they investigated in the United States, as proponents of the theory argued. They determined that the attainment of competence was at least equal to, if not incrementally more important, than obtaining the final qualification. The brand image of the institution where the credential was earned was, however, important to some of the 'credentially inclined' students (Stodt and Thielens 1985, p.261). This concept of academic brand, with the value of higher education qualifications being linked to particular types of institutions, lends itself to club theory, an important explanatory concept covered in the following section.

2.5 Degrees as positional status goods – an application of club membership theory

I think that it's a privilege. I think that all of us need to appreciate that having university education is not something that any of us should ever take for granted. And one of our failings as a country, of course, is we've created this culture in which young people feel that, if they don't get a university education, in some way they're not as good as someone who does. Dr Brendan Nelson, former Federal Minister for Education, when asked if university education was a right or a privilege (Fullerton 2005).

Another strand in credentialist theory is derived from the view of qualifications as status or positional goods, like other items of tangible value and conspicuous consumption. The yearning of some individuals for status or positional goods has been well documented (Veblen 1899; Easterlin 1973; Hirsch 1976; Cooper, Funk and Garcia-Penalosa 2001). Positional or status goods are recognised as increasing the societal utility for an individual, but always at the expense of somebody else consuming less of that good. The utility gains to one individual are essentially cancelled out by the utility losses to another. As a result, the utilitarian gains of positional goods are gradually eroded as more people obtain and enjoy

their benefits. Warren (2001, p.130) argued that status goods were social, symbolic, scarce and excludable items, which included academic degrees, titles, exclusive club memberships, as well as expensive cars, houses or other such goods with an attached symbolic value. He further suggested that the holders of such goods developed trust or empathy with one another which was restricted to fellow members or like-minded individuals (Warren 2001, p.136-7).

Academic degrees have been regarded as status conferring items (Boylan 1993; Bridges 1996) which sorted and labelled individuals, by giving (or withholding) certification, and determining what work society allowed them to undertake (Dore and Little 1981). In this way, they acted as a social mechanism akin to club theory. Faia (1981, p.1107) claimed that credentialism (or, as he termed it, 'certification screening') could be likened to club theory, as a phenomenon with substantial impact on status hierarchies.

In club theory, degree qualifications are items of value which confer advantages on some individuals, but deny them to others (Noah and Eckstein 2001; Marginson 2004b, p.7; 2004c). Marginson (2004c, p.452) described the current range of educational offerings as commodities, with the testamur conferred at graduation seen as a status-allocating commodity good which provided the tangible evidence of study performed. It was this document, and its associated transcripts, which were used as proof of mastery and the possession of the status good (degree) by the graduate in negotiations with an interested third party. Students with this end in mind have been criticised for adopting a utilitarian approach to obtaining the necessary paperwork. Jacobs (2004, p.165) observed what he regarded as an alarming trend of students doing the minimum amount of work required to 'get by and get out', whilst Hu Dayuan, Dean of the Beijing International MBA program at Peking University, found that most students undertaking the program were doing it purely to obtain the credential (Kuo 2005).

According to Noah and Eckstein (2001, p.61) and Wolf (2002, p.251), academic qualifications served as positional or status goods which were priced according to their ability to position their owners in society or to represent the status of who or what they were. They carried a status value, which was inherently hierarchical, bringing with it titles and the rituals of conferring the award. The status was relative to the position of the qualification in the academic hierarchy and the scarcity of the qualification (Keating et al. 2005, p.11). Normal supply and demand theory would suggest that the status of a qualification would be reduced if there were too many qualifications in the marketplace. This position was argued by Gubser and Millard (1982, p.15) who contended that as society provided more advanced degrees to individuals, a devaluation effect occurred, making training 'less treasured'. Research conducted by Boylan (1993) found the converse to be true; using a simple queuing model, he found that the value of qualifications actually rose, as the number of credential holders increased, casting doubt over the credentialist argument of degrees as status goods providing exclusive club rights. This rise in demand has led to the traditional supply of higher education failing to meet contemporary needs; the following section addresses this issue.

2.6 Satisfying unmet demand

Contemporary society's demand for paper credentials drives some people to acquire a bogus degree. They feel like they can't do what they want to without that credential. Alan Contreras, Office of Degree Authorisation, State of Oregon USA (Kettler 2006).

Whilst demand for higher education has increased exponentially, some countries have been unable to provide sufficient opportunities to meet this need. Where candidates have been unsuccessful in obtaining a position in a state funded institution, they have often looked for other alternatives. It is this lack of subsidised provision which is seen to cause a high deficit on the supply side, resulting in an augmented 'alternative' non-official sector which lacks recognised accreditation and faces serious problems of recognition, quality assurance and

quality control (Kokosalakis 1999, p.34). Whilst Australian private higher education provision has been well regarded and falls within the official category, many other countries have failed to embrace or adequately regulate this important sector. The prior discussion has emphasized the fact that individuals' successful completion of the investment in higher education is evidenced through documentation which has great value for their career advancement and status (Eckstein 2003, p.32 & 72; Hallak and Poisson 2005). The credentialist approach and its associated signaling and positional derivations is satisfied with the production of these documents. Given the increased mobility of employees, and the new Internet paradigm, the increasing risk of non-official and falsified qualifications being provided in order to satisfy these screening needs has become a significant issue of concern (The international encyclopedia of higher education 1977, p.1239; Arnstein 1982; Stewart and Spille 1988; Buon 1993; Eckstein 2003; Katz 2004; Garrett 2005).

In 1985 a US Select Sub Committee formed to investigate fraudulent qualifications claimed that American society had become more credential conscious, partly through the '... peddling of phony credentials' (Fraudulent Credentials. 1985, p.5). The search for higher social status, increased self-esteem and the need to meet job requirements (Spille and Stewart 1985; 1988), fostered an unmet demand for academic credentials; this was catered to by non-official providers through to those prepared to forge academic documents.

Whilst the exact definition of non-official higher education and the associated degree/ diploma mills are discussed in the next chapter, the negative connotation already implied suggests that these entities supply qualifications in a more accessible format than traditional means. Cases of misrepresentation and lying are common forms of professional misconduct (Eckstein 2003, p.33), all mainly fuelled by striving to satisfy personal and status seeking desires and/ or meeting the 'hurdles' built into various recruitment policies (Arnstein 1982,

p.552). The lack of effective screening mechanisms and the assumption of honesty that exist in some recruitment processes have assisted the rise of the degree/ diploma mill.

Credentialism, according to Arnstein (1982) has been facilitated and the screening problem solved, via the use of degree/ diploma mill qualifications. Satisfying the inferiority complex

of some individuals, and the pre-requisite requirements for job roles, they provided a useful

'impression tool', which if left unchecked, could have serious ramifications.

In their review of credentialism and its encouragement of the use of falsified and non-official qualifications, Garrett (2005, p.16) and Aumann (2006) pointed out that employers should emphasize demonstration of competency and overt skills prior to employment, and not rely on, '..a degree as a vague proxy for such capability'. This outcomes approach does, of course, hold merit; however, the preceding discussion has demonstrated that stakeholders prefer a measure that is easily used, cost effective, and provides a semblance of surety. Garrett cited a report by Finnie and Usher (2005), which argued that there was no adequate method currently available that clearly defined student ability on entry into and exit from higher education establishments. An academic qualification evidenced by a testamur and/ or transcript of results appeared to be the only broad, socially acceptable measure of competence, except for extensive testing in a particular area. It is, however, this emphasis on the documentation, which fuels the demand for credentials and subsequently heightens the risk of fraud, perhaps at the expense of merit.

2.8 A new model for analyzing academic credentials

The demand for higher education credentials, whether it be fuelled by a personal drive for self-enhancement or egotistical needs (Eckstein 2003, p.48), exacerbates the perception of academic qualifications as both a valuable positional good and a signifier of ability. There is

greater competition in the education and labour markets and this has led to an increased reliance on indicators such as academic qualifications (Hallak and Poisson 2007). It is therefore argued that employers have been partially responsible for the demand for non-official and fake degrees, mainly due to the influence of credentialism (Johnson 2006a) and the over reliance on degrees as proof of competence. The pressures of competitiveness and ambition have moved some individuals to misrepresent these items of value (Eckstein 2003, p.44), for improved status, power and influence, at the expense of a meritocratic process.

Dore and Little (1981, p.40) suggested that in this meritocratic process, there was a linkage between qualifications and an individual's future success, as follows:

Academic ability

1

Educational attainment credentials

1

Occupational status

1

Economic success

Using this pathway, economic success is seen to be facilitated by the use of academic credentials to provide not only a human capital component, but the status and positional aspects necessary for the role as well. All of these characteristics could be seen to be embodied in an 'official' degree qualification.

A three-dimensional attribute space model, which is given below, has been adapted from work undertaken by Grolleau, Lakhal and Mzoughi (2005). It seeks to depict visually the three main attributes that are ascribed to an academic qualification according to both the human capital and credentialist theories.

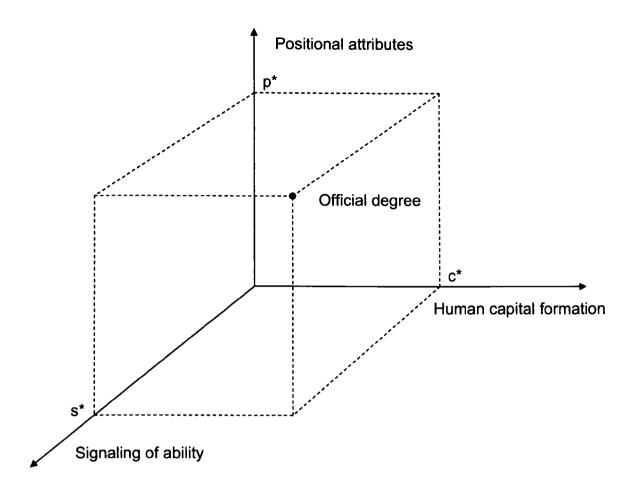


Figure 6 – Three-dimensional attribute space model for an official degree Adapted from Grolleau et al.(2005).

The bottom two axes, human capital formation (c*) and signaling of ability (s*), indicate the two kinds of functions that official degree qualifications provide. The third, vertical axis, indicates the level of positional status (p*) a degree qualification may also provide. Within this three dimensional model an 'attribute space' exists, an area where an 'official' degree qualification provides functional and positional attributes which are higher than the minimum levels, c*, s* and p*. From a conceptual standpoint, all degrees located in this area are deemed to be legitimate and credible qualifications.

Figure 7, below, elaborates on this model and attempts to depict situations where an individual claims a 'non-official' or 'falsified' qualification. Grolleau et al. (2005) have argued that holders of these claimed qualifications receive none of the benefits of human capital formation, but still have the potential to deceive prospective employers or other interested stakeholders by producing the non-official or falsified qualification and demonstrate that they possess a high level of ability. They therefore see the non-official or falsified qualification providing a 'free ride', not only on the positional attributes of an 'official' degree, but also on the functional attributes of the signaling effects it offers.

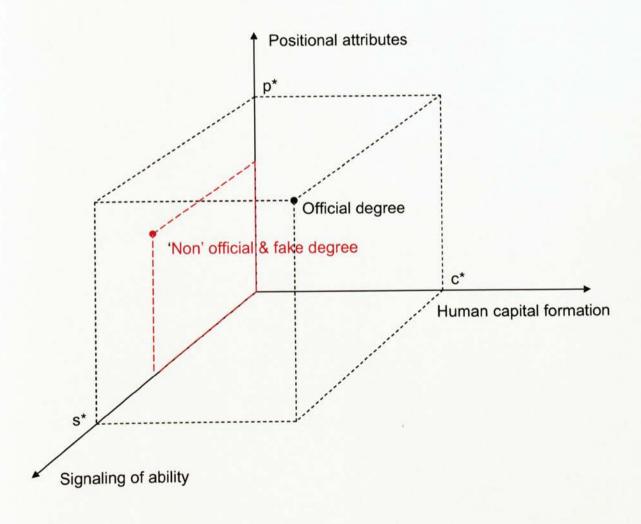


Figure 7 - Three-dimensional attribute space model for official, non-official & fake degrees Adapted from Grolleau et al (2005).

These conceptual models provide a useful means of comparing official, non-official and falsified academic qualifications, even though they do not fully explain the attributes they may possibly confer. Human capital theory recognises several forms of endowment which include not only schooling, but also job experience and skills acquired through other non formal training (Voon and Miller 2005, p.S23). This can be explained by reverting to the analysis of qualifications and employment previously provided by Dore and Little (1981, p.40). They argued that educational credentials could be removed from their economic success flow model and not used to provide occupational status in the process, as follows:

Academic ability

 \downarrow

Effective performance in the market *OR* good job performance ratings and promotion in an organisation

1

Economic success

This theoretical possibility was supported by Marginson (1995, p.73), who maintained that individuals could pursue either an education path or an employment path when seeking higher socioeconomic attainment; academic credentials were not mandatory. For the purpose of this study, the author acknowledges the existence of both pathways, each holding merit. It can be argued that individuals do not necessarily have to possess the academic ability as proposed by Dore and Little in their models above. Ability, whether already innate or acquired through work and life experience, may be present in individuals as potential human capital without the need for academic verification (Haspel 1978, p.280). Individuals may also obtain positions based on merit in work practices, not necessarily through the assistance of study and/or academic credentials. In addition, there is no evidence to suggest that a non-official degree

provides lesser human capital than an official degree (or vice versa); indeed some research has found that a non-official degree is a more effective screening device than an official degree (Douglas 2003). Furthermore, this chapter presents evidence that even an official degree qualification is an imperfect proxy measure of ability and capacity.

Whilst some individuals hold years of human capital acquired through life and work experience, the pressures of credentialism and screening may lead them to obtain a falsified or non-official qualification. The argument that by demanding and using academic qualifications for selection purposes, employers are partially responsible for the demand for fake degrees cannot be proved empirically; nevertheless the assertion is highly plausible (Johnson 2006a, p.289). It is therefore the author's contention that non-official or falsified academic qualifications have the potential to provide a 'free ride' on the functionality dimension of human capital as well. This assumption is confirmed by Keyes (2004, p.66) who found in his analysis of individuals who falsified their academic qualifications, that the majority had significant talent and more than enough ability to succeed without the credential. Garrett (2005, p.15) also postulated that whilst there was an absence of adequate data, there undoubtedly were many examples of individuals who had secured employment with nonofficial or falsified qualifications and (prior to discovery) had performed their jobs satisfactorily for many years. Research conducted by Jude Werra confirmed these assertions, indicating that individuals who scored highly in emotional intelligence tests included many people who had falsified their academic credentials (Keyes 2004, p.77).

In seeking to refine and develop the above model, the author acknowledges Garrett's and Grolleau et al's (2005, p.13) observations that fake and/ or non-official academic qualifications do not necessarily increase individual abilities. In many situations ability does not need to be raised, as it is already present since it has been acquired via other human

capital pathways. In essence, the concept of education as a positional good has more to offer than the concept of education as human capital (Marginson 1995, p.73). It is therefore argued that a non-official degree or fake degree has the potential to provide similar human capital, as well as positional and signaling benefits, not dissimilar to what an official degree may provide.

There are risks inherent, however, in holding such alternative degrees in an employment or higher education position. These are made evident when persons in such positions have been publicized in the media for holding non-official or fraudulent qualifications. Many appear to have been victims of the credentialist approach and its screening demands. Whilst they may already have held the requisite human capital required for their positions, they lacked the paper credential necessary to substantiate these claims. This lack of the proxy measure compelled them to either pursue a non-official degree or commit fraud, with serious risk implications for both themselves as individuals claiming the qualification and the wider community. These acts may sometimes be seen as a form of intentional or unintentional deceptive status signaling (Kempen 2003), which can range from zero cost acts (i.e. pretending to hold a degree without any documented evidence), through to the purchasing of falsified documentation to feign legitimacy. These issues are explored further in Chapter 4. For the moment, the author proposes a new pathway as outlined below.

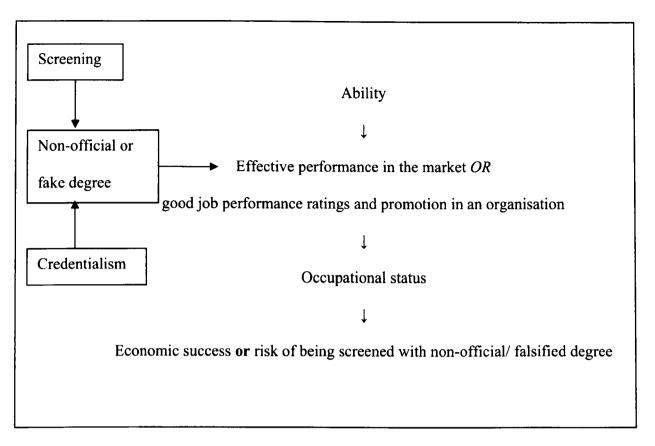


Figure 8 - Pathway to occupational status and economic success via the use of non-official or falsified educational credentials.

Adapted from Dore and Little (1981, p.40).

Based on the above new pathway, the attribute space model previously discussed is now updated by the author as per Figure 9 below to explain how individuals have the potential to deceive interested stakeholders on all dimensions, including human capital. This model now demonstrates the real and potential risks associated with non-official and fraudulent qualifications, and the ironic potential to call into question the validity of official degrees, except where professional and continual demonstration of competence is required.

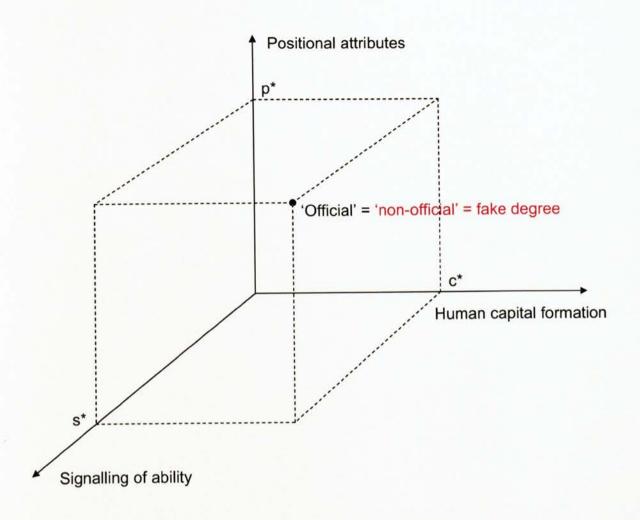


Figure 9 - Three-dimensional attribute space model where non-official and fake degrees are equated to official degrees.

Adapted from Grolleau et al (2005).

The previous discussions have demonstrated that the majority of hiring or admissions decisions are based on uncertainty (Bills 1990), with the use of degree qualifications as a proxy. With an official degree providing a less than accurate indicator of competence, the author argues that this uncertainty is heightened by the risk surrounding non-official and falsified qualifications. Unless a process of verification regarding the acceptability and authenticity of claimed academic qualifications is undertaken, it is contended that an official 'real' degree can, in some circumstances, be equated to a 'non-official' or falsified 'replica' degree with significant consequences for the holders of these claimed qualifications and other

stakeholders. These consequences and implications are discussed in greater detail in Chapter 4.

2.9 Summary and conclusions

The debate pertaining to academic credentials and the motives surrounding their acquisition and use appears to be unresolvable. Society has yet to devise an alternative-screening tool. Whether one agrees with the human capital or the credentialist position depends on one's school of thought and one's sociocultural background. The reality for any credential evaluator, however, is that the demand for academic credentials does not appear to be waning, and it is the contention of the author that the societal forces discussed in this chapter have been instrumental in spawning the provision of alternative to illicit qualifications.

As a result of the burgeoning demand for academic qualifications, a range of providers and methods have emerged whereby an individual may obtain, or purport to hold, these valuable documents. The following chapter constructs a new taxonomy of this provision, exploring the supply side of higher education credentials including unorthodox and fraudulent provision, and the varying levels of risk surrounding the different sources.

Chapter 3 – Risk identification: Academic degrees, their acceptability and their sources

All universities are degree factories. One way or another, they're a degree mill. Professor Jim Mienczakowski, Deputy Vice Chancellor (Academic & Research), Central Queensland University (Fullerton 2005).

What is clear is that traditional quality assurance systemic measures are no longer adequate for the new educational environment, with its blurred borders between informal and formal learning, online and on-campus provision (Ryan and Stedman 2002, p.48).

3.1 Preamble

The above comment by Mienczakowski was aired on a controversial ABC Four Corners story, but received surprisingly little attention in Australian academic circles. Allegations that Australian universities are 'degree factories', concerned only to provide the paper qualification at the end, have plagued academia, along with stories of plagiarism, 'soft' marking, and the aquiring of qualifications purely for migration purposes. A series of quality issues affecting the credibility of Australian higher education occurred from 1998 to 2001, prompting authorities to tighten procedures and create uniform standards of regulation. Such moves have been applauded by overseas observers concerned with the lowering of standards associated with degree mills, although some argued that more needed to be done in relation to regulation (Contreras 2002). Others warned that the standard of official universities was 'tending towards the middle ground between real institutes of higher learning and degree mills', instead of maintaining a 'real gap' in quality between them (Oppermann 2002, p.30).

To make sense of this debate, this chapter seeks to identify the risk incurred by recruitment agencies and higher education institutions when they fail to distinguish between the different sources of academic qualifications which are currently available. As a result they may accept a qualification from a non-official provider or a falsified official qualification as having the

same value as an academic qualification from an official higher education institution. The chapter begins with a brief outline of the origins of academic qualifications and the degree parchment, and the meanings given to them today. Then follows a consideration of the ways in which the recognition or acceptability of academic degrees can be established, and the methods used to distinguish between official and non-official sources of such qualifications. The discussion leads to the proposal of a new typology for the source of academic qualifications, which takes into account issues relating to both their acceptability and authenticity.

3.2 The origins of higher education qualifications

As this study concerns itself with identifying and ameliorating the risks associated with the evaluation of academic qualifications, it is necessary to understand the credentialing process, together with the degree documentation, which is being evaluated.

As previously discussed, the popularity of the degree qualification was a post World War II phenomenon, an instrument of social engineering which facilitated the process of meritocratic advancement (Perkin 2006, p.197). A review of the literature suggests that the definition of a degree qualification ranges from 'grade or rank', 'a title bestowed as official accomplishment or attainment' to 'a stage of proficiency in scholarship'(Eells and Haswell 1960; Eells 1963; Perkin 2006). An earlier definition, provided by Wooton (1883, p.iii) cited in Eells (1963, p.2), considered a degree as an:

...officially recognised gradus or step in one or more branches of learning; such official recognition being manifested by the bestowal of a title on the person by whom the step has been made...A degree may be held to be any title, so styled, conferred by any legally recognized authority, and intended to distinguish it as a mark of attainment on the part of the recipient superior to those required for a diploma.

Academic degrees have been seen to possess four very important characteristics which are relevant to this study:

- A degree is a special form of title;
- A degree is not a diploma; the diploma is the written evidence, or the paper document attesting to the attainment of a degree;
- Degrees can be earned or honorary;
- Degrees may only be conferred by a legally recognised body (Eells 1963, p.2).

While most would agree on the above, the most contentious of all characteristics listed is the conferment of the degree by a legally recognised body. This issue falls at the very heart of the debate over what constitutes an acceptable qualification from the different individualist vs hierarchist perceptions. These issues are discussed later in the chapter.

3.2.1 An early history of the academic degree

The earliest mention of an academic degree found by the author was a citation by Du Boullay who found that the degrees of Bachelor and Doctor were mentioned in Peter Lombard's 'Book of Sentences', published in 1151 (Du Boullay cited in Malden 1835, p.17).

Historically the academic titles of Bachelor, Master and Doctor were created by medieval universities (Wright 2001, p.121). Although the title, 'Doctor of the Church' existed as early as the fourth century, this qualification was not deemed to be an academic degree *per se* (Eells and Haswell 1960, p.7). It was not until the nineteenth century that academic credentials were first used as a tool to protect the public, by demonstrating the competence of professional individuals (Husen and Postlethwaite cited in Buon and Compton 1990, p.126). Seen initially as letters or certificates that established the position, authority or identity of the bearer (Buon and Compton 1990), their importance as evidence of competence evolved over the years.

The value of academic credentials to the public came from the early 'studia generalia', collective groups of scholars, whom the civil and ecclesiastical authorities chartered by giving

them broad powers to grant degrees (Cox 2002-2003). From the middle of the thirteenth century, degree granting power was normally conferred by the Pope or Emperor of the time (Moodie 2007); this power was also exercised by authorities such as the Counts Palantine, through to the late sixteenth century. One of the privileges that came with the status of *studium generale* was that of *ius ubique docendi*, meaning that the holder of a degree from a *studium generale* was authorised to teach in any other university without hindrance (Cobban 1975; Wright 2001). Peddersen (1997) found this 'right to teach everywhere' to be one of the first and most precious credentials issued by the medieval university. However, Cobban (1975) was sceptical of such acceptance, asserting that the right was not as ubiquitous as the conferring institution would have liked, even though such directives were included in the founding charters of the fourteenth century universities. Despite these conflicting interpretations, here lies the first evidence of the conferred credentials being a teaching licence (*licentia docendi*) and first mention of the controversial issue of academic qualification acceptability.

In addition to the teaching licence, the term *baccalaureus* (a corruption of the Latin word *baccalarius* meaning a vassal of lower rank, or a craftsman who had not yet mastered their trade) was used when a student of the university came into their fourth year of study and their first examination was held (Pedersen 1997). Meaning 'garlanded with laurels', the term was also used to identify older scholars who assisted the masters in teaching. In Bologna, this was known as *bachalari* and was awarded to advanced students to tutor in limited areas (Harris and Troutt 1978, p.31).

By the middle of the thirteenth century the practice had become widespread, but concern was raised in relation to quality and some form of control was required in order to ensure incompetent teachers did not assist the masters. This control was implemented by a statute

passed in Paris in 1252, which required all potential bachelor students to submit for examination by producing a 'schedula', a certified statement obtained from their master that they had studied in a certain prescribed and formalised manner (Pedersen 1997). This is perhaps the first mention of documented evidence of paperwork designed to authenticate study undertaken at this level and the implementation of some form of accreditation or control of the academic process.

3.2.2 A history of the degree parchment/ testamur

As the falsification of academic documents is one of the phenomena being investigated in this study, it is important to review the history of degree documentation, how it evolved, and the importance placed on its value. The word 'testamur' is derived from the Latin word *testari* meaning, 'to testify' or 'certify'. The word was adopted in English universities to refer to the document attesting to the fact that a candidate had successfully completed a program of study at an institution of higher education (Woody 1997, p.339). Other terms used are 'diploma' or 'parchment', a term derived from the Latin *pergamena* (and Greek word, *Pergamene* i.e. pertaining to Pergamum) the name of an ancient city in Asia Minor (Orr 2005).

Wallace-Hadrill (1967, p.89), cited in Ezell and Bear (2005), claimed that perhaps the earliest citing of a diploma parchment referred to a document existing in the Merovingian and Carolingian times (circa 5th-6th Century AD). During this period diplomas were official court rather than academic documents, authenticated in different manners, whereby kings certified their gifts and grants to communities or individuals. Interestingly, whilst the awarding of the diplomas was designed to confirm privilege and to impress upon others the 'divine' right of the King, medieval scribes soon took advantage of these documents and produced forgeries.

As such, there were 'many bogus diplomas' (Wallace-Hadrill 1967, p.89) perhaps the first documented evidence of falsified academic credentials

In his analysis of testamurs, Orr (2005) provided a brief account of the process of creating parchment for early academic qualifications.

In order to develop a document for writing upon, skins of sheep, goats or young calves was used. The hair and fleshy portions of the skin are removed and soaked in lime. The skin is then dehaired, scraped and washed. The skin is then stretched on a frame and treated with powdered chalk, or other absorptive agent, to remove the fatty substances, and is then dried. It is finally given a smooth surface by rubbing with powdered pumice. Parchment was extensively used at the time of the early Christians for scrolls, legal documents, etc., having replaced papyrus for that purpose. It was no doubt used at even a much earlier time. Scrolls were later replaced by codices of the same material. After the Arabs introduced paper, parchment was still used for centuries for the book bindings. Diplomas printed on "sheepskins," are still issued by many universities, representing the survival of an ancient use of parchment.

The use of sheepskin for testamurs has coined the phrase 'sheepskin effect', an American term, often used to describe the effects of credentialism. Its application is humorously depicted on the inside cover of this study. Notwithstanding this, the parchment is still seen as an important document, a symbol of achievement and academic merit. The contemporary meaning of a degree certification is mirrored by statements such as the one below from the University of Wollongong's academic website:

Following successful completion of your studies you will receive a testamur (certificate) stating the name of your qualification and area(s) of major study. The testamur is a 'legal' document, issued under the authority of the Vice-Principal (Administration) and the Chancellor, and imprinted with the University Seal. (Source: http://www.uow.edu.au/student/centre/testamur.html)

While academic qualifications in the twenty first century are not deemed to be essential items of identification (often termed 'tokens' of identification) their use as proof of academic achievement has been significant, especially in seeking employment, higher education transfer and migration into countries such as Australia. Academic certificates are seen as important information systems, documentation attesting to the fulfilment of certain conditions

(Keating et al. 2005; Ridoutt et al. 2005). Increased attention is now being paid to their use, with concerns being raised as to the security and integrity of the documents and their possible misuse including false identification to assist terrorist activities (Roesler 2006). Security issues and the controls used to minimise the risk of fraud in the area are addressed in greater detail in Chapter 5; for the moment, other important aspects of academic credentials will be explored.

3.3 Contemporary meanings of a degree qualification

The importance of the testamur as a token of scholastic achievement can be seen by visiting the offices of academics or other professionals who proudly hang their parchments of achievement on their office walls. Historically this symbolic meaning of the testamur has been most evident in the United States. In other countries (including Australia), the document has had a more utilitarian meaning as evidence of achieving a necessary standard of competence (Tufts 1987; Stewart and Spille 1988). The ceremony of graduation and degree conferral has also been seen as a symbolic 'rite of passage' (Hernes 2005), a public acknowledgement of certification, conferred by a collegium of already authorized practitioners and expressed in a publicly issued document with the seal of the institution. Much ritual surrounds the use and conferment of these documents, and it is necessary to explore these areas so that the value of academic qualifications may be assessed.

Unbeknown to the layperson, the degree parchment provides a rich form of communication between the higher education provider and those that evaluate the document for academic merit (Wright 2001, p.109). Seen as a testimony of intrinsic economic exchange value (Keating et al. 2005, p.7), the degree is eroded in value when questions are raised over the authenticity of the document, or the status of the conferring institution. In order to address

this, control systems such as the Bologna process and the Diploma Supplement (described further in Chapter 5) have been devised to restore faith in the recognition of paper based documentation, all designed to decode the often confusing information presented (Rauhvargers 2004b; Brown 2005h; DEST 2006b). Despite these attempts at regulation, evidence presented in Chapter 1 suggests that many qualifications are still taken on face value, and little screening occurs. An amusing symbolic interpretation of the lack of attention paid in a screening process is offered by Secrest (1985) cited in Woody (1997, p.341):

Presumably some warm feeling flows through the practitioner who can gaze upon the large array of neatly framed documents decorating his or her office wall. One of my colleagues has suggested that we go into business manufacturing diploma wallpaper that could simplify the whole thing.

In another example, Woody (1997, p.341) comments on a highly qualified and *bona fide* psychologist who hung a range of certificates on his office wall which, according to him, were worthless 'purchases'. His rationale for doing this is that:

They impress my clients because they don't know one board from another, and, frankly, I get a charge from having my wall covered with certificates, even though I know they are worthless.

In order to provide a first step in protecting the public from such misleading claims, it is important to consider the process of credentialing, a central function of all higher education institutions.

3.4 The credentialing process

The process of credentialing is complex and a high risk procedure (ICAC 2002a, p.40), culminating in the approval and recognition of graduates by law and through the institution's legal authority, and the issuance of documentation which attests to their accomplishments (Buon and Compton 1990). This documentation is generally made up of two main

components: a transcript which shows the complete and unabridged academic history of the degree holder and a testamur which attests to the degree awarded (Shutt 1986). The main aims of this documentation are to '...identify the qualified, to protect against the incompetent and the fraudulent, and to encourage learning and competence' (Miller and Mills 1978, p.8). Although academic qualifications are privately earned, they are deemed to be public credentials as they are used by bearers to solicit a range of services and benefits. An assumption of integrity in the credentialing process is made by the layperson, a process which entails three important steps (Miller and Mills 1978, p.9):

- The definition of the attitudes, competencies, knowledge, or skills to be certified;
- The assessment of each individual to determine whether he or she meets the requisites;
- The issuing of a document to attest the individual's possession of the requisites.

In relation to the use of academic qualifications, they can be seen to serve the following main purposes:

- general access to higher education;
- restricted access to higher education (i.e. access restricted to certain parts of the higher education system, such as certain technical studies);
- general access to further studies at a given level (such as doctoral studies or second degree studies);
- restricted access to further studies (e.g. access to further technical studies);
- access to professional training;
- general access to the labour market (i.e. as a qualification for a wide range of positions at a given level);
- access to a specialized area of the labour market;
- access to a regulated profession (Rauhvargers 2004c, p.4)

In Australia, as in many other countries, qualifications are broken down into two main areas: academic and professional. The process of evaluating and/or recognising these is as follows:

- for skilled stream migration the relevant peak professional bodies assess
 professional and managerial occupations, Trade Recognition Australia (TRA) in
 Department of Employment and Workplace Relations (DEWR) assesses trade
 occupations and Vocational Education Training and Assessment Services
 (VETASSESS) assesses the general educational level of qualifications for unregulated
 occupations, under contract to DIMIA;
- in the case of regulated occupations the State and Territory regulatory authorities;
- in relation to decisions for employment purposes the professional bodies or employers;

• for academic purposes — the educational institutions (DIMIA 2003, p.126).

For the purposes of this study, the author is interested in the last two areas of recognition, namely for general employment purposes (not professional) and for academic purposes.

These two areas are generally regarded as 'unregulated' in that they rely on employers and educational institutions making informed decisions based on a range of external information as to the level and status of a claimed academic qualification (Rauhvargers 2004c, p.17).

Apart from the professions, where continuing professional development is usually required, a general assumption is made that once the testamur is conferred, competence is deemed to be ongoing and the holder of the award is able to exhibit certain characteristics. The credentialing authority (higher education institution) issuing the award attests to the qualification, the holder of the award represents this attestation, and external parties make judgements about an individual based on the recommendations of the credentialing authority (Miller and Mills 1978, p.9). The process of credentialing students is therefore important, since external, third parties rely on its integrity and the competence/ authority of the issuing body. The process gives higher education institutions social charters, through their legal right to define people as graduates, who possess distinctive titles and capacities in society (Meyer 1977, p.59, cited in Bills 2003a, p.451).

The importance of this process cannot be overstated, as there are few organisations within society that selectively allocate symbolic meanings (i.e. academic qualifications) to individuals which may entail major, lifelong consequences for the status and material circumstances of their recipients (Wright 2001, p.111). In his analysis of the conferment of academic awards, Wright (2001, p.111) further contended that there were only two institutions in the civilized world which had absolute power in that they were the sole arbiters

of their decisions - universities and the judiciary. He noted that whilst an appeal on a legal decision was quite possible, appeals against academic judgments were rare. The implicit power held by providers of higher education qualifications has made them important organs within society; however, the rise of non-official and fraudulent providers has raised questions about the trust which can be placed on the documents used in an evaluation process.

Despite the reliance placed on official higher education providers to ensure a rigorous process of credentialing individual students, there are inherent risks and flaws in the procedure. Miller and Mills (1978, p.9 & 10) articulately pointed out the following:

The possession of a valid credential is evidence that the holder has qualifications, which, in the view of the issuing source, entitle him sic to authority and confidence within the area certified. The credential is not a guarantee that every person credentialed will perform satisfactorily or that any credential holder will perform well in every situation. It merely indicates that those people who hold the credential tend to deliver adequate services with substantially more consistency than those who do not hold the credential. Given the difficulty of defining and assessing the requisites for delivery of complex and highly refined services, credentialing cannot be expected to provide absolute protection to society. It has social utility because it increases the likelihood that satisfactory services will be delivered.

Since credentialing is inherently a judgemental process, based as it is on professional view and group values, it should be regularly and systematically questioned in all forms. Although society must continue to rely on credentialing as a means of identifying the qualified, it must always recognise the potential for the credentialing process to be abused. Thus, society should continually seek answers to three questions:

- 1) What capabilities, competences, and learning can be reliably and usefully credentialed? 2) When is it in the interest of society to award credentials?
- 3) Who should be the credentialing authority? There are, of course, no universally accepted answers to these questions...

The three questions posed by Miller and Mills are important ones. Evidence presented in this study demonstrates that the process of credentialing students is open to abuse. Furthermore, the lack of 'universally accepted answers' admitted by Miller and Mills highlights the sociocultural conflicts that cloud precise answers to this contentious issue. As discussed in Chapter 2, degree qualifications issued from any status institution, be it official, non-official or

fraudulent, are not necessarily good indicators of potential ability. Notwithstanding this, society demands some form of sorting process, which is called into question when there are revelations of alternative or fraudulent credentials being used in the selection process. The risks surrounding the process of using degrees as credentials then become more apparent and need to be addressed.

While much of the work reviewed above was written close to thirty years ago, evidence presented in this study suggests little has changed in relation to the reliance on the process of credentialing students and the documentation issued as the proof of individual competence. In order to provide a form of surety to the student credentialing process, a range of approaches has been developed to assist in the determination of the acceptability of these documents; these are addressed in the following section.

3.5 The acceptability of higher education qualifications

The differing approaches to higher education provision reflect competing socio-cultural perspectives on higher education and the ways of accepting academic degrees. These perspectives labelled individualist and hierarchist in Chapter 1 need to be taken into account when distinguishing among educational providers and creating an all-encompassing typology. In order to differentiate between the various forms of provision, some form of basic sorting mechanism is called for; accreditation is seen to be one solution, and is discussed in the following section.

3.5.1 The university's traditional right to confer degrees

The credentialing process, previously discussed, is arguably a central function of a higher education institution, and this has historically been entrusted to universities (Miller and Boswell 1979; Stodt and Thielens 1985). Traditionally, outside of the United States, the only

entities which have been permitted to offer degrees have been universities. These are self-accrediting, autonomous institutions established by an Act of Parliament or granted authority by a sovereign power to confer a range of academic degrees. Historically, universities have been tied to the state by reason of their founding instruments; these range from eleemosynary trusts to civil corporations (Rochford 2006, p.150). Royal Charters, the only way an incorporated body could be formed via Royal Assent, created the earliest British universities and are rarely used.

Despite this conferred autonomy by the state, many officially accredited institutions are now branding themselves with additional accreditation processes. These moves appear to be efforts to create a 'logic of confidence' within potential customers (Bell and Taylor 2005, p.243) and assure students of the quality and recognition of the qualification they will receive. Many faculties within universities now seek specialised programmatic business school accreditation such as the European Quality Improvement System (EQUIS), Association to Advance Collegiate Schools of Business (AACSB), and distance delivery accreditation such as through the Distance Education Training Council (DETC). These moves mirror a growing international trend of traditionally self-accrediting institutions seeking increased levels of international recognition and assurance not only for marketing and product differentiation purposes, but also as a form of external peer review of their quality assurance process.

Australia has inherited the English process of creating universities. States are empowered to create their own universities via Acts of Parliament, with little reference to the central Department of Education, Science and Training. The process of creating these universities has traditionally not been referred to as accreditation. Rather this term has grown in popularity and use in relation to the private sector. The follow section covers this important area.

3.5.2 Accreditation; the desire to guarantee acceptability

The issue of accreditation is an important one. Business sees that it is important to have that quality assurance process that comes from an accredited State-backed, if you like, organisation. Dr Yoni Ryan (Correy 2000).

Accreditation alone does not determine the value of credits and credentials awarded by an institution (Miller and Boswell 1979, p.224).

Perhaps one of the mostly widely used processes to assist in the recognition of higher education credential providers is that of 'accreditation'. Despite its perceived importance, the term is unregulated, unlike the word 'university', which is controlled in many, but not all, jurisdictions. Sometimes referred to as 'ceremonial criteria', accreditation is seen to enable the fitness and contribution of an organization to be demonstrated when the quality of its product or service is uncertain (Meyer & Rowan, 1977 cited in Bell and Taylor 2005, p.243).

The term 'accreditation' has application to many different sectors, not just education. In the manufacturing industry, for example, providers need to produce and sell products that can be recognized and characterized differently from their competitors (Lasala and Rizzello 1999). Accreditation provides a form of guarantee that a producer's activities are qualified and differentiated with special certification and are deemed superior to others. This process is equally applied to higher education, although challenges arise when trying to measure the intangibility of the educational product and at the same time provide some form of assurance to the layperson (Altbach 1999, p.11). This assurance of educational quality has historically been provided to universities by the exercise of sovereign power (Rochford 2006, p.149) with the state seen to 'guarantee' the academic credential provider and the credentialing process it employs. This assurance provided by the state is viewed by hierachists as a form of protection and safeguard of quality, whilst individualists argue it is a form of control that stifles innovation and impedes freedom of choice and provision in the higher education market.

Despite these competing interpretations, accreditation in academia is seen as a process which relates strongly to the recognition of academic qualifications (dos Santos 2002, p.107).

According to Haakstad (2001, p.77) cited in Harvey (2004, p.211), accreditation has three particular nuances. First, it is a process that is applied to organisations; second, it is a label that institutions or programmes acquire as a result of the process and, thirdly, it is an "abstract notion of a formal authorising power", a notion that underpins the first two qualities. This abstraction is seen to legitimise the accreditation process, but at the same time, highlight competing power relationships (Harvey 2004, p.221). Credentials awarded by accredited institutions gain "legitimacy" from third parties through their perceived value in the marketplace and their accreditation status (Miller and Boswell 1979, p.219). It is, however, the perceived power of accreditation and its authorising force between private and public institutions which is seen to have a legitimising function (Stensaker and Harvey 2006), albeit a power struggle between the individualist and hierarchist positions.

The United States is perhaps one of the more confusing jurisdictions where accreditation is an important, though voluntary, process and is often confused with terms such as incorporation, authorization, approval to grant degrees, and certification (Stewart and Spille 1988, p.128 & 129). The lack of a national, common standard and recognition procedure has plagued US higher education, although there have been recent moves to reform the system and increase regulation (Lederman 2006a). Research shows that even the recognition of transfer credits between accredited institutions is a problem, and students are ill informed about the accreditation process in the USA (Urdan and Lee 2006). Adding further confusion is the range of other jurisdictions throughout the world which either do not regulate higher education at all, or regulate it in a manner inconsistent with commonly accepted standards; this lack of a common standard further clouds the recognition process.

While accreditation is now taken for granted as a prerequisite for private higher education delivery in Australia, the onset of transnational education and new internet providers posed a distinct challenge for the recognition of higher education providers (Brown 2001b, p.61), even where some form of accreditation exists. Concern was raised regarding the activity of non-official providers in Australia in the late 1990's, as legislation failed to accommodate this new form of provision. Reports undertaken by Anderson, Johnson and Milligan (2000) and Harman and Meek (2000) formed the cornerstone of the present accreditation and quality assurance system in Australia. Research at the time addressed a range of standard practices across selected nations and found that accreditation was:

...the process whereby an authority, recognised by institutions and government, determines that an institution offering courses in higher education may become self-accrediting, or offer its own higher education awards subject to periodic review. An accreditation agency certifies that the standards for a course are appropriate for the award to which it leads; and that the methods are appropriate for the purpose (Anderson et al. 2000, p.viii).

As a result of their recommendations and work undertaken by the Ministerial Council on Employment, Education, Training and Youth Affairs (MCEETYA), the Australian Universities Quality Agency (AUQA) was formed in 2001, and the National Protocols for Higher Education Approval Processes created, designed to address both accreditation and quality assurance. Despite a recent review of these protocols (MCEETYA 2006), no changes were made in relation to the role government agencies play in the accreditation process, suggesting that state control and the hierachist perspective is the accepted norm within Australia.

3.5.3 Accreditation from a global perspective

The 'territorial principle' that governs many of the existing regulation systems, including quality assurance and accreditation arrangements, becomes irrelevant with regards to webbased delivery (OECD 2003, p.11).

As a result of the increase in cross border delivery, efforts have been made to create alliances and global accreditation bodies to maximize recognition and minimize the risk surrounding the acceptance of academic qualifications. In 2003 a Worldwide Quality Register (WQR) was proposed by the President of the International Association of University Presidents, but was resisted by the existing quality assurance and accreditation agencies (OECD 2003, p.13). As a compromise, separate organizations, such as the European Consortium for Accreditation (ECA) (http://www.ecaconsortium.net) and the European Association for Quality Assurance in Higher Education (ENQA) (http://www.enqa.eu), are seen as important initiatives to create synergies between separate jurisdictions, while the Asia Pacific Quality Network (http://www.apqn.org) provides a similar framework servicing the Asia Pacific Basin. At a global level, the International Network for Quality Assurance Agencies (INQAAHE) (http://www.inqaahe.org) is seen as the peak networking body. Despite these concerted efforts, they are still seen as 'soft' types of recognition (OECD 2003, p.12) since they are voluntary in nature and achieve little at the regulatory and risk minimization level.

In addition to state backed initiatives, private efforts have also been made to develop 'global' recognition bodies, albeit with mixed results. In 1995, Jones (2001) founded the Global Alliance for Transnational Education (GATE), accrediting both his own institution (Jones International University http://www.jonesinternational.edu) and other institutions including Monash University in Australia. This form of accreditation was one of the first serious 'elitestyle' attempts at product differentiation within the global higher education provision market. Despite its good intentions, less than a year after the above-cited article, the venture was wound down after internal conflicts and a corporate takeover (Zeleza 2005, p.16). In 2005 another similarly styled venture called the International Accreditation Agency (IAA) (http://www.int-aa.org) was created. While still in its infancy, it appears little progress has

been made, and such *bona fide* private organizations will constantly battle the confusion surrounding 'accreditation mills' which is addressed later in Chapter 5.

Despite these moves towards additional voluntary accreditation which may be seen as providing additional layers of surety to the potential student and wider community, there are those from the individualist perspective that criticize any form of external accreditation or peer review. According to this school of thought, accreditation perpetuates the need for external control, a process of deskilling which reduces autonomy and freedom to make pedagogic decisions, creating a 'context of compliance and game playing' (Harvey 2004, p.221). Despite its well intentioned aims, accreditation does not protect individuals from fraudulent institutions and does not advance the pursuit of excellence (Wriston 1960, pp 327 & 328).

Questioning its appropriateness even further, Harvey (2004, p.222) maintained that it is necessary to look beyond the consumer rhetoric, and critique the abstract power processes and ideology that legitimate the activity and control function of accreditation. He argued that, '...this myth of benign guidance is perpetuated by the powerful as a control on those who provide the education' (Harvey 2004, p.222). In his study of accreditation processes, he pointed out that the common terms used were, 'jumping through hoops, tails wagging dogs, asking permission'. Accreditation, it has been argued, '...is not an infallible guarantee of quality, nor does it guarantee the quality of individual graduates of an institution, but seeks to provide a reasonable assurance' (Stewart and Spille 1988, pp.111 & 125). Accreditation carries no guarantee, and increased cross border delivery has led to even higher unregulated mobility (Zeleza 2005, p.3). Overall, it appears that it is within human nature to seek guidance and assistance in delineating between a range of choices; accreditation attempts to assist in this decision process and can be used to draw a strong, yet often challenged, line

between accredited and unaccredited providers. The following section will address these challenges.

3.6 Differentiating academic qualifications from acceptable and non-acceptable providers and sources

Capogrossi (2002, p.483) observed that the ever-increasing demand by adult learners for alternatives in higher education, had led to a broad array of new institutions which had adopted weakened standards of academic quality and institutional integrity. It has now become common practice to use the terms 'official' and 'non-official' to distinguish between acceptable and non-acceptable providers of academic degrees, but there is not always agreement on how to interpret these terms. A report prepared for one of the first Bologna Forums in 1999 highlighted some of these problems:

There seems to be a tendency to doubt automatically the quality of a non-official qualification because of the existence of a number of not very serious institutions.

There are few data on the number and different types of non-official educational offers in different countries as by nature they do not belong to a national system and consequently are not registered in the same way as national qualifications (Knudsen, Haug and Kirstein 1999, p.34).

A further report went on to suggest that:

...students and stakeholders need to be protected against titles without formal or substantive value as instances of malpractice and fraudulent activities are increasing due in part to the introduction of information and communication technologies that cannot be monitored easily (Lamicq and Jensen 2001, p.5).

A definition of what constitutes non-official higher education, first coined by Kokosalakis (1999, p.19), has more recently been affirmed by Vignoli (2004, p.2) and Knight (2004, p.10). They agree that non-official higher education provision consists of, '...all forms of higher education activities operating in parallel to and outside the official higher education system of the host country'. Kokosalakis (1999, p.30) clarified that it included all forms of higher

education that are not recognised by the Ministry of Education in a given country. Despite concerns about non-official higher education not being regulated, Kokosalakis (1999, p.18) stressed that the term should not always '...be identified with fraudulous activities or bogus titles', as illegality was only one part of the non-official problem. The main concern for Kokosalakis was the lack of transparency and adequate oversight of the sector. Accreditation was seen as the only mechanism that could ensure transparency of providers; this process, embodied in regulative procedures and specific national legal frameworks, enabled the drawing of a line between official and non-official providers of higher education (Kokosalakis 1999, p.21).

Despite the calls from Kokosalakis to take account of the differing forms of non-official higher education, traditional accreditation approaches have been the only yardstick employed thus far. In applying the accreditation model to separate official from non-official providers, the most useful explanatory framework has been Generally Accepted Accrediting Principles (GAAP) (Bear and Nixon 2006, p.41). Whilst this framework is not officially endorsed by any major stakeholder in higher education circles, its simple but comprehensive nomenclature is most useful to delineate some form of categorisation between the sectors. A higher education institution, located anywhere in the world, is deemed to hold GAAP equivalent accreditation and is therefore classified as an 'official' provider if it falls into one of the following four categories:

- US Institutions Accredited by an agency recognised by either the US Department of Education or the Council on Higher Education Accreditation;
- Institutions in Great Britain and the British Commonwealth Membership in the Association of Commonwealth Universities and listed in the Commonwealth Universities Yearbook
- Australia Recognised by the Australian Qualifications Framework
- Rest of the world Appropriate description in the World Education Series
 (published by PIER, Projects in International Education Research, a joint venture
 of AACRAO, NAFSA (the Association of International Educators) with the
 participation of the College Board; or a listing in the Country Series, published by
 NOOSR, the Australian National Office of Overseas Skills Recognition.

Examples of institutions holding GAAP accreditation are widespread, and for the purposes of this study, they are classified as 'official' providers of higher education. These include all Australian universities and Non-Self Accrediting Higher Education Providers listed on the Australian Qualifications Framework Register (http://www.aqf.edu.au). This register, along with the other reference resources listed in the GAAP framework above, are important tools used in the academic qualification evaluation process. These will be discussed in greater detail in Chapter 5 and their actual usage by stakeholders investigated in Chapter 7.

While accreditation may be seen as the first and foremost process in assisting the recognition of higher education qualifications, there are competing perceptions as to what is deemed 'acceptable' as an academic qualification, and there is no consensus. The acceptability of non-official as compared to official higher education qualifications is a topic of significant debate. Despite the increasing reliance of degree qualifications as proxy measures of ability and capacity, it is surprising that little research has been dedicated to procedures used to determine the acceptability of official and non-official qualifications in Australia. The author is not aware of any research undertaken in Australia, apart from studies in the skilled migration area. These reports centre primarily on overseas qualifications and their recognition for acceptability within Australia, citing specific challenges and poor processes in recognition procedures (Training and Skills Commission 2005). The only other studies on procedures for recognising qualifications, in both the employment and academic sector, emanated from the USA (Sosdian and Sharp 1978; Bear and Douglas 2000; Douglas 2003; DeFleur and Adams 2004; Adams and DeFleur 2005; 2006). Each of these studies had different aims, but provided important background information on the perceptions of acceptability in relation to qualifications from different sources and, in particular, the mode of delivery.

The earliest study by Sosdian and Sharp (1978) looked at the challenges which students faced in relation to the acceptability of the degree which they had earned in non-traditional settings. A non-traditional degree, at this time, was the studying of a qualification via a range of alternative delivery modes, and the awarding of life experience credit for limited units of study. Only 18% of respondents cited the lack of 'official' accreditation as one of the main problems in relation to the acceptance of their degrees by employers. It should be noted, however, that such minimal problems with acceptance was due mainly to the fact that, at the time of the study, only 3 of the 20 institutions whose students were surveyed did not hold recognized accreditation (Sosdian and Sharp 1978, p.81). Notwithstanding this, one of the most interesting findings was that employers were not overly concerned as to the status of the institution that conferred the degree. The top personnel officers in 81 large corporations felt that the non-traditional degree was just as useful as one from a traditional institution with a "strong" reputation (Sosdian and Sharp 1978, p.98).

A more recent study by Douglas (2003) was dedicated to the acceptability of degrees, as evaluated by human resource professionals. He found a very high acceptance rate for non-official degree holders (Douglas 2003, p.137). For example, he found that Kennedy Western (now Warren National), an unaccredited, state licensed university based in Wyoming, was generally acceptable to over 79% of surveyed employers. Overall, Douglas found that state approval and some form of accreditation, even if by unrecognized agencies, were considered by employers as acceptable forms of recognizing degrees, even more so than the internationally recognized GAAP regional accreditation (Douglas 2003, pp.117 & 118). Perhaps, the most startling finding came from his following summary.

A nontraditional name (of a higher education provider/ university) seemed to be a detriment, even if the school was properly accredited. And having a traditional-sounding name (as in the case of Columbia State University) seems more effective than being properly accredited-even for a diploma mill.

A candidate for employment is more likely to have his or her degree accepted by the employer if the degree comes from a school that sounds substantial, even if it is issued from a rented post office (Douglas 2003, p.122).

It should be noted that Columbia State University was one of the largest providers of fraudulent qualifications in US history. Millions of dollars were generated from parchments sold for \$1,500 to \$3,000 each. In testifying to the US District Court, Ronald Pellar, the owner and operator, suggested that the students were not 'victims' because they '...wanted a fraudulent degree to show to employers for promotion' (Associated Press 2004). Overall Douglas surmised that employers were confused and ill informed about the intricacies of accreditation and regulation, and generally uninterested in what accreditation stood for (pers comm. Richard Douglas). These findings were commensurate with earlier work undertaken by Miller (1991), cited in Brown (2001b, p.81), who found that unaccredited institutions providing qualifications for little or no study prospered essentially due to the confusion surrounding accreditation, approval, authorization and licensing. Other studies, in areas such as the medical profession, by Grover, Dharamshi and Goveia (2001) found that even medical directors generally accepted information on face value, and that misrepresentation of credentials was a common occurrence.

In another acceptability study in relation to academic registrars at universities, Bear and Douglas (2000) investigated how registrars of 1,000 regionally accredited institutions across the USA dealt with qualifications conferred by thirteen different categories of higher education institutions in relation to credit transfer, admission to postgraduate study, and hiring of staff. Some of the findings were as follows:

- State licensed, unaccredited qualifications had close to zero acceptance;
- There was no difference in acceptance of degrees conferred from unaccredited institutions licensed in weaker regulated jurisdictions (eg Wyoming) compared to stronger regulated states (i.e. California) they all still had close to zero acceptance;
- Accredited degrees acquired through distance learning were only 80% as acceptable as accredited residential degrees;

- The use of independent credential evaluation companies was seen as the most valuable source for determining acceptability of a qualification.
- Accreditation from unrecognised accrediting agencies had close to zero acceptance.

These findings affirmed the earlier conclusions of Stewart and Spille (1988, p.124) who contended that it was extremely rare for an official institution to accept transfer credit from an non-official institution.

Some further interesting, but perhaps less reliable work, is offered by DeFleur and Adams (2004) and Adams and DeFleur (2005; 2006). These researchers conducted three separate, but similar studies, each of which sought to determine the acceptability of degrees earned by various modes of delivery from the perspective of graduate admissions staff (DeFleur and Adams 2004), hiring committee chairpersons at universities (Adams and DeFleur 2005) and hiring executives from the employment industry (Adams and DeFleur 2006). The respondents were asked to rate their acceptance of degrees earned a) totally by residential study, b) mixed mode (i.e. face to face delivery and distance/ online mode) and c) earned totally via distance/ online learning. While the studies were an important contribution to the field, their results should be assessed with caution, since respondents were not given any information on the accreditation status of the conferring institutions. It can be argued that without this information respondents might have characterised these institutions in a negative light as unaccredited.

In the 2004 study pertaining to admission of students to postgraduate programs, only 7% of public and 11% of private higher education providers would have accepted an undergraduate degree from a "virtual" institution. In Adams and DeFleur's 2005 study with hiring committee's chairpersons at universities, 85% had reservations about individuals who had earned their doctoral degrees from "virtual" (totally online) institutions, with only 4% not

concerned about the type of institution it was conferred from (Adams and DeFleur 2005, p.78). Adams and DeFleur's third study, pertaining to the acceptability of undergraduate degrees for employment purposes, showed that only 16% of employers were not concerned about the type of institution that conferred the applicant's degree, with 96% of respondents not considering a "virtual" on-line degree to be as acceptable as one earned via traditional methods.

These findings are in direct contrast to other studies conducted in the field of qualification acceptability in the distance medium. A study conducted by the Distance Education Training Council (DETC) (a nationally recognized accreditation agency in the US) found that 83% of employers were favorably inclined to hire an employee who held a degree earned totally by distance, with 96% finding it more, or just as valuable as, a residential degree (DETC 2006, p.6). Results from a study conducted by Eduventures were commensurate with the DETC's findings, that 77% of surveyed students were considering enrolling in a totally online program (Gallagher and Poroy 2005, p.11). The Sloan Consortium recently conducted a study of over 2,200 higher education institutions across the USA, and found that 3.2 million US students took at least one online subject of study in 2005, up 25% from 2004 (Allen and Seaman 2006). The majority of academics whom this study surveyed suggested that the quality of online instruction was equal to, or better than, face to face delivery.

The positive assessment of online study reported in these investigations strengthens the argument that the evaluation of qualifications from virtual institutions by the respondents in the Adams & deFleur studies was negatively affected by the way the term 'virtual' was used together with their failure to provide information on the accreditation status of the institutions concerned. While the consumer awareness and overall credibility of online higher education as a viable alternative to traditional choices appears to be growing (Gallagher and Poroy 2005,

p.3), it is evident that Internet technology has resulted in a cornucopia of sources whereby an individual may source a qualification. This, in turn, has brought inherent risks whereby traditional 'territorial' accreditation processes are nullified, and new borderless delivery approaches increase the risk of fraudulent activity (OECD 2004g, p.8).

Despite the limited empirical research on the issue of acceptability and recognition of qualifications, one most interesting finding was the diverse opinion between employers and higher education providers. In his final summation, Douglas (2003) pointed out that his study revealed that the majority of employers were ill informed as to the intricacies of accreditation in the USA. By contrast, Bear and Douglas (2000) had found firm evidence from official university registrars that non-official degrees had zero acceptance and were not considered for recognition. Why was there such a significant difference between academia and employers on such an important issue? Perhaps employers who accepted these non-official degrees in the past, found that the employees performed well, that is they held the requisite human capital for their positions. The underlying rationale of the employers' position is worthy of further investigation, but is beyond the scope of this study. However, it is worth investigating whether there is equivalence in the evaluation procedures adopted by recruitment agencies and postgraduate higher education providers in Australia and this is undertaken in Chapter 7.

The findings from the above studies also highlight the perceptual problems in relation to the recognition of academic qualifications. Attitudes towards the acceptability of academic qualifications can be based on an individual's own experiences, as well as broader social, professional and industrial attitudes towards them, rather than just a framework of guidelines (Keating et al. 2005, p.33). Research shows that the recognition and evaluation of qualifications is challenging at the best of times (Foley and McKown 2002), and significant professional development is required for consistency in the area. Absolute consensus on how

'acceptable' an academic qualification is to the various interested stakeholders has been deemed 'unachievable' (OECD 2004g, p.10). The differing perceptual beliefs and socio-cultural values surrounding credential recognition leave the area subject to considerable ambiguity, which, in turn, opens up the risk of fraud. The creation of a new typology which differentiates between the various academic qualification sources could be of assistance to those evaluating credentials.

3.7 Developing a new typology for the sources of academic degrees

Developing a typology helps to define the conceptual tools necessary to select and order the phenomena a researcher attempts to study (Renn 1992, p.55). In relation to the acceptability of academic degrees, a typology would prove most helpful in highlighting the potential risks posed by providers in the various categories. Research by the author finds no previous efforts made to collate and quantify the entire range of qualification sources currently available. In particular, none focus on the non-official sector. In developing this new proposed typology for higher education credential provision, the author is mindful not only that no single indicator for a 'good' institution exists (Arnstein 1982, p.551), but also there is a lack of consensus as to what an agreed taxonomy should consist of (Zeleza 2005).

It is acknowledged that the typology proposed may be seen as over simplistic. Researchers such as Dima (2004) have argued that taxonomies, classifications, phyletics and other labelling methodologies should be used and he critiqued a range of classificatory methodologies. The in-depth analysis which Dima favoured would be a distinct challenge, especially when looking at the diversity of higher education from a global perspective. For example, in the USA alone, Birnbaum (1983 cited in Dima 2004, p.5) found over 768

possible institutional types. Clearly such an in-depth critique is beyond the scope of this study.

The classification proposed for this study draws upon prior works of a range of authorities in the field, who have proposed a variety of different criteria (Brown 2001b, p.49; Davies 2001; Eaton 2001; Middlehurst 2001; dos Santos 2002; Middlehurst 2002; 2003, p.12; Vincent-Lancrin 2004; Brown 2005f; i; Knight 2005c). These are acknowledged as a firm grounding. In particular, the author uses the previously cited GAAP criteria as a basis for distinguishing between the two main categories of 'official' and 'non-official' sources of academic degrees. However, this categorisation has been extended to make important new distinctions in the relatively unexplored areas of non-official and falsified academic credential providers. Based on an extensive review of the literature, the author contends that academic qualifications may be sourced or claimed via the following main three sources, and their subcomponents:

- 1. Official higher education providers, via a variety of delivery modes. Official providers hold GAAP equivalent accreditation.
- 2. Non-official higher education providers, via a variety of delivery modes, do not hold GAAP equivalent accreditation. Providers under this classification may be classified as follows:
 - 2.1. Start-up institution or new areas of study
 - 2.2. Religious exemption within certain jurisdictions
 - 2.3. Licensed/ authorised but unaccredited
 - 2.4. University companies in unregulated jurisdictions
 - 2.5. Degree Mills
- 3. Falsified academic credential providers. These are sources of qualifications that are fraudulently obtained or manufactured by the user. Sources under this classification may be classified as follows:
 - 3.1 Diploma Mills
 - 3.2 Doing it yourself (Glenn Oakley, catch me if you can style)
 - 3.3 Claiming a degree without proof

In the sections that follow, each of the three main sources are discussed. The official higher education sector is examined in greatest detail, while non-official and fraudulent sources are

outlined only in brief, for the sake of giving a complete coverage. They are the subject of further detailed analysis in the chapter that follows.

3.7.1 'Official' sources of higher education credentials

This first classification in the typology consists of entities that are deemed to be 'official' providers and hold GAAP equivalent accreditation (Biggs and Davis 2002, p.20). In Australia, the most commonly accepted means of acquiring a higher education qualification is through a recognised Australian university or duly accredited private higher education provider, earned via face-to-face, distance or mixed mode delivery. While most official providers start as traditional brick and mortar institutions, many (if not all) now provide courses using paper based correspondence and the Internet, a medium which now serves as the primary vehicle for the globalisation of knowledge and communications (Altbach 2006, p.134). This move away from traditional approaches could be seen as a response to an increase in the non-official provider sector, which has historically provided more flexible approaches to qualification provision. A 1996 OECD report highlighted the important impact these technologies were having.

New information and communication technologies can change the way education is organised. Instead of a supply-led and heavily institutionalised system, the new conditions allow for a demand-led, client-driven approach, where learners can shop for education from diverse sources and in ways they themselves plan (OECD 1996, p.72 cited in Kokosalakis 1999, p.25)

With one out of every ten postsecondary students in the US envisaged to be studying in a totally online program by 2008 (Gallagher and Poroy 2005, p.5), it is evident that this mode of delivery must be analysed. Despite these different models of provision, the prevailing attitude of governments and quality assurance agencies is that they should all be accredited in the same manner as traditional brick and mortar institutions (OECD 2004g, p.8). The

following provides a basic breakdown of how these modes of on-line delivery work in a variety of settings and draws upon previous work of the author (Brown 2001b; 2005i).

3.7.1.1 Virtual front ends

This model occurs when official 'brick and mortar' universities have created a web presence for the purposes of providing online courses and administration. Courses may be either wholly or partly online, and offered as an alternative, but more likely as a supplement, to face-to-face provision. The majority of traditional universities have now embraced web-based technologies in this sense. In fact, finding a traditional official university that does not offer a virtual portal and provision of programs online would be difficult.

3.7.1.2 Collaborative ventures

Under this model, groups of official 'brick and mortar' official higher education providers have sought to achieve economies of scale by working together to provide online delivery of programs, generally through one main web portal. Ventures within this model include Universitas 21 (http://www.universitas21.com), seen as one of the more successful collaborations, along with the Global University Alliance (http://www.gua.com) and the Global Virtual University (http://www.gua.com) and the Olobal Virtual University (http://www.guu.unu.edu). Other ventures have had mixed outcomes, with the once notable Clyde Virtual University (http://www.guu.unu.edu). Other ventures have had mixed in 1995, no longer enjoying government funding. A similar fate recently befell UKeU (http://www.UKeU.com — URL broken), with the UK Education and Skills Committee inquiry finding gross mismanagement and excessive salaries contributing to its failure (Samuels 2005). The University of Highlands and Islands (http://www.uhi.ac.uk) appears to be a far more promising venture, consisting of twelve academic institutions providing distance learning programs to remote Scottish islands (Hills and Lingard 2003).

3.7.1.3 Corporate, non-award

This model provides company employees with highly focused, career-relevant programs, which are delivered primarily online (Cunningham, Tapsall, Ryan, Stedman, Bagdon and Flew 1997; Cunningham, Ryan, Stedman, Tapsall, Bagdon, Flew and Coaldrake 2000; Ryan and Stedman 2002). Concern was raised in the UK and Australia in the late 90's when it was thought that this form of provision could compromise traditional university programs and research sought to determine whether it should fall into the official framework, or posed a threat to traditional university provision. Findings suggested that these organisations were primarily either research or human resource development arms of corporations. Although they do not issue academic qualifications, they are respected within the field of alternative provision. Examples of this model include Hamburger University (McDonald's fast food chain) (http://www.mcdonalds.com/corp/career/hamburger_university.html), Motorola University (http://www.mcdonalds.com/motorolauniversity) and Hilton University (http://www.hilton-university.com). The previously cited studies eventually determined that the model did not pose any immediate threat to traditional accreditation approaches.

3.7.1.4 Solely on-line institutions

These organisations are deemed to be true 'virtual' universities in the operational sense, as they were created for the sole purpose of developing their own courses and delivering them entirely by distance delivery/ online. Typically these entities do not possess a campus and only have a small core faculty. An established, official example of this model is Jones International University (http://www.jonesinternational.edu), a Regionally Accredited institution in the United States. Other examples include Capella University (http://www.capella.edu/) and the University of Phoenix (http://www.phoenix.edu/), one of

the USA's largest accredited private universities with over 17,000 faculty, 128 learning and internet delivery sites around the world, and a student body alleged to be close to 295,000.

Within Australia, there has been only one example of a fully Internet based, virtual and official (albeit, for a very short period of time) institution model. In 1998 Greenwich University (http://www.greenwich.edu.nf – URL broken) was established on the Territory of Norfolk Island and obtained self-accrediting status via the Greenwich University Act. This Act was assented to by the Commonwealth of Australia, and Greenwich subsequently claimed to be Australia's newest, and third private university. It is unclear whether it was the nature of the process that established Greenwich, or its virtual form, which drew the ire of Australian academic circles. Nonetheless, the Greenwich University Act was overridden by new legislation in 2003, Greenwich disbanded and a permanent website explaining the past (and current) status, recognition and legality of the university (DEST 2006a) has been established.

During the period of Greenwich's creation and operations, a number of other non-official providers came to the fore in Australia. Their emergence prompted a range of articles and studies regarding the alarming growth of virtual university activity in Australia (Bear 2000; Carr 2001; Illing 2001; Lawnham 2002c; d; e; Brown 2005i). The emergence of all of these providers raised concerns in relation to the risk of virtual, non-official transnational providers, and the inability of legislation to control their operations.

Since Internet technology is the main medium of delivery for this model, questions are continually raised as to how to accredit such entities. How does the layperson determine the acceptability of online provision from the comfort of their computer at home? For many, as previously demonstrated in the review of the deFleur studies, virtual university provision has connotations of poor quality and illegal provision. Puffer (2005) analysed the literature

pertaining to non traditional education over a 25 year period from 1979 to 2003, finding that the term 'diploma mill' was commonly used to describe distance learning providers. Without question, this model of delivery has raised distinct challenges for all stakeholders involved in accreditation, quality assurance and the end user (OECD 2003, p.11). Faith certainly cannot be placed in website domain names, with many alleged 'degree mills' holding the coveted '.edu' suffix despite regulation of the nomenclature in 2001 (Carnevale 2004; Educause 2006). The very pragmatism and flexibility created by these new models of non-traditional education cause confusion as they make it possible for diploma mills to flourish under the banner and guise of innovation and outreach (Stewart and Spille 1988, p.45). They constitute the real threat to legitimate non-official higher education and it is important to explore the various forms this classification may entail.

3.7.2 'Non-official' sources of higher education credentials

This section seeks to categorise those entities classified as non-official. The providers profiled in this section may have a physical presence and/ or web based business model similar to those of official providers, however they do not hold GAAP equivalent accreditation. Notwithstanding this, due to the previously cited issues pertaining to higher education regulation they may operate legally within jurisdictions that do not regulate or have little oversight of higher education. The development of a typology is necessary, due in part to the lack of accepted standards in regulation of cross-border higher education.

In his analysis of transnational delivery, Garrett (2005, p.2) observed that many new, forprofit providers were seeking to capitalise on the appeal of prestige and credentialism, and provide programs in under regulated jurisdictions with little utility; he further argued that this supply and demand was not well balanced. However, as dos Santos (2002, p.103) rightly argued, transnational education should, in general, '...not be identified with fraudulous activities or bogus titles'. It is very important to delineate between the wheat and the chaff in non-official higher education and it is the author's aspiration that this new typology will assist in the process. However, given the competing idealistic views of individualists and hierarchists (and those that fall between these extremes) the development of an all-encompassing typology is challenging. In their analysis of other unrecognised provision, Ezell and Bear (2005, p.59) argued that, in addition to counterfeiting services (referred to as diploma mills in this study), there were four additional categories of higher education credential providers that did not fall into the officially recognised framework. For the sake of completeness these are incorporated into the framework below, with the aim of providing a classification of non-official provision which is as comprehensive as possible.

3.7.2.1 Start-up institutions or new areas or study

This first classification refers to providers based in jurisdictions (primarily the USA) where higher education providers must operate for a period of time before they may seek recognised accreditation, or where providers offer specific programs for which no actual accreditation exists. Recent legislation passed in a number of US states (discussed further in Chapter 5) now requires new institutions to be candidates for recognised accreditation as they become registered as legal, albeit unaccredited, degree granting institutions. Given these new moves, it is envisaged that this classification will disappear in the near future.

3.7.2.2 Religiously exempt institutions

These providers are institutions that operate, or have a legal presence, in jurisdictions, which provide for religious exemption of programs and recognise separation of the church from state. Again, this appears to be a purely US based phenomenon, but despite its good

intentions, it has been abused over the years. Levicoff (1992) and Stewart and Spille (1988; 1993) identified a significant number of religiously exempt operations that were not '...necessarily read(ing) the Bible and say(ing) their prayers every day of the week' (Stewart and Spille 1993, p.46). In their analysis, they demonstrated the ease of licensing and registering a university in over nineteen US states, particularly Florida, Missouri, North Carolina, Virginia and Washington. Research by Waller and Waller (2004) found that 20% of senior pastors within The Baptist General Convention of Texas held non-official doctoral degrees. The authors voiced distinct concerns with this high level, claiming that the missions and churches did not understand the issues surrounding accreditation. Lumadue (2006) also voiced serious concerns pertaining to religious non-official qualifications, contending that religious degree mills were 'prostituting the educational process'. Playing the separation of church and state card has enabled many religious leaders to profiteer in deceptive ways (Lumadue 2006, p.276), particularly when these programs have been offered over the Internet into other more regulated jurisdictions.

3.7.2.3 Licensed/ authorised but unaccredited

This classification is again primarily a US based category and has been subject to much controversy. While legal in operation, unaccredited institutions are often criticised for not pursuing voluntary accreditation from a recognised accrediting body. Historically states such as California, Wyoming, Louisiana and South Dakota have been seen as popular jurisdictions of convenience, paying little attention to the operation of degree granting providers. To illustrate the problem, in 1986 Stewart and Spille (1988, p.2) registered a legally operating university in the United States, authorised by law to issue degrees with virtually no official oversight. Over time, more stringent laws have been implemented in a variety of states, forcing institutions to move to other less regulated jurisdictions. In his assessment of

jurisdictional oversight of higher education in the USA, Contreras (2005) identified what he termed the 'Seven sorry sisters' of higher education regulation. Each of the following jurisdictions suffers from lax oversight which is not commensurate with other jurisdictions:

- Alabama (split authority for assessing and recognizing degrees),
- Hawaii (poor standards, excellent enforcement of what little there is)
- Idaho (poor standards, split authority)
- Mississippi (poor standards, political interference)
- Missouri (poor standards, political interference).
- New Mexico (automatically recognised some mystery degree suppliers)
- Wyoming (poor standards, political indifference or active support of poor schools).

Due to the voluntary nature of accreditation in the US it is unclear if any consensus can be reached in relation to some for of regulation common in other jurisdictions. There are, however, new moves afoot to take a national approach to regulation and this is discussed briefly in Chapter 5.

3.7.2.4 University companies operating in unregulated jurisdictions

Under this model, higher education companies are legally created within a jurisdiction which either has laws that allow incorporation of companies with the word 'university' and does not require ministerial approval to use the word, or the jurisdiction has no oversight over higher education other than that which is state funded. There are many examples of this form of provider, which include entities such as St Clements University (http://www.stclements.edu) which is incorporated in the Turks and Caicos Islands, but the owners are based in Adelaide, South Australia. Earlscroft University http://www.earlscroft.com is incorporated in the Seychelles, with the owner living in Portugal, while Knightsbridge University (http://www.knightsbridgeuniversity.com) is incorporated and operated in Denmark. Due to the complex nature of this model, Chapter 4 will further analyse its operations.

3.7.2.5 Degree Mills

Perhaps the most challenging of all classifications is the term 'degree mill' (sometimes known as 'diploma mill'), often used to describe institutions of substandard quality or unknown operations of non-official providers. The term has no official standing as a classification, although some jurisdictions have regulated its use. In his study of non-official higher education in Europe, Kokosalakis (1999, p.42) found an unspecified number of diploma mills operating in each of the countries under review. Bear and Nixon (2006) have listed over 500 degree mills in their latest publication. According to Ezell and Bear (2005, p.60), these are institutions which, '...pretend to be legitimate schools but simply sell their degrees to anyone, man or beast, based on little or, in most cases, no work'. Another term used by writers in the area, perhaps taking a more politically correct tone is 'rogue providers' (Kokosalakis 1999; Sursock 2001; Damme 2002; Knight 2004; OECD 2004g; Vincent-Lancrin 2004; Knight 2005a; OECD 2005a; Bhushan 2006). Although the term 'degree mill' is often used interchangeably with 'diploma mill', the author argues the two terms can be clearly differentiated. Due to the complex issue of definitions surrounding these providers, this model is analysed further in Chapter 4.

3.7.3 Sources of falsified academic credentials

Within this section all claimed academic qualifications are classified as being either fraudulently developed or obtained from falsified qualification sources. The falsification of academic qualifications has been identified as a serious issue of concern for both employers and higher education institutions (Mangan 2002). It is therefore important to understand how these claimed academic qualifications are obtained/ created and the risks they pose to both official and non-official providers.

3.7.3.1 Diploma mills

Also known as 'briefcase colleges' (Snyder 1974; Patrick O'Neill 1991), the documents provided by this type of entity are not earned but are purchased for a fee. Seen primarily as 'counterfeiting services' (Ezell and Bear 2005), these operations are generally run by individuals who provide replica testamurs (degree/ diploma parchments) and transcripts of results from *bona fide*, official providers of higher education. They are easily available and purchased primarily on the Internet (Potter 2003a), although historically they have been available through mail order and street vendors, depending on the country. The quality of these reproductions varies, from extremely poor to convincingly authentic. Eells and Haswell (1960, p.55) in a study of the then US Office of Education files, documented 116 providers of replica testamurs; research by the author suggests that there has been no attempt to develop a full listing of the current online providers. A preliminary analysis of this form of falsified qualification provision is presented in Chapter 7 in order to ascertain the level of risk this may pose in relation to Australian qualifications.

3.7.3.2 'Do it yourself' - Glenn Oakley 'catch me if you can' style

Like the above counterfeit services, this classification is a source of claimed qualification that includes evidentiary documentation fabricated by an individual and purporting to emanate from a *bona fide*, official provider. These individuals create the academic documentation themselves, using a variety of methods to either copy an original document or create one. One of the most famous of all fraudsters, Frank Abagnale, created replica transcripts for a Harvard Law degree program and a PhD testamur from Columbia University in New York (Abagnale 2000). In a recent Australian case, Glenn Oakley, a resident of Sydney, was charged with falsifying Bachelor, Master and PhD qualifications from three separate universities (ICAC 2003b). Abagnale and Oakley both created replica documentation, which

went unverified for many years, and was accepted on face value as *bona fide* qualifications. In the Oakley case, the documentation was notarised by a Justice of the Peace, feigning increased legitimacy. The significant risk associated with this model is again further explored in Chapter 4.

3.7.3.3 Claim a degree, without proof

While this classification is not related to the provision of academic documentation *per se*, it may still be seen as a source of claimed academic qualifications. Under this method, an individual falsely cites a degree qualification on their resume or other documentation, but has no valid evidence to substantiate the claim. Cases that fall within this category are those profiled in media articles where individuals claim qualifications that do not exist, or are 'nearly' earned. Individuals involved do not have a copy of any academic documentation and are unable to provide this on request. This classification, which is seen as a high risk area, is analysed further in Chapter 4.

3.8 Tying the models together – continuums of legitimacy, acceptability and risk

There is no clear divide between the old and new delivery modes, but only a continuum...(OECD 2003, p.11).

While the author believes that the above classification is a logical approach to understanding the diverse range of providers and sources of degree qualifications, there are inherent problems in trying to design an all encompassing nomenclature. The clash of rationalities between the hierarchist and invidualist perspectives, for example, challenges the extent of acceptability of some non-official higher education providers and degree mills.

Bills (2003a, p.457) argued that value of a prestigious qualification was unlikely to decline, no matter what the quality of knowledge was obtained during the academic process. He also asserted that some qualifications could be trusted, even when they provided misleading information as to the capacities of their holders. He therefore contended that analysts needed to become increasingly attentive to the diversity of offerings, particularly as to the source of the qualifications an individual claimed (Bills 2003a, p.457). The author concurs with Bills' suggestion that the globalised higher education market now blurs the distinctions between academic, research-driven education and vocational training; public and private providers; and challenges the 'age-old identity of universities' (Damme 2001, p.5). According to research conducted by Adams and Eveland (2007), this 'blurring' is evident in the online promotion of degree programs. They argued that *bona fide* institutions were doing little to provide consumer awareness information on accreditation, fraud and abuse in the sector, and did not adequately promote their accredited status.

In his summary analysis of the significance of academic qualifications, Wright (2001, p.127) raised perhaps one of the most pertinent questions surrounding the operation of higher education:

The 'surprising' aspect of the functioning of higher education is this. How is it that higher education can provide a large-scale sorting and labeling process which has a material impact on millions of lives, in which a significant proportion of aspirants fail (in some countries, around half), and which produces decisions that are largely beyond appeal without being repeatedly subject to criticism and complaint? Why is such a state of affairs taken for granted, scarcely remarked on, seldom challenged and only rarely the subject of major social discontent? What are the sources of its legitimacy? In addition, are these changing as higher education changes? The significance of this question is likely to continue to grow as award-bearing HE (higher education) study comes to assume even greater importance in many societies.

Delineating between institutions of varying legal structure, multi jurisdictional offerings via online delivery, and differing recognition systems does not allow for simple categorisation. It is also evident that the layperson may be easily misled into pursuing a higher education

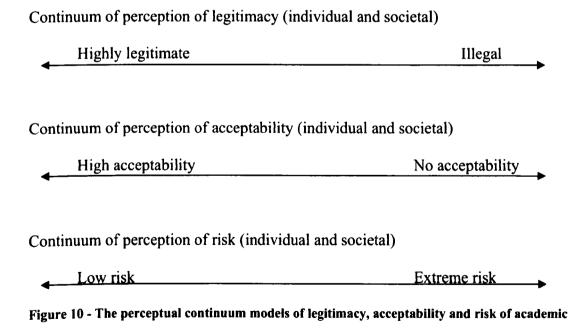
credential which lacks utility and recognition in the marketplace. By the same token, credential evaluators who do not follow the best available screening procedures may be unwittingly assisting qualification fraud, when they hire and promote individuals whose claimed qualifications are not from a legitimate provider (Johnson 2006b, p.285).

The question, 'Should people be concerned if individuals hold a non-official degree or a degree from a degree mill or diploma mill?' is fundamental to the debate surrounding alternative academic qualifications. The theoretical aspects of this question were presented in Chapter 2, where it was argued that the mere possession of a degree did not necessarily increase competence. For example, in the above-mentioned cases of Oakley and Abagnale, both performed their roles in meritous fashion. It could be argued that their falsified qualifications should be ignored in favour of their human capital attributes and demonstrated competencies. On the other hand, the qualifications these individuals purported to hold could be seen as credentials which unfairly raised their occupational status and, in essence, their perceived value in comparison with other candidates who might have held similar personal attributes, but did not hold the requisite degree, used as a screening tool. Although the ethical and moral dilemmas surrounding these issues are important, they are beyond the immediate scope of this study.

The desire to further explain and categorise the various avenues available for qualification acquisition pose immense challenges. Just as there are many unanswered questions pertaining to human capital derived theories of screening, signalling and filtering (Bills 2003a, p.449), there are equally unanswered rationales and classificatory solutions as to how to address the issue of official, non-official and fraudulent qualifications. In order to try and assist this process, the author contends that the Continuum Models, first espoused by Ezell and Bear (2005, p.282) and refined by the author (Brown 2005e; 2006) provide a way through this

quandary (see Figure 10 below). The far ends of each continuum provide for finite and seemingly plausible explanations for the phenomenon at hand. At the far left of the continuum are 'official' higher education providers, deemed official through their external approval received via established accreditation regimes. Notwithstanding this, they do still hold some level of risk regarding the acceptability of these qualifications. Moving further to the right of the continuums are non-official providers, each holding a perceived level of acceptability, and a higher risk in relation to acceptance. At the furthest right point in the continuums fall diploma mill documents and false claims of academic qualifications.

Although these may feign a high level of acceptability, they carry a high level of risk for either the individual or the evaluator, depending on whether a determination of authenticity is undertaken. All of these perceptions of legitimacy and acceptability are in turn influenced by the sociocultural evaluation perspective emanating from the hierarchist or the individualist view.



qualifications.

3.9 Summary and Conclusions

This chapter has briefly outlined the credentialing process and the evolution of the testamur/ parchment and transcript conferred at the completion of studies. The history of higher education qualifications, highlighting the emergence of the new 'for profit' providers, offering programs in differing formats and guises has demonstrated the confusion that has arisen in the higher education market. While the documentation has not changed significantly, the providers and sources of these important tokens of competence have. The chapter then developed a typology for sources and providers of academic credential provision, breaking them down into 'official', 'non-official' and fraudulent. In order to provide insight into those operations which pose the greatest risk to higher education provision, the following chapter analyses at greater depth the operations of non-official and falsified providers, ascertaining both the supply and demand aspects of these often ignored sources of academic qualifications.

Chapter 4 – Risk identification: An analysis of 'non-official' and fraudulent qualification providers and sources

Educational credentials are being forged in larger numbers, more than ever before around the world (Noah and Eckstein 2001).

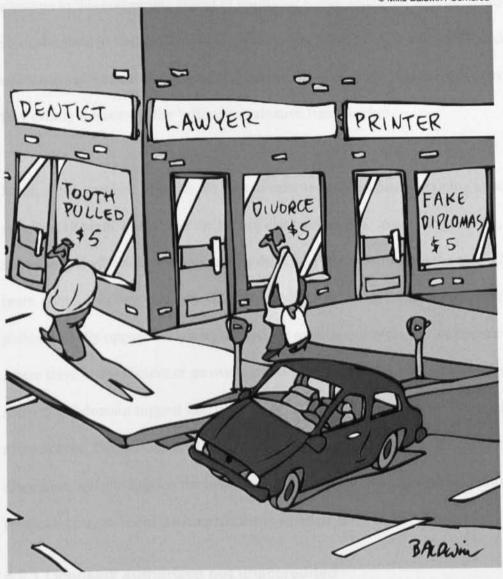
Education is for sale and so are certificates (Hernes 2005, p.7).

Useless degrees know no national boundaries and occur in all cultures (Contreras 2006b).

Neither forged nor purchased credentials can be condoned (Savage 1994).

4.1 Preamble

While the established official higher education sector is familiar to many, little research has been dedicated to profiling the many and varied sources of credentials available via the non-official providers, and particularly in the high-risk area of providing counterfeit testamurs. This chapter provides a systematic and comprehensive analysis of academic qualification providers, which were classified at the end of Chapter 3 as non-official or fraudulent. The discussion demonstrates the increased risk surrounding the provision and use of non-official or fraudulent, as opposed to official, qualifications. The risk issues presented show that in some cases, the consequences of using these credentials is low; in other cases, the consequences may be life-changing. It is necessary to raise these issues as an area of concern since if a process of academic qualification verification and authentication is not undertaken, then the possibility of these qualifications being used is considerable



4.2 Non-official academic credential providers and sources

One of the most challenging aspects of the classification of academic credential providers is the attempt to precisely identify those that fall within the non-official category. One of the most prominent publications focusing on the concerns raised of this study is the UNESCO Guidelines for Quality Provision in Cross-Border Higher Education. The main purpose of these guidelines is to '...protect students and other stakeholders from low-quality provision and disreputable providers' (UNESCO 2005a, p.7). It argues, 'In this context "disreputable providers" refer to degree and accreditation mills'. While UNESCO is correct in drawing

attention to this concerning aspect of unofficial higher education activity, it provides little or no explanation to stakeholders as to what exactly this statement means. How does an interested party ascertain 'low quality' provision, or identify 'disreputable providers' since they clearly fall outside the 'official' evaluative frameworks?

Much of the problem lies with the lack of information and data pertaining to non-official provision (Knight 2006a) and the lack of clear definitions. According to Bear, there are approximately 2,800 institutions across the world which fall within the non-official category (pers. comm.), in that they lack GAAP accreditation. Some of these institutions are philosophically opposed to accreditation (i.e. on religious grounds), or operate in jurisdictions where there is insufficient or no oversight of higher education. Many observers located in the hierarchical domain suggest that if providers do not hold 'official' GAAP equivalent accreditation, they automatically fall within the so called 'degree mill' category. This discussion seeks to explain the important differences between non-official through to fraudulent categories of the classifications outlined at the end of Chapter 3.

4.2.1 Licensed/ authorized but unaccredited

Beyond the realm of accredited universities, the waters get murkier, and the risk increases (Aumann 2006, p.84)

This category includes higher education institutions which possess the legal authority to offer degrees from an external government source, but their academic status is still deemed 'unaccredited'. This type of institution is primarily found in the United States, which has a voluntary accreditation system. Due to its uniqueness, as well as the world-wide popularity of US higher education, it is important to include this type in the non-official classification.

Further complications arise due to the varying standards of license in each of the fifty US States. Due to this varying level of regulation, most accredited providers in the USA do not

grant credit transfer for subjects and degrees acquired through these unaccredited providers (Bear and Douglas 2000). It is at this point that the 'grey area' of difficulty with qualification recognition is encountered. The utility of degrees earned within the non-official sector is challenged in some, but not all jurisdictions, due sometimes to poor legislation, lack of guidelines or conflict between established educational laws and bureaucratic 'difficulties' (Kokosalakis 1999, p.24).

Since providers that fall into this category do not seek official accreditation, little information is available in relation to their existence and operations, except what is reported in the media. Predictably one of the fiercest defenders of this model is Douglas Capogrossi, the past Vice Chancellor of the previously discussed Greenwich University. He has argued that existing approaches to accreditation fail to encompass alternative providers of these degrees (Capogrossi 2002), while espousing the virtues of non-traditional higher education and freedom of choice in the higher education arena. He is now President of Akamai University (http://www.akamaiuniversity.us), an unaccredited virtual university based in Hawaii, but delivering programs primarily across the Asian region. Appearing most sincere and forthright in his assertions, Capogrossi (whose own PhD comes from Cornell University) vehemently denies that all unaccredited universities are 'degree mills' ie offering degrees that are inferior in academic quality to providers which are accredited, and argues strongly for bona fide modes of non-official higher education. In his view, some represent a genuine attempt to provide a high standard, alternative form of higher education, but have not sought official accreditation for a variety of reasons, which may include individualistic or financial motives.

Unaccredited universities in the USA are generally evaluated negatively and labelled inferior due to their lack of official accreditation, without any attempt to evaluate the quality of the studies they offer. The previously mentioned Kennedy-Western University

(http://www.kw.edu now renamed Warren National University) was an unaccredited university based in Wyoming, which was the target of such allegations, ranging from government reports to banter on discussion boards. In a statement to the press, the owner of the university argued:

Our non-accredited status affords us the opportunity to provide...education, which is in great demand. ... Kennedy-Western University is not and never has been a diploma mill (Saltman 2004).

In a move to strengthen its position in this unaccredited area, Kennedy Western University sued the State of Oregon on a constitutional question, regarding the wording of a statute relating to the use of unaccredited degrees in that state (addressed in more detail in Chapter 5). Legislation was subsequently amended to allow individuals to use unaccredited degrees in that state, so long as they divulged the unaccredited status of their degree on business cards and other promotional material (Sinks 2005).

When an unaccredited US based university seeks to physically operate in overseas jurisdictions, further complications are created. In Kenya, for example, the Commission for Higher Education (CHE) announced that Newport International University (NIU) (another unaccredited Wyoming based university) had no authority to award degrees in Kenya, despite it having conferred over two hundred degrees on local students. While NIU operated campuses in the UK and Hong Kong unhindered, the Commission declared the awards granted in Kenya were invalid because the university had failed to secure accreditation from the CHE or an American accreditation body. The Kenyan government does not recognize programs from Newport, and graduates are not able to use their qualifications to apply for further studies (Private Varsity Degrees Bogus, Declares State 2005). Many examples of the overseas operations of US based unaccredited institutions exist, such as Columbia Pacific University and Pacific Western University. While they may operate legally within their own

jurisdiction, the acceptability of these qualifications in other jurisdictions is highly controversial.

To demonstrate the risks to the individual who has a degree from this type of provider, a selection of media articles and critiqued cases of individuals using these qualifications, both in employment and academia in Australia and around the world is provided in Appendix 3, Volume 2, page 386. While the Douglas (2003) study revealed some acceptance of these degrees within the US employment sector, elsewhere the use of these qualifications resulted in some positive, but mostly negative outcomes such as shame, personal conflict and loss of career.

4.2.2 University companies incorporated and/ or operating in unregulated jurisdictions

The popularity of transnational education has led to an increasing number of universities operating as incorporated companies, outside the country of their operators. Such providers have proved popular with students and operators, mainly due to the widespread acceptance of online, distance education and the ease of university companies gaining incorporation in jurisdictions of convenience such as Panama and the Turks and Caicos Islands. In their research, analysing the Bologna process (discussed further in Chapter 5), Wende (2000, p.5) and Saarinen (2005) argued that the competition and the threat posed by:

...non-traditional and non-European providers of higher education that enter the European market, by means of branch-campuses and virtual universities, called for new regulatory processes in order to regulate 'diploma mills'.

Notwithstanding this, it has been argued that non-official, online/ distance higher education satisfies current market needs, as it can easily deliver popular knowledge-based discipline

areas, such as social sciences, economics, business studies and information technology (Kokosalakis 1999, p.29).

The main difficulty facing various stakeholders in recognising this model is that although the corporate entities are legal, they are not recognised by a competent authority and fall outside the higher education sector of their country of incorporation. The institutions in question have not been conferred with degree-granting authority by a competent government body, such as a Ministry of Education, in the countries in which they are operating, even though they operate legally within the country or state of their original incorporation. Woody (1997, p.339) likened this form of institution to 'self-proclaimed' providers, as the only form of degree granting authority they lay claim to is their own articles of company incorporation. While this form of legal entity is currently the most popular form of non-official provision, Eells (1963, p.10), some forty years ago, had already identified the systematic use of general laws governing the creation of corporations (business name legislation) being used to create universities, in jurisdictions where no regulation of the term was maintained. The activity of such institutions can be regarded as standing between fraudulent providers, which purposely incorporate offshore in order to avoid scrutiny, on the one hand, and on the other, sincere operations that offer an education of substance, but either do not believe in external peer review examination, or do not have the resources to accommodate such a review.

In their recent taxonomy of academic fraud, Hallak and Poisson (2005, p.8) argued that accreditation and certification processes around the world were being undermined by a number of misleading approaches, which included the introduction of programs into jurisdictions where course accreditation and external review were not compulsory. This form of unregulated provision, which the OECD is trying to address in new guidelines (OECD 2005a), is ultimately a jurisdictional issue. This form of operation does not constitute fraud,

as general legislative provisions are not broken. It does, however, represent the skirting of ethical grey areas surrounding external recognition, about which individualist and hierarchist views of higher education have competing views.

Despite its detractors, a significant number of exemplars of this category exist throughout the world, with many taking advantage of jurisdictions which offer exemptions in legislation. For example, Kokosalakis (1999, pp. 19 & 35) found intriguing and paradoxical cases in countries such as the UK and Ireland. Although state education there appeared to be at a level to satisfy demand, some of the most significant increases in non-official higher education provision have been recorded in these jurisdictions. Due to a legal loophole, existing regulations pertaining to the UK 1988 Higher Education Reform Act allow overseas universities to operate freely in the UK, so long as they do not purport to offer UK recognised degrees. One of the most vociferous commentators in the area was the editor of the UK Education Training Journal, Lyndon Jones who wrote a series of articles on the proliferation of non-official providers in the United Kingdom in the mid to late 1970s (Jones 1972a; b; 1973a; b; 1974a; c; d; b; 1975; 1976). Recent research indicates that over 200 non-official entities operate in the UK, whilst of the new enquiries about UK higher education providers, received by the Department of Education in March 2006, 63% pertained to non-official providers (Vine 2006b). Since little has changed in the regulatory environment since the 1970s, the UK still harbours a significant number of non-official, unrecognised higher education providers (Fake degrees 'blight UK standing' 2005; Dowd 2005; Halpin 2005). Recent investigations found several overseas based medical schools operating in the United Kingdom, with no oversight over the quality of their operations. Although they were listed in the World Health Organisation (WHO) Directory, such a listing provided no accreditation of the quality of their delivery (Curtis 2005).

A similar regulatory situation exists in Ireland, where a company may be incorporated with the word 'university' in its business name, since there is no legislation to prohibit this. This legislation recently came under scrutiny by the UK QAA with concerns raised as to the number of institutions operating from, and within, the UK, but holding dubious registration overseas (Halpin 2005). Of particular interest were Irish incorporations, such as Warnborough University (http://www.warnborough.edu), Irish International University (http://www.dmuedu.org) and the European University of Ireland (http://www.europeanuniversity-ireland.com). All have operated in the UK for many years, without any oversight (Farrell 2001; Brennan and Walsh 2005; Trought 2005; Walshe and Lyons 2005). The Irish International University recently came under scrutiny as it was alleged to be offering PhD degrees for no study in Cambodia, where it was partnered with Ministry of Education accredited institutions, in order to obtain legitimacy (Wasson and Thul 2006).

Kokosalakis' (1999) has pointed to the paradox of this situation. UK higher education is held in high regard throughout the world. Where degree providers claim a UK presence, without undergoing a review but in order to claim legitimacy by association, their actions can be seen as reminiscent of institutions which purchase memberships in associations, in order to appear well connected and *bona fide*. The difficulty of distinguishing between the institutions that operate in this manner, and those created merely to profiteer without providing an education of substance is one of the most challenging aspects of assessing this particular model.

Knightsbridge University (http://www.knightsbridgeuniversity.com) is another example of an institution that operates unhindered with no oversight. After operating for some years in the UK, it relocated, on paper, to Denmark. This university has no official recognition in either iurisdiction, but operates freely as both countries have no formal interest in regulating private

universities that do not claim public funds. Likewise, the now closed Athenaeum University International (http://www.unicollege-edu.net – URL broken) was an unaccredited university corporation, registered under Number 467582, Document 695589, of the Panama Public Registry, Section of Mercantile as of 16th November 2004. It derived its degree granting authority from the articles of incorporation filed under Panamanian Corporations Law 32 – 1927. At the time of its operation it claimed to operate a branch campus in the United Kingdom, whilst the owner lived in Greece. The institution was not part of the Panamanian, UK or Greek higher education systems, and caused significant concerns for UK authorities (Baty 2005).

Within Australian shores, Pebble Hills University http://www.pebblehills.edu appeared on the Internet in 2004, incorporated in the so-called Principality of Hutt River Province in the middle of Western Australia, with contact details in Auckland, New Zealand. Hutt River Province sells university licenses and has created entities such as the University of Australasia, Australasia International University & Dargo University

http://dargouniversity.com. Pebble Hills University also claims licensure to grant degrees from the Principality of Seborga, another independent sovereign state, this time in Italy.

Research has found that Seborga does not even have a high school, and the address provided for the alleged accreditation is that of a wine cellar (Colla 2006). The degrees offered by Pebble Hills were delivered at learning centres in the Knowledge Village, Dubai, Singapore, Hong Kong, Nigeria, Taiwan, and Lebanon. Further investigation by the author has found over 25 other online, higher education institutions claiming purchased accreditation from this jurisdiction (see Appendix 4, Volume 2, page 394).

Further examples operate within Australia, claiming degree granting authority from their business incorporation in the Turks and Caicos Islands. St Clements University

http://www.stclements.edu and the now closed University of Asia http://www.uniasia.edu

(URL broken) operated from Adelaide, South Australia, but claimed delivery sites throughout the world. They were not part of any higher education system, and yet operated freely for over ten years, offering degrees up to PhD level in a variety of disciplines (Brown 2005i). How should these university companies be classified? Some researchers have suggested that these providers have created the illusion that they were flexible, non-traditional providers (Arnstein 1982), sharing attributes of 'official providers', '...but with some token work involved and all by correspondence' (Snyder 1974, p.93). Some argue that they are entirely legal in their jurisdiction of incorporation and, as such, should be left to operate freely.

In his analysis of trans border activity, Garrett (2005, p.2) argued that those purposely seeking to circumvent established regulatory education processes were either looking to profit from the naivety of others, or to meet the needs of those who had capitalised on the growth of fraudulent activity in higher education. Despite their claims to being non-traditional or alternative and their disdain of the traditional institution model, they have employed all the customary academic titles and nomenclature (Gubser and Millard 1982, p.17). Critics of this model label these institutions as degree mills, in the sense that they offer degrees for minimal work. The following section seeks to clarify the confusion that surrounds the use of this term.

4.2.3 Degree Mills

To promote false universities, which take money from students and provide no skills or education, erodes the whole function of a university system (Crane 2006).

The hierarchist side of the debate surrounding the academic status of degree mills affirms strongly that if a higher education institution offers degrees, but does not hold recognised accreditation, then it is 'non-official' and by definition an inferior degree mill. The individualist position, supported in this section, argues that the 'illegitimacy' debate is not so

easily solved. Most so called 'degree mills' are quite legal in the way they have capitalised on a blossoming and lucrative industry which generates over \$US1 billion dollars in revenue each year (Ezell and Bear 2005). As already mentioned, reference to higher education institutions of dubious standing have been found in medieval France (Tuchman 1979) and have flourished since the early 1800s (Reid 1963). Over the years, the use of technology and various legal models has rendered the analysis of these providers complex. Perhaps the greatest challenge in relation to the identification of degree mills is the manner in which they emulate official providers (Spille and Stewart 1985). The use of similar sounding names, impressive sounding accrediting agencies and online presence has the potential to mislead individuals. Such consequences were recently confirmed by Douglas (2003) who found that the acceptance of non-official qualifications was basically because the use of traditional sounding names gave a 'semblance of dignity' to the institution (Perotin 2003). On the one hand, some of these institutions purport to offer prescribed courses, although there is the suspicion that these may not be equivalent in standard to those of official providers. On the other hand, there are providers who constitute themselves as legal providers in order to sell a qualification in their own name, requiring no course work or mastery of a body of knowledge. It is important to critique the nomenclature and examine the quandary of their academic standing so that the problems posed by these degree mills can be addressed effectively.

The ease with which these qualifications can be obtained is also a concern. This was demonstrated by a news station in the United States, which purchased an MBA for its office cat from Trinity Southern University. With a grade point average of 3.5 the application, originally for a Bachelor degree, was upgraded to an MBA due to the 'extensive life experience' the cat held (Cat Gets MBA Degree From Online College 2004). Perhaps even more alarming is the availability of degrees from institutions such as the 'University of Nuke'. For a fee of \$US3, 000, a parchment complete with Latin inscriptions, raised seal, and

official-looking signatures is available. An additional \$US1, 000 pays for a certified 'transcript' and a further \$US500 includes three recommendation letters from 'professors'. Each 'graduation' package also includes a list of terms to be used in an interview situation such as, 'hydraulic stud tensioner', 'protactinium number density' and 'trypanothionedependent glyoxalase pathway' (Minkler 2005).

Degree mills are now recognised as a global problem. Contreras (2006a) has profiled a range of countries which he believed harboured alleged degree mills; the international coverage of this problem is outlined in Figure 11 below. These global issues were first highlighted in Reid's earlier work, when he found that enquiries and complaints about American degree mills operating overseas came from some fourteen countries, ranging from Eritrea to Columbia (Reid 1959, p.25-29). In relation to the prevalence and number of alleged degree mills that fall within the red areas of Contreras' (2006a) diagram, below, exact numbers are difficult to ascertain. In 1960 the US Office of Education documented 155 degree mills operating at that time (Eells and Haswell 1960, p.55), while more recent figures offered by Bear & Bear (2003, p.257) and Hamshere (2005) suggested there were over five to eight hundred operating worldwide. Given the difficulties in nomenclature, it is unclear how the authors arrived at such figures. In an effort to shed light on the issue, the following section will briefly discuss the range of definitions which have been put forward.

Degree Mills around the World

(Countries with the worst degree oversight are in red)

Some of these countries have a history and culture of corruption, incompetence and indifference. Others are so clean that the presence and operation of degree mills is undetected or beyond reach of existing laws. Others have oversight problems that may be temporary. Some have multiple internal jurisdictions that create problems.

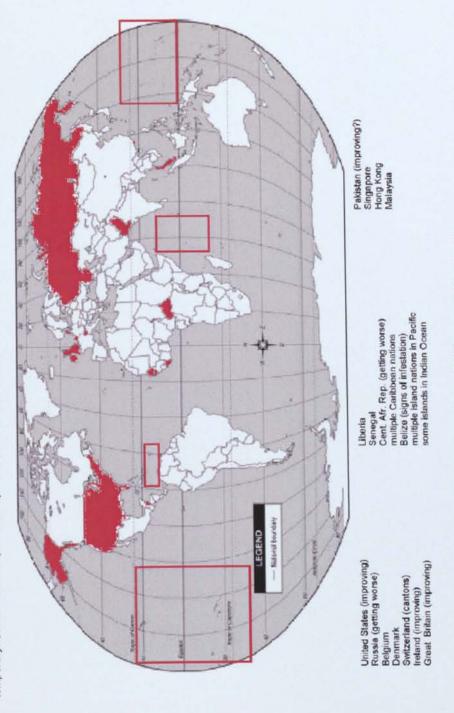


Figure 11 - Degree Mills around the World.

4.2.3.1 Attempts to define degree mills

The lack of consensus on what constitutes a degree mill and the potential risk these pose to the traditional higher education sector has caused great problems throughout the world. Grolleau, Lakhal & Mzoughi (2005, p.14) asserted that '...discussions about definitions (of degree mills and diploma mills) are not unimportant quibbles over words and can change the way we think'. The author concurs, acknowledging the challenges in attempting any definitions. From the outset of his research, Reid (1963, p.5) admitted he 'was troubled by the difficulty of determining what institutions could be labelled degree mills'. He claimed that there was no common agreement on what the term meant, as it was used 'loosely' and 'indiscriminately', particularly by those that did not know what real degree mills were (Reid 1959, p.3). Reid's later doctoral work argued that there has been little effort made to define the degree/ diploma mill, suggesting that the following words were used as broad descriptors of these types of institutions—'questionable, shady, phoney, bogus, shyster, sham, fly-bynight, counterfeit, fake, pseudo, fraudulent, and spurious' (Reid 1963, p.20). Porter (1972, p.26) who attempted to define the quandary, used Reid's loose analogy but again was unable to find an operational definition. In his proposed typology of higher education, Davies (2001, p.38) suggested that 'degree mills' fell under the category of private universities, but acknowledged that this definition was 'a bit fuzzy'. Even quite recent researchers considered that there was still far from unanimous agreement on just what constituted a degree mill (Ezell and Bear 2005, p.21).

The US Select Committee on the Ageing (Fraudulent Credentials 1985) correctly observed that there was, at the time, no definitive criteria of a degree mill and a variety of evidence should be presented to form a conclusion. Notwithstanding this, the Committee did contend that a degree/diploma mill was:

An institution that sells a diploma or a degree to a person upon payment of a fee and does not require demonstration of the achievement of college-level training. Such diplomas may carry the name of the diploma mill itself, or they may be duplicates of diplomas issued by legitimate colleges and universities.

This definition did little to assist research in the area, as it incorrectly combined pure fraud with non-traditional higher education. Committed to finding an overarching definition, Reid (1959, p.5) determined some criteria which, '...serve to draw a sharp line between unethical, "racket" colleges and universities and non accredited, but honest, institutions of higher learning'. A review of his criteria shows they are somewhat dated, and perhaps, fail to distinguish between different types of operations common today.

A study by Eells and Haswell (1960, p.5) around the same period as Reid's work labelled degree mills as 'spurious' institutions that offered questionable qualifications. They argued that a degree mill was:

...a commercial enterprise purporting to be a legitimate institution of higher education which sells a "degree" or more often a variety of degrees, occasionally requiring token effort but never the scholastic work normally expected by reputable institutions (Eells and Haswell 1960, p.53).

Stewart and Spille (1988, p.9) were more cautious, warning that great care should be taken when trying to label an organisation a degree mill as, '...such charges may be unfounded and based upon ignorance or erroneous interpretation of the philosophy and structure of the organization or program in question'. However, attempts to reach a workable and useful definition of degree mills have been confounded by the tendency of many writers to regard the term as interchangeable with diploma mills. For example, a working definition offered by Spille and Stewart (1985, p.19) asserted that a diploma mill was:

...a person or an organization selling degrees or awarding degrees without an appropriate academic base and without requiring a sufficient degree of postsecondary-level academic achievement.

A later definition offered by Stewart and Spille (1988, p.64) used the term 'diploma mill' to include both dubious university activity and the falsification of *bona fide* testamurs from legitimate universities. More recent attempts at definitions appear to have followed a similar line of thought. Katz (2004) treated the terms as synonymous, in the following definition.

...an organization or individual producing and selling diplomas, degrees, transcripts, or other academic records that are meant to give the impression of academic achievement, but in reality represent little or no study. The documents from a diploma or degree mill may bear the names of entities that are not officially-recognized educational institutions, or may be fraudulent misrepresentations of documents issued by legitimate institutions. Note that organizations may claim to be selling bogus credentials as "fantasy", "novelty", or "replacement" degrees. Such credentials are "bogus" – "fakes" that give a false impression of academic achievement.

The Netherlands, in its press release announcing the launch of a new Coordination Office for Information on Diploma Mills, as part of its existing IB-Groep governmental section, also failed to distinguish between the two terms when it referred to:

"...fraudulous companies that offer, often on internet (sic), non-authentic degrees from both existing and non-existing universities, colleges and schools, without the requirement of following courses or attending class. The activities of Diploma Mills results in misunderstanding, deception and fraud'(IB-Groep CIDM. 2005).

Calote (2001) and Douglas (2003, p.44) both maintained that the terms meant the same. It should be noted, however, that none of these researchers were concerned with the operations of alleged diploma mills, and therefore did not need to address the counterfeiting of *bona fide* qualifications from official providers.

Perhaps the most useful attempt at a definition is to be found in the latest work of Ezell and Bear (2005, p.20) who purposely differentiated between degree and diploma mills. They suggested that a 'degree' was a title, which could either be bought from a fake institution or earned through a legitimate provider. In contrast, the term 'diploma' referred to the parchment or testamur which provided documentary evidence that a degree had been

awarded. The author concurs with this distinction, and has used them in developing the typology presented in this study.

The apparent problems in definition appear to be mainly due to the fact that the term has never had any legal standing, although some jurisdictions are now looking at the area.

According to Bear and Nixon (2006, p.273), it is virtually impossible to write a law that discriminates clearly between *bona fide*, legitimate institutions and degree mills.

Accreditation appears to be the only 'yardstick' used by consumers to '...sort the good from the bad, the legitimate operation from the diploma mill'(Dickeson 2006, p.2). In order to make a firm stand on the issue, the State of Oregon in the United States was, to the author's knowledge, the first jurisdiction to legislate on the term. According to Oregon law, an entity is a degree mill if it meets any one of the following conditions:

- (a) As determined by government action, has engaged in dishonest, fraudulent or deceptive practices related to the award of degrees, academic standards or student learning requirements.
- (b) Is a U.S. entity without governmental approval to issue degrees.
- (c) Is a non-U.S. entity that does not have the legal authority to issue degrees usable as credentials in the nation that authorizes issuance of the degrees."(Validation or Invalidation of claim to possess an academic degree 2005)

This legal definition clearly reflects the hierachist perspective on higher education, in that it includes the term degree mill to define all providers except official accredited providers. It is not surprising that it has drawn the ire of many non-official providers, since most of these institutions fall within one of the above-mentioned conditions. This legislation is now being used as a benchmark for many other US states and is discussed further in Chapter 5.

4.2.3.2 Examples of degree mills in Australia

Over the years, Australia has been subject to alleged degree mill activity, again amid much debate in academic circles. In 1991, Frank Hambly, Executive Director of the Australian Vice-Chancellor's Committee, warned of the increasing prevalence of "degree mills" in

Australia, and implored institutions '...not to give credit to qualifications which are not *bona fide*' (Aubert 1991, p.5). It is warnings such as this and the question of what is deemed '*bona fide*' or official which remained relatively unanswered in Australia. Ezell (2007, p.110) believed Australia was home to at least 40 degree mills, however the author is not convinced that this is an accurate figure. To shed light on the area, the author undertook research highlighting the issue of non-official higher education as it applied to Australia (Brown 2001b; 2002; 2004; 2005i) where again, some challenges are raised pertaining to definitions. The following provides discussion on examples of degree mills as they have appeared in Australia.

Perhaps the first alleged degree mill to operate in Australia, the 'Independent University of Australia', was located in Morwell, Victoria. The only evidence of its operations was a single listing in a publication, with no bibliographic details, sourced from the British Library Lending Services (Bogus Degrees and Fake Diplomas nd). According to Bear and Bear (2003, p.317) the university was founded in 1972 and claimed to be a sincere attempt at creating an alternative university. Later in 1991, an institution called Somerset University (also known as Villareal National University) was warned by the Victorian Consumer Affairs Minister about false and misleading advertising in the state (Richardson 1992b, p.18). This was followed by a mention of the 'University of Saint Bartholomew' from Oodnadata, South Australia (Richardson 1992a). While John Bear was on a lecture tour of Australia, he claimed in an interview on Australian radio, that:

...a number of people called or wrote to mention (University of Saint Bartholomew), that merrily sold its fake product to Europeans (Bear and Bear 2003, p.284).

In 1993 an entity called the "Aesthetics and Visual Literacy Council" allegedly conferred a range of honorary doctorates, using the University of New South Wales auditorium for

graduation ceremonies with some of the university's staff in attendance (Question and Answers 1993; Maiolo 1993). During the period 1999 to 2004, the author found evidence of over twenty seven non-official providers attempting to offer their programs in Australia, with an additional eight trying to gain leverage off the brand of Australian higher education (Brown 2004). To categorize these as degree mills, as opposed to non-official providers, is very difficult without undertaking a more detailed assessment of their operating characteristics. The following sections attempt to distinguish between the two types of degree mills – university companies selling degrees and fictitious universities.

4.2.3.3 Degree Mill Type 1 – University companies selling degrees

The first type of degree mill model applies to organisations that incorporate themselves as a legal entity, but with the clear intent to provide academic credentials with little or no academic work. These entities often use jurisdictions such as Panama, the Seychelles, and the Turks and Caicos Islands to gain the legal authority to grant degrees, without being constrained by oversight from a competent educational authority. Newer jurisdictions such as the Principality of Seborga in Italy and Hutt River Province in Western Australia, previously mentioned, have also been used. Entities under this model commonly claim accreditation from fictitious accrediting agencies, mostly created by their own operations.

The most ubiquitous of this type of organisation appears to be Buxton University, formerly known as Canterbury University and Bridgewater University. As with the University Degree Program model (outlined below), this operation does not use a website so as to avoid detection. A site located at http://www.buxtonuniversity.co.uk may be related but it is unclear whether it is affiliated with the same operation. Using details provided in a 'graduation package', the Guardian Newspaper in the UK investigated Buxton University through a phone

and mail forwarding address in Cheshire UK, and called the provided number. It was answered by someone who said he was 'just a retired chap walking down the passage' and was unable to give any information (MacLeod 2003).

Despite this seemingly fraudulent façade, each of the 'institutions' created by the owner of these operations is legally incorporated as an International Business Corporation (IBC) in the Seychelles. Using the generic site http://www.instantdegrees.com to promote its offerings (without providing any names) the organisation has also used some spam mail in the past to promote its offerings, as outlined below:

InstantDegrees.com

Enjoy the prestige of putting BA, BSc, MBA or even Ph.D after your name.

Exploit a 100% LEGAL LOOPHOLE and get the recognition you deserve TODAY!

No coursework, no classes, no residency and no hassle. One simple click will change your life forever.

Imagine the social prestige and advantages of legally acquiring a DOCTORAL TITLE. See those doors open, get into those exclusive restaurants and clubs. Enjoy better service wherever you go and whatever you do. All this for less than the cost of a good night

Visit http://www.InstantDegrees.com for more details and to order online, get your diploma in 5 days. Please mention Affiliate ID: A2469

This Is a one time Mailing. To be removed from our list, reply with "REMOVE" in the

In order to obtain a degree, all an individual needs to do is submit the required fee and provide an employment background, which is not verified. The money is submitted online, and the graduation package is mailed from Portugal (Anderson 2004; Bishop 2004; Rutledge 2004). A further level of 'credibility' is added through the provision of an Apostille service, designed to legitimise and validate the purchased documents (discussed further in Chapter 5). Accreditation is provided by the 'Independent Accreditation Board' a fictitious accreditation agency, along with a verification service for an employer. Together this constitutes a

seemingly comprehensive service. A copy of the parchments and the information provided by the 'Instantdegrees' program is shown in Appendix 5, Volume 2, page 395. All information presented by this operation emulates the *modus operandi* of Earlscroft University http://www.earlscroft.com, which has been referred to as a 'rogue college' initially incorporated in Ireland (Clancy, cited in Kokosalakis 1999, p.159). Earlscroft University has since reincorporated in the Seychelles, with parchments printed and similarly mailed from Portugal. Claiming exemption from the UK 1988 Education Reform Act, the Earlscroft site points out that it is legal, so long as it does not claim to offer British degrees. Earlscroft is also accredited by a fictitious accrediting agency, the United Congress of Colleges (MacLeod 2003: Dowd 2005).

4.2.3.4 Degree Mill Type 2 - Fictitious universities selling degrees

It is possible to distinguish another type of degree mill. These particular organisations claim no legal basis or framework for offering degrees, and provide credentials in the name of universities which do not exist in anything but name. The individuals who operate these entities sell pieces of ornate, impressive looking paper including 'Letters of Recommendation' for a fee. Much of the promotional material surrounding these operations revolves around the validation or justification of life experience, using documentation presented by the applicant.

The most pervasive and concerning of these particular models is the University Degree Program (UDP), a multi million dollar operation with roots in Romania (Bartlett and Smallwood 2004). Concern was first raised about the operations of the UDP and Australian consumers, when Lawnham (2002d) profiled its operations, questioned the usage of the credentials, and explained the confusion they could create with prospective employers. The

UDP has been clever in creating confusion with its marketing material, suggesting it can provide a 'genuine' degree in as little as two weeks. Samples of their documentation are located in Appendix 6, Volume 2, page 398. Researchers such as Hallak and Poisson (2005, p.6) have incorrectly identified this entity as trading in 'counterfeit qualifications'. However, the qualifications cannot be regarded as counterfeit, as they do not replicate the degree certificate of an existing official institution. UDP's operation has been described by Ezell and Bear (2005) as 'The Biggest Degree Mill Ever'. The author has personally documented over seventy one names that this non-existent entity has used since its inception (see Appendix 7, Volume 2, page 403). The frequent change in name is designed to avoid scrutiny and media attention, once one particular name is exposed.

The UDP has a single *modus operandi*: spam the internet with millions of untraceable email messages. If an average return rate of 0.001% on spam is being calculated, this provides for a profitable return (OECD 2004a). Gollin (2005) found that some of the spam came in graphic form, text based and also via Windows Messenger. Jacqui Ryall, Administrator of the 'Australia.edu' domain has reported that over one hundred emails per day are being sent to various addresses, causing a significant administrative burden (pers comm.). Appendix 8, Volume 2, page 404, contains copies of the various versions of spam issued over the past seven years. While it did not originally use websites, some sites have recently been created. It is possible that these may have emanated from other individuals imitating the program and trying to capitalise on the business model. Fourteen of the websites were closed down in 2003, and the mail forwarding services used in the UK closed (Bogus degree sites shut down 2003; Frean 2003) in an attempt to address the problem. However, the organisation continues to operate freely at this time, with the latest name, Summerset University being used, and another mail forwarding address located in London.

In a close analysis of the UDP operation, Ezell and Bear (2005) reported that those who took an interest in the offerings were asked to call a recorded number in the United States and leave their contact details. A call centre agent subsequently returned the message and used a standard, and very convincing, marketing approach. The price for the complete degree package (degree of choice, transcripts of results and letters or recommendation) generally started at approximately \$US3, 500. This figure was then negotiated down, with the lowest price being \$US800 before the telemarketer hung up. Orders were shipped from Romania and transported via Federal Express to the USA, where they were distributed via mail drops. The money generated was subsequently channeled into a Western Union account which was then banked in Cyprus (Ezell and Bear 2005). The testamurs and associated documentation provided by the UDP were reported to appear very authentic, with the quality of the paper and accompanying statements suggesting to the layperson that the institution was a bona fide degree granting institution. Ezell and Bear (2005, p.201) estimated that, based on the return rates of spam and the prevalence of the operation, the UDP had generated more than \$US400 million dollars since its inception in the mid 1990's. The American owner, who runs the office in Romania, allegedly earned a personal salary of \$US150, 000 per day (Ezell and Bear 2005, p.14 & p.201).

The ease by which these particular types of operations can be established and operated in the Australian market was determined by the author in February 2006. While researching the offerings of falsified qualifications on Ebay http://www.ebay.com, a popular online store, the author identified the site http://www.buydegrees.com.au, offering qualifications from the 'University of Northern Australia', a fictitious Australian university allegedly located in Queensland. The author purchased the documents (see Appendix 9, Volume 2, page 407 for screen shots of the Ebay site), consisting of a Doctor of Philosophy degree and a Doctor of Medicine degree (see Appendix 10, Volume 2, page 409 for copies of these documents).

Assuming that the documents were intended for purely novelty purposes, the author asked the owner if the degrees could be used to obtain a job. The online seller (going by the name of Eugen Soos) replied, 'You can show them to anybody.'

Despite the seemingly fraudulent nature of degrees provided by the Degree Mill Type 1 and 2, challenges still are apparent. The Type 1 providers are difficult to dispute from a legal standpoint, as the entities that sell these qualifications are actually legal corporations. While the standing of the qualifications is criticised by those familiar with credential evaluation, many employers and other stakeholders interested in these documents may not be aware of what these institutions represent. In relation to the Type 2 degree mill, these organisations do not sell degrees from existing or real universities, in many cases, they appear not to be breaking any laws within a variety of jurisdictions. Moves to address the activity of such degree mills are discussed in Chapter 5. Their prevalence and apparent legitimacy is assisted through corrupt practices, such as the use of accreditation and credential evaluation mills, which are critiqued in the following section.

4.2.3.5 Corruption in accreditation and credential evaluation mills

Perhaps some of the most concerning activity which appears to be on the rise is the corruption surrounding legitimate government level accreditation of higher education institutions. The Boston College for International Higher Education has been so concerned with this issue, that it has created the Higher Education Corruption Monitor

http://www.bc.edu/bc_org/avp/soe/cihe/hecm/, a branch dedicated to researching and profiling the burgeoning problem of corruption within established higher education institutions and government. Studies undertaken for the centre are diverse and cover a range

of countries subjected to higher education fraud (Waite and Allen 2003; Altbach 2004; 2005; Rumyantseva 2005; Stetar et al. 2005; Hallak and Poisson 2007).

Whilst it was acknowledged in Chapter 1 that corruption does not form the core of this study, the credentials provided by corrupt, yet GAAP accredited, institutions can pose a serious risk, especially in light of the UNESCO Guidelines. The recent revelations that 60% of all Chinese PhD students, indentured at GAAP equivalent higher education institutions, plagiarised their studies or offered bribes for soft marking (Marquand 2006) and the rampant plagiarism in countries such as Nigeria (Edukugho 2006) do little to reassure the globalised higher education community of the integrity of official institutions.

One of the most concerning cases of fraud pertaining to higher education accreditation involved the operations of St Regis University, once a Dominican, then a Liberian based, university, which was found to be selling falsified Microsoft engineer certificates in Australia (Lawnham 2002j; c). At the time of writing this study, St Regis University had allegedly sold more than \$US4.7 million worth of falsified academic credentials, including degrees in nursing and radiology (United States of America, plaintiff vs. Blake Alan Carlson, Defendant 2006). Complications have arisen because this institution claimed official GAAP equivalent accreditation from the jurisdiction of Liberia, although after some time these claims were disavowed by the Liberian Ministry of Education. An investigation involving the U.S. Secret Service, the U.S. Internal Revenue Service, the Office of the U.S. Attorney for the Eastern District of Washington, the U.S. Immigration Customs Enforcement Bureau, the U.S. Postal Inspection Service, the Office of the Attorney General of Washington State, and the Spokane Washington Police Department found a concerning level of fraud relating to the creation and operations of the university (Feds Crack Down On Alleged Diploma Mills 2005; Morlin 2005).

On 6th October, 2005, the United States Attorney for the Eastern District of Washington, announced that a Federal Grand Jury in the Eastern District of Washington returned a three-count indictment, charging eight individuals with conspiracy to commit mail fraud and wire fraud pertaining to the St Regis operations. According to the Indictment, official, fraudulent rubber stamps and seals were created and telephone verification of the degrees was available to potential employers (Pass 2005). At the bail hearing, it was found that the owners of St Regis had sold up to 15,000 degrees and 10,000 high school qualifications, primarily in the Arab states, in addition to creating over 300 fictional colleges over the previous six years (Phillips 2005; Press 2005). Further investigations determined that three Liberian diplomats had been paid more than \$43,000 to provide false accreditation for St Regis University. Using this claimed accreditation as a leverage for authenticity, the operators easily sold degrees, 40 percent of which went to foreigners seeking entry into the United States, while over 135 were sold to government employees (Associated Press 2006a; b).

Whilst the abuse of GAAP equivalent accreditation is not commonplace, the difficulty in obtaining such status has led some operators to either create or purchase feigned accreditation. Often called 'accreditation mills' (OECD 2003; 2004g; UNESCO 2005a; Ezell 2006; 2007), some examples of these have already been cited in the degree mills section, where Type 1 and 2 providers tried to feign some form of legitimacy. It is now estimated that that there are well over 200 such entities in existence (Ezell and Bear 2005, p.240; Bear and Nixon 2006). Unrecognised accrediting agencies such as the World Association of Universities and Colleges (WAUC) http://www.waucglobalaccreditation.org and the International Accreditation and Registration Council (IARC) http://www.iarcedu.com in Australia (labelled an accreditation mill by Ezell (2007, p.110)) are simple to create as organisations. Some entities create their own accrediting agency and list their institution alongside other 'official' higher education providers, creating legitimacy by association (Stewart and Spille 1988,

p.169). The UDP model is one relevant example, where two sites were created http://www.echoe.org/member.html & http://www.icdhe.org/ in order to mislead individuals.

Confusion has also been caused by the attempted listing of institutions on databases and the unauthorised use of logos in order to gain some form of *de facto* official recognition. The Higher Education Institution Registry (HEIR), once located at http://siu.no/heir was one such register, created by the Norwegian Centre for International Cooperation in Higher Education. This organisation has affiliation status with UNESCO, and maintained this free to use, editable database online, which at one time hosted over 7,000 listings. Once it was discovered that the site could be easily modified, a myriad of providers submitted their details and made claims on their websites that they held some form of recognition from UNESCO. Athenaeum University International, previously discussed, engaged in such activity, along with Pebble Hills University. Georges Haddad, the Director of the Higher Education Division of UNESCO, argued in an interview with the Times Higher Education Supplement that the HEIR website, referred to by the Athenaeum University International UK, had nothing to do with UNESCO. The institution was not listed on UNESCO's World Register (Baty 2005), which is one of the main tools used in the recognition of institutions (profiled further in Chapter 5). As a consequence, the site was closed on the 15th September 2005.

Another organisation that has suffered similar misrepresentation is the World Association for Online Education (WAOE) http://www.waoe.org, a highly credible non profit organisation dedicated to the promotion of internet based education. A variety of non-official providers, including Athenaeum International University mentioned above, used its logo without authorisation to claim some form of recognition. This activity led the WAOE Board of Directors to pass a resolution and publish a statement to denounce and disavow any form of accreditation function (see Appendix 11, Volume 2, page 411).

Credibility by association is another strategy which causes significant confusion. Both the International Council for Open and Distance Education (ICDE) http://www.icde.org and the British Learning Association http://www.british-learning.com have links on the UNESCO website, and some institutions which purchase membership with these organisations attempt to claim recognition by UNESCO. In an interesting move, the United States Distance Learning Association (USDLA) http://www.usdla.org/html/membership/organizMembers.htm has categorised its members according to recognition and accreditation status levels (official and non-official), making it the only professional organisation to make efforts to provide such a service.

One of the newer areas of concern regarding misleading accreditation is the use of credential evaluation companies. These are most common in the USA, and as evidenced previously by Bear and Douglas (2000), are popular with many providers due to the volume and complexity of assessing overseas qualifications. Because of a lack of uniformity in the process of evaluating academic qualifications for equivalency (Abel and Sementelli 2002), the evaluation process is self-regulated via two peak bodies, AACRAO and NACES. Recently, AACRAO released the following press statement regarding current problems in the industry:

AACRAO and other legitimate higher education organizations are under constant assault by diploma mills, fake accrediting bodies and/or credential evaluation mills. These entities typically attempt to misappropriate AACRAO's respected and reputable name to further their fraudulent and deceptive activities (AACRAO 2006a).

Pebble Hills University is one provider attempting to use this process, through a company called ECE International http://www.eceinternational.com. The university makes the following claims:

Pebble Hills University's degree can be officially attested to their U.S. regionally accredited equivalency through Education Consultants and Evaluators International (ECE International) which is also a member of American Association of Collegiate Registrars and Admissions Officers (AACRAO).

Appendix 12, Volume 2, page 412, provides screenshots of the credential evaluation websites, and the problem this has created for a similarly named company ECE http://www.ece.org (Koenig 2006). In an attempt to address the problem, AACRAO filed for a temporary restraining order on another similar evaluation company, American Universities Admission Program (AUAP) http://www.auap.com, alleging this entity misused the AACRAO logo, along with making other misleading statements. In their opening statement, AACRAO contended:

Unfortunately some entities provide false or highly deficient evaluations and thus undermine the evaluation process. Furthermore, institutions known as "diploma mills" fraudulently produce fake or unsupported academic credentials for foreign students. In turn, the fraudulent entities further perpetuate the fraudulent actions of the diploma mills and the foreign students by giving credence to their credentials with false or suspect evaluations and accreditations (American Association of Collegiate Registrars and Admissions Officers vs. American Universities Admissions Program Inc and Jean Noel Prade 2006, p.5 & 6).

Due to the apparent rising abuse of the credential evaluation process, Ezell (2007, p.93) has called for regulation of the industry, requiring companies to be independent and at arm's length from the higher education institutions they evaluate.

Moving further down the acceptability and authenticity continuums are counterfeit testamur providers and their various derivatives which are discussed in the section that follows. Seen as entirely fraudulent from both the hierachistic and individualist perspectives, the next section demonstrates that the ubiquity and unregulated nature of the Internet provides the most optimum environment for this activity to thrive.

4.3 Falsified academic credential providers and sources

He has pieces of paper which are indistinguishable in terms of authenticity. Professor Michael Irving, Vice Chancellor of Griffith University Gold Coast Campus when asked about

the revelations of Dr Horace Sogar's falsification of his undergraduate and postgraduate degrees (Whittaker 1996, p.1).

For as long as diplomas represent value, they will be subject to counterfeiting in one form or another (Stewart and Spille 1988, p.185).

Faking degrees is maybe one of the fastest and most profitable businesses (Grolleau et al. 2005, p.17).

Academic documents, as previously discussed, have the intrinsic function of granting their bearers certain rights (Renesse 2005, p.295). These rights are infringed upon by suppliers of falsified academic testamurs and transcripts, an activity which falls within the realms of counterfeiting. Seen sometimes as a 'nearly risk free crime' by the perpetrators, counterfeiting can been defined as '...the knowing duplication of a product by a party who wishes to usurp the brand or trademark of another' (Hopkins, Kontnik and Turnage 2003, p.9). Counterfeiting, as applied to higher education qualifications, is therefore a process which devalues academic qualifications, as in the case of currency, for those that hold these 'club documents', and threatens to infringe the legitimately earned rights and brands they have acquired. A brand, according to Hopkins, Kontnik and Turnage (2003), is a symbol of quality and service that a consumer attaches to a product. The more credibility a brand has in the marketplace, the more the consumer has confidence in the product. Just as the counterfeiting of legal tender threatens to compromise the trust and value placed in it, by analogy, there is a comparable devaluation of higher education qualifications. The increasing use of polymer banknote technology (discussed further in Chapter 5) to protect academic qualifications, in the same way as monetary currency, mirrors the value society places on these tokens.

To protect the multi-billion dollar global industry of consumer brand products from counterfeiting, over five main organisations exist:

- International Chamber of Commerce Counterfeiting Intelligence Bureau (CIB) http://www.icc-ccs.org/cib/iacd.php
- International Anti-Counterfeiting Coalition (IACC) http://www.iacc.org/index.html

- Anti-Counterfeiting Group http://www.a-cg.com/guest frames.html
- Global Anti-Counterfeiting Group (GACG) http://www.gacg.org/index.php
- Quality Brands Protection Committee (QBPC) http://www.qbpc.org.cn (Hopkins et al. 2003)

While these operations have made considerable efforts to address fraud levelled at consumer goods, it is interesting to note that none of their mandates encompasses the falsification of academic qualifications. Eckstein (2003, p.23) has argued that due to the rapidly changing nature of the Internet, no sooner is a fraud unearthed, then a countermove is created. This context provides opportunities and incentives for both the perpetrators and the purchasers of falsified academic credentials. Lowe and Matz (nd, p.39) and Hopkins, Kontnik and Turnage (2003, p.5) identifed five main factors which helped to explain why the falsification of academic qualifications was a burgeoning business:

- 1. The sheer profitability of the exercise;
- 2. The absence or inadequacy of legal penalties and/ or intellectual property laws in many countries and the general lack of effective enforcement action;
- 3. The widespread availability of relatively cheap high-tech equipment, which facilitates copying;
- 4. The perception of counterfeiting as a "low grade harmless crime";
- 5. Increased globalisation of world trade and brand recognition which offers a global market for counterfeits.

While most counterfeiting involves testamurs from official bona fide institutions, some organisations/ individuals have produced qualifications from institutions with names that sound similar to well known institutions. One example was found when a job candidate in Japan, submitted a parchment from the University of Minnentosa (sic), instead of the well established University of Minnesota (Fisher 2005). Similar attempts have been made to mislead those reading testamurs. For example the University of Hartford in Connecticut is an official higher education institution in the USA, whilst Hartford University (http://www.hartforduniversity-edu.org) operates from a post office box and fails to provide a physical location for its 'campus'. These examples represent 'copycat' or 'simulation' attempts, involving the copying '...of a product in form or substance with no attempt to

actually duplicate the brand name' (Hopkins et al. 2003, p.9). This form of document creation clearly avoids legal implications associated with brand and trademark protection, and feigns legitimacy by simulating established brands in a way which aims to deceive both the consumer and evaluator of the qualification.

Despite the concerns surrounding the counterfeiting of academic degrees, some research shows that public perception is actually accepting of such behaviour. In 1997 the Anti-Counterfeiting Group (ACG), a body located in the UK, commissioned a report from Market Opinion Research International (MORI). The study found that one sixth of the one thousand respondents contacted were not aware of the prevalence of counterfeiting, while forty percent stated that they would knowingly purchase a counterfeit product. This latter figure included thirty percent who indicated that they were morally opposed to any form of counterfeiting activity. In addition, fifty two percent of those in the highest income bracket stated they would knowingly purchase counterfeit products, whereas only twenty six percent from those in the lowest income bracket would do the same (Hopkins et al. 2003).

4.3.1 Background to qualification forgery

It is clearly evident that every document used for the certification of education has the capacity to be altered or forged (Askins 1996), with transcript fraud being the most frequently encountered form of counterfeiting of academic documents (Stewart and Spille 1988, p.162). Hernes (2005, p.7) recounted the story he heard when he was fifteen, that at some German railway stations they would announce: "Funf Minuten Aufenthalt um einen Doktortitel zu erwerben" – "15 minute stop to acquire a Ph.D". While this may appear to be an entertaining anecdote to commence proceedings at a global summit on higher education accreditation, he freely admitted that what used to be a small scale dubious operation had now become an

'unpretty' big business. Ezell and Bear (2005) maintained that the problem of fake, replica testamurs has existed for over thirteen hundred years, but they provided little evidence as to its prevalence. In 1833, Wooton (cited in Reid 1963, p.82) contended that a:

"... "bogus degree" deserves a special place of dishonor all to itself, and it shall have it. A "bogus" degree is a fraud, an imitation, a mere counterfeit."

Noah and Eckstein (2001) referred to a reported 1880 incident, when a representative of the Philadelphia Record newspaper in the United States purchased an array of degrees for the present equivalent sum of \$US20,000. No other documented studies have been found pertaining to qualification forgery, until the previously cited US Select Committee on Fraudulent Credentials researched what they termed 'lost diploma' services, or 'good as new or better replacement degrees'. The Committee determined that the individuals who sold these products advertised mainly in the print media with 50% of fake degrees being bachelor, 30% masters and 20% doctorates (Fraudulent Credentials 1985, p.12). During the ten years that the FBI 'Dipscam' investigations ran in the USA, only one major counterfeiter was found, a replacement degree operation in Grants Pass, Oregon. Anthony Daniels, Inspector-Deputy Assistant Director, Criminal Investigation Division of the FBI reported to the US Select Committee on Fraudulent Credentials at that time that the owner, Dennis Gunter, possessed information on 2,311 'clients' who over a 21 month period, purchased replica testamurs purporting to be from over 330 official bona fide institutions. When the operation was closed down, over \$US100,000 in revenue had been generated and 33,000 testamur parchments were confiscated by the FBI (Shutt 1986; Tufts 1987, p.228; Stewart and Spille 1988, p.37 & 65; Ezell and Bear 2005, p.271).

At a later 1986 meeting of academic registrars in the United States, the manager of transcript processing for the American Medical Colleges described the centralised verification service it provided for over 80% of all medical schools in the US. He argued that forged or altered

academic transcripts were extremely difficult to uncover, and were a major concern for his operation (Stewart and Spille 1988). Similar concerns were expressed at a variety of levels, with some conference papers seeking to raise awareness of the problem (Ariano 2004), yet few tangible solutions were offered. With the advent of the Internet, the obtaining of a falsified qualification has become faster, easier and potentially more effective (Potter 2003b). The next section profiles the operators of diploma mills and the benefits which this line of business reaps from the Internet.

4.3.2 Methods of creating and distributing counterfeit testamurs

One should also consider the value of appearance, since some diploma mill parchments can look very much like the real thing (Stewart and Spille 1988, p.43).

The process of forging or counterfeiting official academic qualifications involves the creation of a document. Depending on the jurisdiction and how it is used, it is unclear whether this act is designed to defraud or deceive others. Most providers in the replica testamur area, in order to avoid prosecution, claim they are creating 'novelty' products, for home and/ or entertainment use. When an individual goes beyond this 'novelty activity' and uses the document to obtain occupational or academic financial benefit, then this is seen as 'uttering' a forged document and using it to obtain advantage by deception (Nettler 1982, p.65).

The quality of reproduction of academic documents varies, based on price, and with no guarantee that one will actually even receive something in return for the money paid. The onset of advanced technology with laser printing, programs such as Adobe Photoshop, and access to reproduction tools have made falsification a very accessible and simple process (Kearney 1994; Cook 2005b; Smith 2005; Leeuw 2007). In addition to the falsification

aspects, there are more elaborate and daring methods used in order to secure a seemingly authentic qualification, such as:

- Bribing an employee in the Registrar's office of the target university;
- Electronic break-in into the Registrar's computer based records;
- Physical burglary into the office/ location where documentation is kept (Noah and Eckstein 2001, p.74).

Employing hackers to break into university databases and have names added to graduating lists is a growing trend according to Michael Distefano, Vice President of Global Marketing for Korn/Ferry International, a global executive search firm (Allen 2004). The stealing of university transcript paper and seals is also a regular occurrence (Askins 1996, p.2), confirmed by the author, who has found a variety of websites selling these items (see Appendix 13, Volume 2, page 414 for examples of seals, presses and security paper).

A review of the current trends relating to the falsification of academic qualifications, indicates that the following are deemed to be the main areas of concern (Adán 2004; Brown 2005a):

- 1. Forged Qualifications Also known as counterfeit or falsified documents, these are created to represent an official or fictitious institution, and/or program of study. These documents are either purchased from the Internet or another black market source, or created by the holder themselves. The quality of the documents varies from perfect replicas through to very poor reproductions.
- 2. Altered Documents These are official, legitimate documents that may have been altered through omissions, additions, or changes. These alterations can include, but are not limited to, changes in the date of birth, dates of attendance, initial enrolment and graduation dates, grades, course content, etc.
- 3. Manufactured In-house These are documents produced by corrupt employees located within the official educational institution. Cases can include both altered and fabricated documents in the national language or the language of the receiving country and designed "specifically for foreign consumption." In many cases, grades are inflated; contact hours/ credits inflated and professional titles or degrees awarded for programs that represent only a partial completion or an intermediate qualification.
- 4. Interpretative Translations These are inaccurate translations of documents which have been interpreted to be systematically misleading. Samples include the literal translation of the Latin American high school diploma of bachiller into a higher education bachelor's degree, the conversion of grades into the US grade scale, A-F, and the translation of course titles to comparable subjects in the receiving country, to enhance the possibility of credit transfer.
- 5. Official copies of forged qualifications These are examples of forged qualifications which have been photocopied and then authenticated from an official source. Even

documents that have been notarized by a Justice of the Peace/ Notary Public have the potential to be forged.

Hamshere (2005) suggested that high quality, fraudulent qualifications were available from a variety of websites throughout the world. Although the Internet is undisputedly now the main medium of communication for these operators, the author has located a practical guidebook to academic qualification falsification entitled 'Fake ID by Mail and Modem', which suggested that a mail order market was still in existence. In this text, Sands (2000) reviewed the laws of the United States and their application to fraudulent identification documents, including the sale and use of replica testamurs. He argued that in order to circumvent the laws governing fraudulent qualifications, replica degree providers should supply their documents in kit form (Sands 2000, p.6). The purchaser then received the kit and instructions on how to fill in the blank diploma. The name of the chosen university was inserted by the purchaser, including provision for transcripts of results. The kits were not illegal, but the actual manufacturing of a counterfeit document from the kit was. Another approach was for providers to advertise the products as novelties, with the 'For novelty purposes only' sticker, or perforated edge/ cut line easily removed (Sands 2000, p.7). In his review of the counterfeit industry, Sands (2000) cited the previously mentioned US 1980 Dipscam investigations, which used mail fraud laws as the main prosecuting arm of its investigations. As a result of these investigations, he recommended that purchasers of fake documents should use a mail-receiving (PO Box) service, never their real names when ordering a document and should always pay by money order.

The falsification problem touches all corners of the globe. Ariano (2004) was concerned at the prevalence of websites selling falsified Canadian qualifications, while counterfeit Russian academic credentials have been identified by the Russian ENIC-NARIC for sale on a range of websites. Diplomas, certificates, transcripts and other educational credentials which were

printed on official "Goznak" templates and included all required security features were exact reproductions of documents issued by official Russian institutions. These websites sold the newer and older type versions of Russian educational credentials and also the Soviet type of document. The ENIC-NARIC detected over forty seven internet sites selling Russian qualifications, which are listed in Appendix 14, Volume 2, page 419. With Russia being seen as an emerging market for Australian overseas student recruitment, these findings should serve as distinct concern to the Australian higher education sector.

Perhaps one of the most well-known replica testamur providers who operated on the Internet was Peter Leon Quinn (aka 'The Magician'). Providing the service for over 20 years, Quinn's websites have listed all official Australian universities and provided good copies of original testamurs (Pinnock 2004). These forgeries contained realistic signatures, watermarks and seals and were reported to be delivered within a few days. Counterfeit certificates were found to cost the equivalent of A\$555, while false degrees and transcripts cost A\$870. Orders were placed by email and payments made by cheque, electronic funds transfer, or postal order (Smith 2005). Quinn's operations were first profiled in 1997, when degrees from universities around the world were reported to be available for £70 (Baty 1997).

It was not until 1999 that the UK High Court issued Quinn with a temporary injunction and a suspended sentence to halt his operations (Legal action against fake degrees 1999; Baty 1999). Quinn ignored this sentence and continued trading, resulting in a 12 months sentence, suspended for two years in 2004 (Baty 2004; UniversitiesUK 2004). The sentencing of Quinn was followed by a UK Joint Council for Qualification's warning on the problem of falsified qualification documents (JCQ 2004) urging all stakeholders to be vigilant. Despite these prosecutions, Quinn continued to operate and reopened his websites at http://www.peterleonquinn.com, http://www.fakecertificates.com,

http://www.fakedegree.co.uk & http://www.degree.freeserve.co.uk/index.html (formerly also operating http://www.degreee3.741.com & http://www.myspace.co.uk/degree/index1.htm).

His replication service was again on offer in 2005, along with packages of homemade products. It was not until June 2006 that the UK Joint Council for Qualifications finally won a civil suit to stop Quinn producing exam certificates, and was awarded £30,000 in costs (Bar on fake exam certificate man 2006; Exam forger ordered to stop selling fake grades 2006; Smith 2006).

While it is evident that some legal action has been taken on a variety of fronts, the origin of this action is not always clear. Once sites such as http://www.counterfeitlibrary.com,

http://www.counterfeitlibrary.com,

http://www.counterfeitlibrary.com,

http://www.counterfeitlibrary.com,

http://www.counterfeitlibrary.com,

http://www.coun

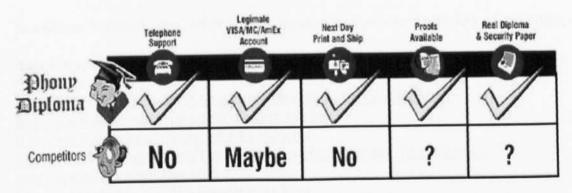


Figure 12 - Promotional item for Phonydiploma.com.

Other providers offer a verification service to increase the attractiveness of their products, facilitated by phone numbers and email addresses, similar to those of official universities.

One particular provider, the Degree Masters http://www.thedegreemasters.co.nr offers the following advice:

- Q) Do you offer verification for the diplomas and transcripts?
- A) Yes. Your degree will be available for verification 24 hours a day 7 days a week by phone fax and e-mail. Our phone operators are standing by to verify your degree, Our registrar office is located in FL. We verify the university of your choice, your degree and gpa via our registrar information systems.

Another recent addition has been the creation of review sites which include bulletin boards and blogs, in order to try and regain credibility by discussing the merits of some providers and assuring consumers of the quality of their products. The following websites, for example, have been careful in their wording, so not to be seen as promoting the sale of fraudulent qualifications, but at the same time, they have criticised their competition in an attempt to maximise their market share:

http://www.diplomareview.com

http://www.diploma-review.com

http://www.fakediploma-review.com

http://www.fakenoveltydiplomareview.com

http://www.fakediploma-review.org

http://fake-id-reviews.com/diplomaadv.html

http://www.underground-review.com/F DIPLOMA.html

http://www.Fakediplomablog.com

http://www.Fakediplomasearch.com

In addition to review sites, other generic promotional sites host a variety of providers, using their listings within search engines to generate 'hits'; these include:

http://www.webguest.com/Computers/Hacking/Fake Identification

http://www.fake-id-reviews.com/diplomaadv.html

http://www.gimpsy.com/dir/Get/fake/diploma

http://directory.google.com/Top/Computers/Hacking/Fake Identification

http://www.fake-diplomas.com

http://www.fastids.com/buyfakediploma.html

Ebay http://www.ebay.com is also a popular location for the selling and purchasing of replica testamurs. Although these activities contravene the terms of service of the site, the ease with which advertisements can be created and removed, provides an ideal medium for the sale of fake degrees. Enquiries at the time of writing this section, located a provider (example located in Appendix 15, Volume 2, page 420) who offered degrees from the University of Liverpool, with responses from the vendor suggesting that London University and Southend University documents were also available.

Based upon the author's research over the past three years, over 46 main websites have been operating, to sell counterfeit qualifications, although an equivalent number have been closed for unknown reasons (see list of inoperable URLs in Appendix 16, Volume 2, page 422). The only other known listing of fraudulent testamur replication websites was provided by Ezell and Bear (2005, p.274-280). The author documented all their listed sites during the research phase. An empirical analysis of this provision is provided as an exploratory research question in Chapter 6 with results provided in Chapter 7.

4.4.3 Diploma mills: providers of counterfeit Australian academic qualifications

Degree fraud is a real, but misunderstood, risk facing organizations today (Aumann 2006, p.86)

False representations as to academic qualifications, whether or no such qualifications are needed for the position, indicate a lack of integrity on the part of the applicant that should make that person unsuitable for public sector employment. Irene Moss, Commissioner of the ICAC on her findings pertaining to Glen Oakley (ICAC 2003b, p.8)

As with other official and non-official providers of higher education credentials, diploma mills have significantly improved their methods of global communication via the Internet, enlarging the trade in forged credentials to a global market (Noah and Eckstein 2001). This

rapid increase in offerings, according to Koenig & Devlin (2004) could be explained by a variety of factors, including:

- 1. The high value of academic credentials in the workplace;
- 2. The low risk of being "caught" due to low level of scrutiny;
- 3. The low risk of prosecution if caught, because of legal loopholes;
- 4. The ease of obtaining credentials on the Internet;
- 5. The good sales work done by degree selling staff;
- 6. The lower cost involved than for official education (in terms of money, time, effort, stress).

Based on these concerns, it is argued that academic qualification forgery must be tackled, because of the risk of the devaluation they pose to the owners and evaluators of authentic certificates for official universities. It has been argued that these risks operate at three levels.

- The credibility and reputation of the higher education provider against which the claim of legitimacy is being made is tarnished.
- Legitimate graduates are displaced from the workplace, because of competition from those who claim fake credentials.
- The fraud steals from the whole community by committing resources on the basis of credentials that have not been acquired by legitimate means (Askins 1996, p.3).

The providers of counterfeit qualifications, however, cannot be regarded as the only cause of the problem. Sauter's (1998, p.26) empirical research determined that, for students who falsified their academic records, the incentives and rewards were high, and clearly seen as outweighing the low risk of detection and punishment. This behaviour is difficult to quantify, although the operations of diploma mills are easier to monitor. These organisations are generally individuals or organised groups of people who specialise in printing counterfeits of official university degree testamurs, together with transcripts and letters of attestation for a fee (Ezell and Bear 2005). Described by Ezell & Bear (2005) as decorative announcements to be framed and hung on the wall, such documents are perhaps the most difficult to authenticate as their quality can, in many cases, match that of official academic documents.

Due to the nature of the Internet and the fraudulent practices it harbors, a large number of sites appear and are removed on a regular basis. In order to avoid prosecution, some sites are deliberate in their disclaimers and offerings. One of the newer providers, Dipomaxpress.com at their page http://www.diplomaxpress.com/wont_do.html claims that it will remove the name of any university that requests to be taken off the list. In addition, this site will not sell degrees of any higher education institution domiciled in the State of Arizona, a proviso suggesting that the business is located in that jurisdiction. In addition, the company will not sell degrees to residents of certain other states where legislation forbids the use of falsified qualifications (see Chapter 5 for further analysis), and will not sell degrees to residents of certain countries due to 'homeland security risks'.

It is interesting to note that some non-official providers are actively capitalising on the rising exposure of testamur replication Internet sites, and use this to leverage their alternative products. Seen as pseudo-credential suppliers (Hernes 2005, p.7), these organisations provide a lucrative trade for both the buyers and sellers. One particular organisation, Rochville University, uses the following URL's to promote their products on the Internet:

http://www.fake-diploma.net

http://www.counterfeit-diploma.com

http://www.buy-a-diploma.com

http://www.degree-mill.net

http://www.replica-degree.com

http://www.degrees-for-sale.com

While the domain names could suggest to laypeople that they could purchase a replica testamur from an official institution, these sites do not actually sell these particular items. Instead, they warn consumers as to the dangers of replica, fake degrees and urge them, instead, to purchase a 'verifiable' and 'legal' degree. Similar sites are found when one performs an Internet search for "Australian fake degree parchment". A warning site at http://www.fake-diploma.net/australian-university-fake-diploma-degree.htm urges consumers

not to fall prey to this temptation, and instead purchase an Ashwood degree, as outlined in Appendix 17, Volume 2, page 423.

Australia has not been immune to the problem of replica testamur provision and a number of falsified testamur cases have been profiled in the media over recent years. In 1993, the University of Queensland discovered a mail order scam selling falsified degrees for \$14,000 through a Chinese Language newspaper in Sydney (Whittaker and Horan 1996). However, it was not until 1999 that the falsification of Australian academic testamurs was raised as a serious concern by the AV-CC, when the author discovered a company called Blacks Professionals, based in Queensland, offering 'extremely authentic' counterfeit degrees from over eighty three universities worldwide, including all official universities in Australia (Bernoth 1999; Donaghy 1999). The AV-CC's inquiries into this operation caused it subsequently to disappear from the Internet and set up a post office box in Spain (Brown 2001b, pp. 91-92).

In 2001 the author became aware of a website called Replica Degree

http://www.replicadegree.com/ (URL broken) owned by an individual allegedly called Dave Phillip. Using the email address davephillip@gdaymate.com.au, this individual sold extremely authentic copies of Monash University and University of Melbourne degree qualifications (see Appendix 18, Volume 2, page 424 for copies of testamurs). Promotions on the website suggested that offerings were to include Curtin University, RMIT University and the University of Sydney. However, the site eventually closed. The authenticity of the products offered was confirmed in a review posted by an individual called 'Gollumfun', viewed as a trusted and respected member of the forum 'Counterfeit Library' http://www.counterfeitlibrary.com/ (URL broken). At the time he provided this site with

unbiased and constructive reviews on the quality of counterfeit products; a screenshot of one of his reviews is provided in Appendix 19, Volume 2, page 427.

In 2002 concern was raised about the operations of a printer in New South Wales who offered a range of academic documents. This issue was brought to the attention of the Senate Estimates Committee, with Senator Kim Carr stating:

Do you recall that I asked you a question concerning a printer in Sydney who was charged with offences under the New South Wales Crimes Act for the printing of transcripts, ESL test reports and other documents necessary for fraudulent applications for Australian visas. The documents included TOEFL tests, TAFE certificates, RMIT certificates, Commonwealth Bank documents and the like—all obviously of great value to persons seeking to fraudulently gain access to Australian international colleges. What has happened to that? Nineteen charges were laid under sections 302A and 527C of the New South Wales Crimes Act back in May. EWRE 204 SENATE—Legislation Friday, 22 November 2002

That same year saw Australian universities becoming increasingly alarmed at the problem of 'verifiable' degrees being sold on the Internet, purporting to be from a range of institutions, including Monash University, University of Queensland, Curtin University of Technology, University of Newcastle and University of Western Sydney (Online buy-a-degree scam targets Asians 2002; Internet scam offers fake degrees from Melbourne universities 2002; Heinrichs 2002a; b; Lawnham 2002i; Maslen 2002; Page 2002). Universities were quick to respond to the allegations, and released statements on their websites, assuring the public that their systems were secure (University secure from external security breaches 2002; Monash student records systems secure 2002; Page 2002).

This particular case of fraud involved the use of the email addresses admissions@australia.edu and enroll@australia.edu, both of which, at the time, were freely available to use. The owner of the Australia.edu domain, Kevin Ryall, came to know of the scam when he received an email from a person based in Indonesia. The inquiry asked

whether the domain owner (providing a copy of a link to the online advertisement and an email from the fraudster) was aware of the advertisement for verifiable degrees. Since the act of selling fraudulent items contravened the Terms of Service of his domain, Ryall was able to take control of all of the accounts and view their contents. He found there had been over 1,000 enquiries for the fake qualifications, with some potential customers offering up to \$12,000 to purchase the academic documentation (pers comm. Kevin Ryall).

Against this background of risk pertaining to the provision of replica testamurs, the author was concerned to know what level of supply currently existed in relation to falsified academic qualifications from Australian universities. A preliminary small scale investigation of this question is reported in Chapter 7.

4.4.4 'Do it yourself': Glenn Oakley 'catch me if you can' style & claim a degree without proof

Wherever credentials are valued, there is fraud (Noah and Eckstein 2001, p.6).

The very stress on individualism, on competition, on achieving material success which so marks our society also generates intense pressures to cut corners (Bok 1978, p.244).

The funny thing is that many of them are good lecturers in their own right and go on to publish in journals and do good research. Neville Lamb, Academic Registrar, University of Queensland when asked about academic fraud in Australian universities (Whittaker and Horan 1996, p.13).

The above analysis of counterfeit testamur provision suggests that such activity, due to multijurisdictional issues, might not be deemed fraudulent until an individual actually attempts to use these documents as genuine qualifications. Although the temptation to lie and present falsified educational qualifications for employment purposes has been seen as a form of deviant behaviour (as per the statistics presented in Chapter 1), Ezell and Bear (2005, p.257-270) are probably the only researchers who profile, to some level, the problem. Their analysis has been primarily related to the use of non-official qualifications. This section addresses behaviour relating to individuals creating their own falsified academic credentials, with the intention to deceive, and to claim academic credentials which they have not been awarded. While the psychological underpinnings can be seen as identical, i.e. coming under the broad umbrella of lying, fraud and deception, the author suggests that these two approaches should fall under separate headings.

Desktop forgery using personal computers and colour printers represents one of the fastest-growing white collar crimes (Askins 1996), with applicants seeking coveted positions by presenting false information about themselves as truth, and inflating their resumes with inaccurate and misleading information (Kidwell 2004). Although the detection of forged academic qualifications is still in its infancy, new technology is currently under development (profiled further in Chapter 5).

Determining the pervasiveness of this purposeful deception is difficult as no empirical data exists. Chapter 1 suggested that, on average, up to 35% of individuals falsely claimed an academic qualification in an employment situation, but these figures were difficult to substantiate. In addition to employment, the increased use of falsified credentials to gain admittance to programs offered by official higher education providers, as well as education agents falsifying documents to assist in this process, is also a distinct problem (Hallak and Poisson 2005, p.13). This activity is that of 'pretenders' (Keyes 2004, p.233), individuals claiming an unearned degree which is a 'garish tattoo, a burden carried around for the rest of one's life'. Bear (2003) has likened the situation for individuals as having a 'time bomb' in their resume. One day it will go off, with dire consequences.

In order to demonstrate some of these outcomes as applied to actual cases, the author provides a range of the most highly renowned and documented examples of falsified qualification users who are, according to Ford (1996, p.147), deemed to be 'impostors'. Appendix 20, Volume 2, page 428 provides a range of cases where individuals have been exposed as not possessing the academic qualification they claimed to hold. The examples span academic through to senior CEO positions, with significant consequences to the individual. These cases represent individuals at the far end of the continuum, from those who committed acts of fraud for screening needs to pathological liars, to individuals wanting to obtain grandiose roles in order to overcome narcissistic problems of low self-esteem.

Perhaps the most interesting aspect of reviewing the cases profiled in relation to the falsification of academic qualifications is the demonstrated abilities of many individuals that made such claims. Keyes (2004) found that some who falsified their academic credentials were often charismatic and quite competent in their roles, creating a halo effect of ability so that people did not check on their backgrounds. Garrett (2005, p.15) concurred; he found many examples of individuals who secured employment with falsified credentials. Prior to their discovery, they had performed their jobs satisfactorily, sometimes for many years. Although the risk that the falsification of academic qualifications places not only on the individual, but also on the employer, family, society and other stakeholders may not be financially quantifiable, such acts have forced societies to address the detection of falsification in a far more effective manner. This will be addressed in Chapter 5.

4.4 International sources of corruption: the heightened risk of academic fraud affecting Australia

Being fake gets you to the top and will get you there quicker. Being genuine will force you to admit that atrocity (Siderius 2005).

It has been suggested that there appears to be a positive correlation between a country's level of corruption in society generally and the level of academic qualification fraud that emanates from it. Students from developing countries are desperate to obtain degrees from universities in developing countries and are ready to buy their diploma online (Hallak and Poisson 2007, p.243). This possibility, coupled with minimal screening of academic qualifications presented by prospective students (ICAC 2002b; a, p.18), can be seen as constituting a high risk for universities and employers in Australia.

Andrejs Rauhvargers, Secretary General of the Latvian Conference of Rectors has argued that the more complicated the political situation in a given country, the higher the prevalence of general corruption and level of fraud affecting education (Mangan 2002). Research outlined in Chapter 1 has found that significant levels of corruption extend to higher education, and commentary suggests that this may be correlated to an index of corruption ("Corruption Plagues Academe Around the World" 2002). In order to measure this perceived level of risk, Transparency International (TI) has developed an annual index of countries based on the perceived level of fraud/ corruption generally encountered. Research by TI in 2006 covered 163 countries, with each ranked according to the index of perceived corruption calculated (with 0 being highly corrupt ranging to 10 being highly clean) (Transparency International 2006c). In its 2006 report, close to three quarters of the 163 nations surveyed scored less than 5 out of the possible clean score of 10, indicating serious levels of corruption in the majority of the countries surveyed (Transparency International 2006c).

Figure 13, below, provides a useful world view of the extent of corruption generally, based on the TI Index. As can be seen, whilst Australia is seen as a relatively low risk country in relation to corruption, its neighbouring countries, which are a significant source of international students and possible migrants, are quite high on the perceived corruption index.

An analysis of the TI index in relation to the main markets for overseas students in Australia produces some concerning results. The ten main source countries of student recruitment according to the Australian Education International April 2006 Data (AEI 2006a) are provided in Table 5, below, compared to the Corruption Perception Index (CPI). This table provides a possible level of risk of falsified documents being used by students who enter the country. Since the top five source markets contribute over 50% of all international enrolments in Australia, and 76% of all higher education enrolments are sourced from the top ten markets (AEI 2006b), the link to the CPI serves as a distinct warning for the official higher education sector in Australia to be aware of the risks of falsified academic documents.

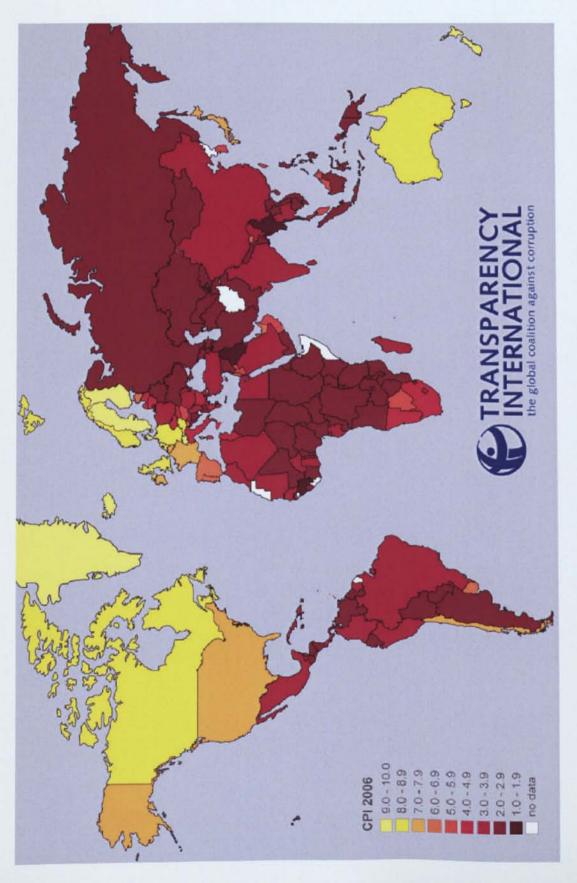


Figure 13 - Corruption Perception Index - World Map 2006 (Transparency International 2006a).

Ranking by source of students for Australia	Source country of students for Australia	Ranking of country on Index of Corruption/ 163	CPI/ 10	Confidence Range
1	China	70	3.3	3.0-3.6
2	India	70	3.3	3.1-3.6
3	South Korea	42	5.1	4.7-5.5
4	Malaysia	44	5.0	4.5-5.5
5	Hong Kong	15	8.3	7.7-8.8
6	Japan	17	7.6	7.0-8.1
7	Indonesia	130	2.4	2.2-2.6
8	Thailand	63	3.6	3.2-3.9
9	Singapore	5	9.4	9.2-9.5
10	United States of America	20	7.3	6.6-7.8

Table 5 - Top ten sources of overseas students for Australia in comparison to the Transparency

International Corruption Perception Index (CPI)

Source: AEI (2006b) & Transparency International (2006c)

The recruitment sector also should be concerned at the possible higher level of risk of falsified academic documentation being presented from individuals who have settled in Australia from an overseas country which has high levels of corruption.

Ranking by source of migrants for Australia	Source country of migrants for Australia	Ranking of country on Index of Corruption/ 163	CPI/ 10	Confidence Range
1	United Kingdom	11	8.6	8.2-8.9
2	China	70	3.3	3.0-3.6
3	India	70	3.3	3.1-3.6
4	South Africa	51	4.6	4.1-5.1
5	Sudan	156	2.0	1.8-2.2
6	Philippines	121	2.5	2.3-2.8
7	Malaysia	44	5.0	4.5-5.5
8	Singapore	5	9.4	9.2-9.5
9	Indonesia	130	2.4	2.2-2.6
10	Vietnam	111	2.6	2.4-2.9

Table 6 - Top ten countries of birth for migrant settlers from 1st Jan 2004 to 1st Jan 2006 compared to level of perceived corruption from the Transparency International Corruption Perception Index (CPI)

Source: DIMIA(2006) & Transparency International (2006c)

As outlined in Table 6, above, although the top ten sources of immigrants include the relatively clean UK and Singapore, the presence of China, India, Sudan, Indonesia and the Philippines at the other end of the scale indicate a heightened risk for Australian employers.

4.5 Identifying the risks posed by the main providers and sources of academic qualifications; a summary

It is important to identify the risks related to the non-official and fraudulent provision of higher education qualifications. In particular, it is necessary to recognise who are the victims of these operations, in the sense that they can be seen at high risk of suffering negative consequences of the activities of non-official and fraudulent degree providers. According to Koenig and Devlin (2004), there were four groups most likely to be affected negatively.

- 1. Official higher education institutions that offer authentic educational programs and experiences.
- 2. Official higher education institutions whose diplomas and transcripts are imitated and sold as authentic, or with the intention to deceive.
- 3. Employers who do not request verification of applicants' or employees' credentials
- 4. Holders of official higher education credentials who compete with purchasers of bogus degrees for employment and promotions.

The current situation in Australia is that if an academic indentured at a university falsified their academic qualifications, the university would be legally entitled to instigate a civil action against the staff member (Jones 1992, p.17). At the same time, if a student were unable to complete his/ her program of study due to this action, the student could sue the university for damages, as the university had a legal duty of care to verify the authenticity of the qualifications of its staff.

The following table endeavors to compare the main risk consequences posed by official, non-official and falsified qualification providers and sources to the individual holders of the qualification; to recruitment agencies; and to official higher education providers.

Qualification provider/ source	Entity/ individual subject to the risk	Perceived consequences of the risk activity
O.C. 11:1	C-1-4-/1-4-4-1	Leading the second of the seco
Official higher education provider	Graduate/ credential holder	Low risk of non-acceptance of qualification but no guarantee of transfer credit within the official higher education sector.
education provider	Recruitment	Low risk of non-acceptance of qualification but no guarantee of
	agencies	a candidate being competent for potential employment
	ageneres	positions.
	Official Higher	Low risk of non-acceptance of qualification but no guarantee
	Education providers	for transfer credit between official higher education institutions.
Non-official	Graduate/ credential	Risk of qualifications having limited/ no utility for further study
higher education	holder	(Bear 2000), although there have been exceptions (Douglas
provider		2003). Risk of obtaining a low quality qualification with limited
		validity for employment purposes (OECD 2004g, p.3).
		Risk of loss of investment due to lack of utility of qualification.
		Risk of being fined or jailed for using the qualification in an
		increasing number of jurisdictions.
	Recruitment	Individuals putting trust in others with claimed qualifications
	agencies	who have no authority in the area (Bear 2000).
		Risk of loss of future business from employing unqualified and
		incapable staff due to lack of adequate screening.
		Risk of adverse publicity for agency.
		Risk of unqualified staff harming others (Bear 2000; Koenig
		and Devlin 2004).
	Official Higher	Risk of losing potential students to non-official providers (Bear
	Education providers	2000; Koenig and Devlin 2004).
		Risk of admitting students unable to cope with the program.
		Holders of legitimate qualifications are forced to compete with
		those that hold non-official and falsified qualifications (Katz
		2004; Koenig and Devlin 2004)
Falsified higher	Graduate/ credential	Illegal for use in most jurisdictions and the high risk of being
education	holder	fined.
credential		Risk of being caught during a screening process. High risk of
provider		negative exposure in the media and possible loss of career,
•		business and personal relations.
	Recruitment	Employing unqualified and incapable staff due to lack of
	agencies	verification could lead to a loss of future business.
		Risk of employing unqualified staff who could harm others
		(Bear 2000; Koenig and Devlin 2004).
		Risk of negative press publicity from revelations of
		qualification fraud linked back to recruitment agency.
		General public where verification may not be performed (Katz 2004)
	Official Higher	Risk of losing students due to use of fraudulent qualifications
	Official Higher Education providers	(Bear 2000; Koenig and Devlin 2004).
	Education providers	Negative press publicity could adversely affect the institution
		where a falsified qualification had been used.
		Risk of admitting students unable to cope with program.
		Risk of the falsified qualification devaluing official
		qualifications in the marketplace (Spille and Stewart 1985; Katz
		2004; Koenig and Devlin 2004)
	1	
		Devaluing official higher education, misrepresenting
		Devaluing official higher education, misrepresenting qualification in the marketplace, global devaluation of higher

Table 7 - Identification of risk: a comparison of official, non-official and falsified academic qualification providers.

As the table highlights, for all three entities, the potential risks posed by non-official and falsified providers are more numerous than those posed by official providers.

4.6 Summary and conclusions

This chapter has sought to explain in detail the different types of non-official and fraudulent providers and sources of academic qualifications and the ways they operate. This was necessary in order to understand the risks to which individuals and organization in a given society, and around the globe, are exposed to because of the operation of these two types of providers. Table 7 demonstrated clearly the greater number of risks associated with non-official and fraudulent qualification providers, compared to the risks associated with degrees from the official higher education sector. Whether or not these risks ever eventuate in practical reality depends to a large extent on whether recruitment agencies and the official higher education sector carry out effective checks on the acceptability and authenticity of a degree qualification presented to them. The next chapter reviews the methods available to recruitment agencies and official higher education providers for the purpose of carrying out these verifications.

Chapter 5 – Risk controls: Methods of verifying the acceptability and authenticity of academic qualifications

Degrees can never be treated as a commodity while no meaningful international or even national screening mechanism is available (Contreras 2006b).

5.1 Preamble

The acceptability and authenticity of higher education qualifications is determined through information available to, and informed opinion developed by, the evaluator of the qualification. The past two chapters have explained how higher education qualifications can either be earned or fraudulently obtained from a variety of sources, ranging from official, to non-official, to falsified providers. Due to the complex nature of these activities, the risks of non-official and falsified qualifications appear to be high.

As previously discussed, a degree qualification is an imperfect proxy device intended to assert to stakeholders outside the educational process that an individual holds human capital which is of value to them. Despite this, the operations of non-official and fraudulent providers have the potential to further erode the credibility of this proxy measure. The process of validating qualifications is therefore justified and must be thorough in order to reassure all interested stakeholders (Warren 1978, p.90).

Given the recent burgeoning increase in non-official and fraudulent higher education provision, various countries have developed resources, systems and procedures in order to assist stakeholders recognise the merits of various credentials. The aim of this development has been to minimise risk and maximise the transparency of the academic qualification evaluation process. This chapter profiles a range of both historical and current global methods developed in relation to verifying a degree's acceptability and authenticity. It

provides a brief critique of the perceived merits and potential disadvantages of each approach. It should be noted that due to the sensitivity surrounding current research developments in the area of qualification authentication, the author has been unable to obtain information from certain government sources.



"Yes, they're fake. I'm not really a shrink. But that's not why we're here, is it? The real issue is your paranoia."

5.2 Control processes to minimize risks in higher education qualifications

This section reviews control processes which have been established to minimise the risks associated with non-official and fraudulent higher education qualifications. A risk management approach attempts to reduce risk to a level deemed tolerable to the stakeholder (Morgan 1990), and to achieve this, uses control interventions. These interventions are shaped by human, social and technological developments (Renn 1998, p.61). This control approach reflects contemporary public policy which assumes that more stringent regulation means better quality control for consumers (Woody 1997, p.343).

Three approaches to control can be taken: punitive, pedagogical or a combination of both (Eckstein 2003. p.79). The level of risk control resources allocated to each of these approaches is a reflection of the individualistic vs. hierachistic position of society and the extent to which 'reflexivity', or response to perceived risks that arouse fear or anxiety, is being employed (Lupton 1999, p.15). The author profiles here the most notable and currently accessible control approaches being used in different parts of the world to minimize the risks associated with non-official and fraudulent qualifications.

Allen Ezell, a retired FBI Agent who worked on the US FBI 1980s Dipscam investigations has contended that there are two main control approaches to address the concerns pertaining to the far right ends of the acceptability and authenticity continuums (outlined previously). He has argued that either the supplier or the user could be punished, or a combination of both could be employed. His research and experience in the area suggested that targeting the users of falsified qualifications was similar to waging war on drug users and was not the most appropriate solution. Instead '...we have to devalue the product being sold and go after the

operators' (Potter 2003b). Given the difficulty of tracing these operators this appears to be a difficult approach.

Noah and Eckstein (2001, p.136) suggested a combined approach, maintaining that there were four control measures that a society could use to counteract the problem of misuse of academic qualifications:

- Reduce incentives for fraud;
- Reduce opportunities for fraud by maximizing the probability of detection;
- Define and publicise the limits of acceptable conduct and clarify, advertise and enforce sanctions;
- Build an academic community that regards cheating, plagiarism and the like as simply unthinkable.

The following sections address the legislative approach and its associated accreditation function as a first line defence in the control process.

5.2.1 Legislation as a control measure

Legislation is a control approach which has been tried with mixed success in a variety of jurisdictions. Whilst Lederman (2006b) recently maintained that in the USA '...the laws and other tools available to regulators, higher education officials, students and others to stop degree mill operators are few and flimsy', the case of Australia has demonstrated that legislation can be a distinct deterrent, where action can be taken against a range of providers (Brown 2004, p.15; Nelson 2004).

The concerns surrounding the use of non-official qualifications in the workplace have led jurisdictions in the USA to legislate on the issue and prosecute users of these qualifications.

Appendix 21, Volume 2, page 438 provides an overview of 11 US states which have recently legislated on the use of non-official qualifications. In the diagram reproduced there,

Contreras (2006a) identified the variations in legislation between the states, indicating where legislation is minimal and lacking appropriate enforcement mechanisms. Oregon is perhaps the strictest state, with a range of regulations, from requiring an individual to place a clearly legible disclaimer on promotional material for some non-official degrees, to totally disallowing the use of others. Mississippi is one of several states who have recently enacted laws which list the names of institutions which are not permitted to confer degrees (Byrd 2006). The law in this state now requires individuals to disclose the non-official nature of their qualifications to employers and other stakeholders, who could take an interest in their academic claims. Maryland has a similar proposal under development and will require all institutions purporting to operate in that state to become accredited by 2015 (Walton 2006); Kentucky is taking a similar approach, and is looking to fine users of unaccredited degrees (Stamper 2007). At the time of writing this study, the Hawaiian legislature was in the process of reviewing Senate Bill 909, with amendments to require all unaccredited institutions to become accredited, commensurate with standards used by the Western Association of Schools and Colleges (a regional accrediting agency).

In the case of Florida, Law - F.S. 817.567 states that no person in the state may claim to possess an academic degree unless specified accreditation requirements are met. Violation of this law is a misdemeanor of the first degree, subject to prescribed penalties which are stated on a variety of employment application forms (University of Central Florida 2003). More recently a bill was passed in California that disallowed the use of non-official degrees for employment in the public service. In speaking to the Bill, one member of the assembly, Maze, asserted:

The public deserves the most qualified and skilled employees that can be hired for the job. We should reject those employees who attempt to disguise their lack of qualifications by using a fake degree. Such an allowance is unfair and potentially compromises public service and safety. Given the rampant internet-diploma mill industry, without state law to prevent acceptance of these degrees, public agencies can

hire unqualified people to serve the public (Assemblyman Maze Highlights Legislative Success 2006).

It is evident that states, like Alabama, which have historically been associated with lax licensing and minimal oversight, are moving to emulate the more stringent states (Redden 2007), yet it is unclear when new laws will take effect.

One of the most dramatic moves to regulate degree acceptability, and develop operating definitions for dealing with the problem, has been the introduction of a new bill at federal level, designed to outlaw the use of alleged 'degree mill' qualifications to obtain jobs in tax payer funded positions (Nassirian 2006). US House Resolution 6008, introduced on Friday 28th July, 2006, aimed 'To reduce and prevent the sale and use of fraudulent degrees in order to protect the integrity of valid higher education degrees that were used for Federal purposes'. In particular, the Bill sought to provide:

- 1. Definitions of a "degree granting institution," "diploma mill" and "institution of higher education."
- 2. A Task Force to determine the characteristics of degree-granting institutions, the feasibility of defining a "fraudulent degree-granting institution," laws and regulations that might be used to address "fraudulent degree-granting institutions" and other related subjects. The Task Force will:
 - develop a plan to protect the federal government against the use of diploma mill credentials to gain federal employment.
 - present legislation for Congress to consider.
- 3. A Sense of Congress inviting states to follow the federal lead in this area.
- 4. An unfair and deceptive practices provision enforced by the Federal Trade Commission that recognizes accreditation as a key to diploma integrity.
- 5. A study to inform the Task Force in its work analyzing:
 - the numbers and types of degree-granting institutions that are not accredited but are legitimate versus those that are fraudulent.
 - why legitimate institutions do not obtain accreditation.
 - steps that can be taken to repair vulnerabilities in the student loan program (CHEA 2006).

The bill, provisionally titled the 'Diploma Integrity Protection Act 2007' was submitted to the US House of Representatives in January of 2007.

Legal challenges have been mounted to this form of regulation, particularly the Oregon legislation, by both individuals (Kettler 2006) and certain institutions (Saltman 2004). Some, taking an individualist perspective, see the requirements of having to declare the nature of unaccredited degrees as a restraint on trade and an unduly burdensome administrative process. However, the jurisdictions concerned clearly regard this as an important consumer protection process and assert that government accreditation provides the reassurance that the public deserves.

By legislating in this way, the law in the USA has removed the previously cited 'grey areas' of recognition, but at the same time, increased the level of risk for holders of fraudulent qualifications and some with genuine but unofficial degrees. In order to avoid litigation in this area, some credential providers such as Almeda University

https://almedauniversity.org/application/policy-procedure.html have posted warnings to potential customers such as the following:

The applicant understands that Almeda University degrees are not legal for academic or business use in the following states: FL, IL, OR, NJ, ND, WA, and ID. Residents of these states should consider the Almeda degree as a novelty item only.

In the author's opinion, there is now going to be an increasing trend of such disclaimers in order to avoid legal ramifications in the future.

In relation to European non-official higher education, Kokosalakis (1999, pp.36-37) used the term, 'degree of legalism' to describe the structure of regulation existing in a host country in relation to non-official providers. He found that in countries such as Austria, Netherlands and Norway, with high levels of legalism, the presence of non-official higher education was low. Other countries, such as Spain, Greece, Italy, UK and Ireland had open legal frameworks,

which allowed for a significant presence of non-official providers. The magnitude of the problem of non-official higher education was therefore directly correlated to the legal and regulative mechanisms employed in the host country (Kokosalakis 1999, p.39). Authorities, involved in transnational higher education delivery have argued that some level of regulation is required:

There is little option for host country governments but to regulate and recognize transnational provision within their borders. If the demand for them exists, there is no easy way to make them go away. If they are not regulated and recognized, pressure will mount on the government from a number of directions—sooner or later unfortunate students who are victims of illegitimate or failed transnational programs may ask why they were not warned of the risks, and the appearance of diploma mills will prompt calls by legitimate transnational providers and their local partners for screening measures to reassure the public (McBurnie and Ziguras 2006, p.132).

Based on the global increase in transnational, non-official higher education provision, arguments for significant allocation of resources to consumer protection abound (Kokosalakis 1999, p.42; Adam 2001a, p.45) and many countries appear to be trying to address this. Borderless higher eduction has now been recognised as an entrepreneurial business, requiring predictability and robustness in infrastructure and regulation, in order to sustain standards and protect consumers (Davies 2001). Contreras (2006b) has argued that more jurisdictions should regulate or oversee higher education through measures such as accreditation; this approach will now be addressed in some detail.

5.2.2 Accreditation as a control measure

Accreditation is generally seen as the most acceptable control system measure in establishing a framework for the acceptability of higher education qualifications. Evolving from legislation, the acceptability of a qualification is seen to be linked to accreditation (Adam 2001b; Farrington 2001), which is used as the most important benchmark in the assessment of a degree. In the summary of his report on the problem of American degree mills over four

decades ago, Reid (1959, p.77) recommended a legislative approach to accreditation. He asserted that both state and federal legislation should be tightened, essentially leading to mandated accreditation. Despite the perceived advantages of accreditation, the rapid expansion of education across the globe has resulted in no international, all encompassing and systematic control of academic qualifications (Eckstein 2003, p.72).

The arguments for and against accreditation can be illustrated by the debate within the rapidly growing private sector of Australian higher education. Whilst some have expressed strong anti-accreditation views, Stone (1990, p.156), in her assessment of private higher education in Australia commented:

The system of registration and monitoring is resource expensive and interventionist but it is considered worthwhile by the government to protect the academic reputation of Australian institutions. If there were institutional failures, the costs would fall not only on the developers, staff, students and graduates, but the general reputation of all Australian education institutions would be damaged. Some regulation is needed to maintain the positive image of Australian education services overseas. The assumption is that the buyers of education are entitled to reassurance that vendors are qualified and competent to transmit knowledge at appropriate international standards. The vendors receive a degree of protection from competitors in return for the maintenance of standards. Regulation of this nature is supportive of those private institutions that become established and meet the regulatory criteria.

This positive view is countered by criticism, such as that from Davis (2006), who maintained that the current regulatory framework in Australia was over protective and stifled diversity, to the detriment of both the private and public higher education providers. Prøitz, Stensaker and Harvey (2004) agreed, arguing that whilst the development of accreditation systems was a possible response to an increasingly internationalized and deregulated higher education sector, the creation of such systems had unintended consequences, not least with respect to limiting the diversity of higher education. Whilst accreditation is seen as providing the 'ultimate' level of reassurance to interested stakeholders, opinions are divided as to its effectiveness as a risk minimisation tool.

In the case of private business schools, Bell and Taylor (2005) have argued that accreditation agencies such as EQUIS and AMBA were based primarily on the constructs and ideology of elitism. Furthermore, due to the difficulties in measuring quality within institutions, it could be argued that the primary purpose of quality frameworks was merely to provide a 'symbol', or give status to an educational product, whereby its activities were legitimated (Bell and Taylor 2005, p.241 & 243). Based on this premise, it could be argued that the aim of participating in voluntary accreditation processes was to create a more appealing market presence rather than stifle new institutions.

At the global level in relation to recognition of overseas qualifications, perhaps the most scathing criticism levelled at the failure of governments to provide effective accreditation has been from Contreras (2001; 2006b), Director of the Office of Degree Authorisation, Oregon USA. He has been highly critical of countries which, in his view, have failed to provide adequate oversight of higher education. Commenting on jurisdictions such as Liberia, St Kitts and Nevis and Singapore, he argued that corruption, a lack of resources and a 'less-than-vigilant' approach to accreditation of higher education makes some countries targets for unscrupulous operators. In his view:

It is irrational, dangerous and bad public policy to assume that all degrees issued in foreign countries are valid merely because some official in that country says they are (Contreras 2006b).

A recent report issued by UNESCO confirmed Contreras' assertions, contending that due to high levels of fraud in a variety of countries, government accreditation was no longer a guarantee of academic quality (Hallak and Poisson 2007, p.233). It is evident that there is a clear and urgent need for an effective process for checking the acceptability and authenticity of the academic qualifications presented by individuals is required; the following section will review existing approaches.

5.3 Procedures for verifying academic degrees

There have been several attempts to detail the key steps or stages in the process of verifying the acceptability and authenticity of a degree qualification. Contreras (2006b) claimed that the following six questions needed to be asked when evaluating the acceptability and authenticity of an academic qualification.

- 1) Do evaluative and approval standards exist in the nation? When determining this step, it is important to find out if the country conferring the award has similar laws and standards approving degree-granting entities. Are these standards acceptable to the evaluator as a standard equivalent to the evaluator's standards?
- 2) Can the institution prove that it met these standards? Documentation attesting to this should be sought through the approving government agency.
- 3) Are the standards sufficient? Professional judgment is made here as to whether these standards are commensurate with the standards acceptable to the document evaluator.
- 4) Is the evaluative and approval documentation authentic? Due to corruption and other fraudulent activities that may occur, the documentation should be attested for authenticity via other methods.
- 5) Are the degrees valid for use inside the country issuing the approval? This is seen as an important assessment by Contreras, and indicates the true legitimacy of an institution, particularly for the professions. Do other higher education institutions in the country accept transfer credits from this institution? Do employers accept the degrees; however this should be treated with caution as many governments state that the recognition of qualifications is a matter for employers.
- 6) Are the degrees usable at other schools in the country of issue? As 5) above.

In relation to the authenticity of claimed academic qualifications, there does not appear to be any form of global, international best practice approach. Stakeholders are left to their own devices to undertake this task and are not generally required to do this, unless contractually bound as part of a risk management process. Smith (2005) argued that testamur and transcript checks were of vital importance and, as outlined below in Figure 14, maintained that testamur authenticity checks should be undertaken for both employment and enrolment in higher

education institutions. He argued that these verifications should form an important component of the entire screen of the identity of an individual.

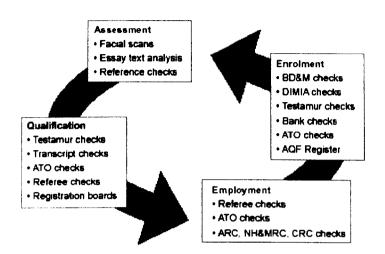


Figure 14 - Verification related procedures to reduce identity-related fraud in higher education.

Source: Smith (2005, p.5)

Some of the best verification practices emanate from the USA, as a result of the work of professional credential evaluators, registrars within higher education institutions and the employment industry. Quann (1979) developed a useful (albeit, now dated) guide to how admissions staff and registrars should operate, providing information on qualification screening and assessment. A recent update to this 27 year old publication has been released (AACRAO 2006c), demonstrating the contemporary demand for resources in the area. In seeking to provide a structured approach to assessing an academic qualification, Adán (2004, p.4) and Cook (2005a, p.5) suggested the following steps as a best practice model to follow, in order to address qualification verification and authentication:

- Ensure all documents are available to undertake the evaluation:
- Check chronology and structure of the claimed credentials;
- Check on the authenticity of the presented documentation;
- Check on acceptability of the conferring institution from the Ministry of Education or equivalent authority.

This approach is similar to that recommended by Bear, Koenig et al. (2004), as a comprehensive process, which is given in its entirety in Appendix 22, Volume 2, page 439.

A further comprehensive credential evaluation procedure was proposed by Rauhvargers (2004c). His flow chart, depicted in Figure 15, below, provides a useful visual depiction of the comprehensive process of control checks that should be undertaken in order to assess an academic qualification. Whilst the author concurs that these are useful guiding procedures for the evaluation process, he would argue that it is imperative that the assessment of the acceptability of a qualification should be undertaken *before* an assessment of the authenticity of the documents. Procedures to determine the authenticity of a degree document are time consuming and resource intensive. It is therefore more sensible to undertake the full authentication procedure only after determining that the conferring institution is acceptable to the stakeholder.

One of the most basic steps needed for improving verification procedures would appear to be the ongoing training and development for individuals responsible for the assessment of academic qualifications. In a review of the US literature, Douglas (2003, p.58) found no evidence of human resource managers in the United States being systematically trained or educated in the area of determining the acceptability of academic degrees for employment or promotional purposes. Within Australia, the author has encountered a similar situation.

Whilst some *ad hoc* training has been conducted by NOOSR/ DIAC, PIER and the UK NARIC for the higher education sector, immigration agents and staff in international education, little, if any, has been available to the employment or recruitment sector. This lack of detailed training, together with the lack of any legal oversight for the evaluation of academic qualifications, and the devolution of assessment to each individual higher education

institution/ evaluator (OECD 2004g, p.11), leaves opportunity for mistaken judgements and possible fraud.

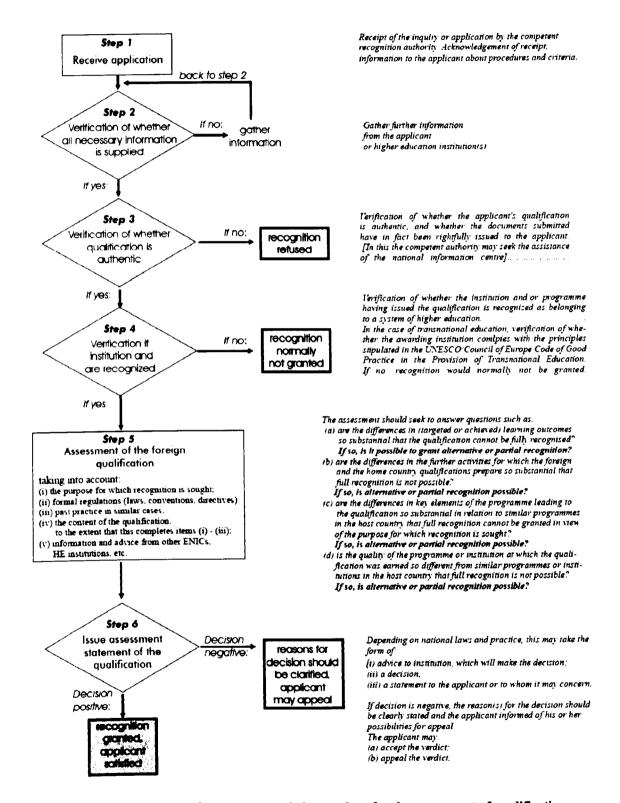


Figure 15 - Schematic outline of the recommended procedure for the assessment of qualifications.

Source: Rauhvargers (2004c, p.13)

It is evident that a variety of jurisdictions have been trying to deal with the evaluation of academic qualifications in different ways. The author believes that it is important to collate and review some of the global best practice approaches available so these may be evaluated for possible inclusion in the proposed risk treatment tool outlined in Chapter 8. Methods for determining degree acceptability are discussed first, followed by ways of verifying degree authenticity.

5.4 Methods and tools used to determine the acceptability of higher education qualifications in countries around the globe

Because degree recognition is a voluntary, unregulated process, there are many different approaches to determining qualification acceptability, a fact which causes confusion in the global transnational market (Damme 2001). Despite loose oversight and basic lack of regulation in the process, academic qualifications are still valued and are used as an important tool in the recruitment process (Keating et al. 2005). The presence of non-official higher education providers raises crucial problems in relation to degree acceptability (Kokosalakis 1999, p.20). This calls for a range of resources and approaches in order to distinguish between the different types of providers. The resources available for determining the status of official providers are discussed before those concerned with non-official institutions are addressed.

5.4.1 Guidebooks, listings and registers of official providers

The following section profiles the most current and commonly available listings of official higher education providers. The most important of these are the resources highlighted by Bear, Koenig et al. (2004) and Bear and Nixon (2006), which form the core criteria for the previously mentioned GAAP category. It should be noted that this section addresses only

currently available resources or initiatives under development and includes both paper based and electronic resources. The items are not listed in any particular order of relevance or usefulness. However, a brief critique is provided for each item, so as to highlight its perceived usefulness as a risk aversion tool and eligibility for assessment in Chapter 7.

5.4.1.1 International Handbook of Universities – UNESCO and the International Association of Universities. France

The International Handbook of Universities (IHU) (and its associated publication, the World List of Universities and Other Institutions of Higher Education) is seen as one of the more authoritative guides for listing official providers of higher education. First published in 1959, the text lists over 9,000 official higher education providers throughout the world, and is updated every two years. It is dependent solely on government submissions for its currency and comprehensiveness. Available on CD Rom and in print version, it is also complemented with a limited online listing located at http://www.unesco.org/iau/onlinedatabases/index.html. The current 18th Edition was published in 2005. Although UNESCO and the IAU are not accreditation authorities and do not have responsibility for tertiary education in any country, this guide is a sought after publication for recognition listing.

Whilst the IHU is deemed quite comprehensive, its credibility has been called into question as a single resource for listing of official providers. Past versions of the guide have listed institutions such as the Monterrey Institute for Graduate Studies, Berne University and Preston University, all of which are deemed non-official providers (Contreras 2001). Questions have been raised, as briefly discussed before, as to the capacity of some sovereign nations to oversee higher education and ensure quality commensurate with other countries, particularly in the area of transnational delivery (McBurnie and Ziguras 2001, p.100). In their critique of currently available resources for recognition of qualifications, an OECD

Expert Panel was particularly critical of the IHU CD-Rom. Their review found significant discrepancies between the published CD-Rom and the online listing of providers offered by the ENIC-NARIC (see below) (OECD 2004e). Notwithstanding some criticism and possible version issues due its paper based nature, it is evident that it is a popular resource.

5.4.1.2 Commonwealth Universities Yearbook – Association of Commonwealth Universities, UK

The Commonwealth University Yearbook is another publication, historically paper based, which only lists official providers of higher education. As the name implies, it only provides listings of higher education institutions which are recognized within British Commonwealth countries. Listing over 500 universities from 36 Commonwealth countries, the most recent edition was published in February 2006. Like many other official resources reviewed in this section of the study, the text is currently being converted into an online database called the Commonwealth Universities Database Online Service (CUDOS) located at http://www.acu.ac.uk/cudos. A review of the service has determined that access is only granted to staff and students of member institutions and only via a login and password. Whilst this is a useful tool, its limited listing and selective access does not lend itself to being a readily available resource.

5.4.1.3 NOOSR Country Education Profiles – National Office of Overseas Skills Recognition, Australia

Seen as an authoritative basis for the determination of any equivalence of a qualification (VETASSESS 2006), the Country Education Profiles published by the Australian National Office of Overseas Skills Recognition (NOOSR) are deemed an important resource. NOOSR comes under the auspices of Australian Education International (AEI), part of the Department of Education, Science and Training (DEST) and is the Australian ENIC, part of the Council of

Europe/ CEPES-UNESCO network. As with the Commonwealth Universities Yearbook, these publications were moved to online, subscription web access on 1st July, 2005 (AEI 2005), and are located at http://aei.dest.gov.au/AEI/CEP/Default.htm. The efforts to digitise the paper based resource appear to be in reaction to criticisms levelled at their currency, with a recent report finding the profiles had not been updated since the early 1990s (Productivity Commission 2006, p.168). Covering over 100 countries, the guides aim to provide information on the relationship between an overseas qualification issued by an official provider, and an Australian qualification issued by an equivalent institution. Anecdotal evidence offered by NOOSR suggests that 80% of Australian education providers use these guides in the process of determining the acceptability of overseas qualifications (Amanda Gordon pers comm). Whilst NOOSR provides an evaluation of the acceptability of an academic credential for a fee, they do not determine the authenticity of presented qualifications.

5.4.1.4 AACRAO World Education Series

The AACRAO International Education Services

(http://www.aacrao.org/publications/catalog/wes.cfm) based in the USA publishes a series of country profiles originally developed by PIER, and similar in approach to the NOOSR publications (above). The paper based publications are being replaced with a new, online system called the Electronic Database for Global Education (EDGE http://www.fcsa.biz/edge.shtml). The EDGE system aims to profile over 120 country education systems, providing information on academic qualifications which can be updated by editors to maintain currency. Particular features of the system include the provision of a sample image of the credential under review, a listing and link to official providers within each country and a glossary of terms for each country. At the writing of this study, version

1.0 is available listing Korea, Malaysia and several other countries. However, the author was unable to view the pilot system.

5.4.1.5 ENIC-NARIC Registers and associated resources

Within Europe, significant resources have been allocated towards the inter-country recognition of academic qualifications, as a result of the Lisbon and Bologna accords which were developed to create greater transportability of academic qualifications. These accords created The European Network of National Information Centers (http://www.enic-naric.net), a merging of the UNESCO network of National Information Bodies (NIBs) and the Council of Europe network of the National Equivalence Information Centers (NEICs) (UNESCO 2003). NARICs (National Academic Recognition Information Centres) have been established to assist stakeholders and interested parties with issues surrounding the recognition of degrees both in their own and overseas countries, particularly in relation to mobility (Kokosalakis 1999, p.24).

The NARICs form an important sector of credential recognition, of which NOOSR is a listed network partner. Some of the individual NARICs have joined forces to form umbrella organisations such as NORRIC (Nordic National Recognition Information Centres)

http://www.norric.org. These initiatives are designed to benchmark credential recognition processes both inter and intra countries and maximise the mobility of qualifications across the countries concerned. A particularly popular resource appears to be the UK NARIC (http://www.naric.org.uk) which hosts the International Comparisons section (http://www.internationalcomparisons.org.uk). This is a subscription based resource (similar to NOOSR & AACRAO above) and allows users to assess overseas qualifications in relation to their UK equivalents. The UK NARIC is also working on a sample certificate database of

genuine parchment qualifications, similar to that offered by the EDGE product (above) which will only be available to subscribers (Vine 2006b).

5.4.1.6 World of Learning Guide

The World of Learning (http://www.worldofleaning.com) was first developed over 50 years ago, and currently contains a listing of over 30,000 institutions throughout the world. Originally only in print form, this publication is now also available online and is updated on a regular basis. The criterion for inclusion in The World of Learning is that an institution must provide academic, research or educational services, or represent academic, research or education professionals, on a not-for-profit basis (pers comm. Driss Fatih Editor, The Europa World of Learning). These broad criterions mean that no significant screening in relation to the standing of the institution is undertaken and it is therefore not generally used as an evaluation tool for assessing degree acceptability.

5.4.1.7 Government endorsed listings and other authoritative databases

Some countries have endeavoured to provide free, online listings of approved higher education providers. Reviews of these attempts suggest that they have enjoyed mixed success. A study undertaken by UNESCO identified 68 countries which offered a public list of approved providers of higher education qualifications with the study providing the following critique:

- Some countries listed only public official providers, whilst some listed private and public official providers overall there was a distinct lack of consistency in approach;
- 51 countries provided listings with comprehensive contact details, whereas 17 countries were database/ search engine driven;
- The terms 'accredited', 'registered', 'state recognised' were used across country sites, with no common definition;
- The bodies hosting and publishing the lists were a range of government, semigovernment or private bodies (UNESCO 2004).

Since this UNESCO report, other useful country projects have been undertaken. In the United States, an online database which lists over 6,900 official providers was released by the US Department of Education in 2005. This site was developed in response to the enquiry into 'diploma mills' chaired by Senator Susan Collins, previously cited in Chapter 1 (Wait and Dizard 2004). The United States Assistant Secretary of Education, Sally Stroup, on launching the new site http://www.ope.ed.gov/accreditation asserted, '...it was an important tool to combat the growing industry of diploma mills that scam unsuspecting consumers and employers by offering fraudulent degrees' (U.S. Department of Education 2005). She was, however, quick to point out that some institutions might not have chosen to participate in the Federal Loan Scheme and therefore did not seek accreditation. She suggested that further investigations needed to be done by a prospective student in order to verify the bona fides of a particular institution. This assertion was supported by the following statement on the site:

The U.S. Department of Education recommends that the database be used as one source of qualitative information and that additional sources of qualitative information be consulted.

In the United Kingdom, an official website listing recognised UK degrees has existed since 2001. During the development stages, two particular sites were created; one was dedicated to listing all providers that are authorised to issue UK recognised degrees (http://www.dfes.gov.uk/recognisedukdegrees/annex4.shtml). The other was a voluntary site designed primarily for listing those institutions which had been approved for the granting of visas to overseas students (http://www.dfes.gov.uk/providersregister). Despite the sincere intentions of the latter, this register created concerns as some non-official providers were included, and concurrently claimed some form of UK recognition. This necessitated the following disclaimer to be posted:

IMPORTANT: The Register does not quality assure or accredit in any way the learning provision of any registered providers. Registration does not imply quality standards and should not be used in marketing. We reserve the right to remove organisations from the Register for such use.

Within Australia, the Australian Qualifications Framework (AQF) Register has been created as the sole listing of providers accredited to issue AQF recognized higher education qualifications. Located at http://www.aqf.edu.au/register.htm, the register was virtually unknown to many within academia and the employment industry until the previously mentioned Greenwich University case in 1999, whereupon it was resurrected as an important accreditation verification tool (Brown 2001b). A recent study by Keating et al. (2005, p.34) found that few employers had heard of the Australian Qualifications Framework.

Notwithstanding this, when it was explained to them, the majority felt that it was 'always' or 'sometimes' important for an Australian qualification to have this recognition.

5.4.1.8 Register of medical institutions

In order to provide a guide on the recognition of medical institutions throughout the world, the Foundation for Advancement of International Medical Education and Research (FAIMER) provides an online listing http://imed.ecfmg.org/search.asp. Entitled the International Medical Education Directory (IMED), the site claims to list all '...medical schools recognised by the appropriate agencies in their respective countries'. The author is aware of many cases where institutions have been listed in this directory, despite the fact that they have been criticised for providing low levels of quality education in a variety of jurisdictions.

A further listing of medical schools is maintained by the World Health Organisation at http://www.who.int/hrh/wdms/en. However, the page has been offline since December 2005 (allegedly due to an upgrade of the database), and offers the following disclaimer:

... WHO has no authority to grant any form of recognition or accreditation to schools of medicine or other training institutions. Such a procedure remains the exclusive prerogative of the national government concerned.

Whilst medical degrees are arguably related to the professions and, as such, should not come under scrutiny in this study, the trust put in these previously mentioned recognition tools makes them of interest to this research.

5.4.1.9 Bologna Declaration and the Diploma Supplement

Over twenty eight years ago, Warren (1978, p.91) argued that some form of additional document was needed to accompany parchments and transcripts. The degree document, as it stands, fails to provide information to interested third parties in a standard format. No serious moves had been made in any jurisdiction to address the issue of qualification recognition until Europe adopted the Lisbon Convention of 1997 and the subsequent Bologna Declaration of 1999. These voluntary approaches endorsed a system of qualification recognition which currently applies to over 4,000 institutions and 16 million students within Europe, and is due for completion by 2010 (DEST 2006b, p.1).

The Bologna process is the result of an identified need for clearer information about tertiary qualifications that are used by individuals to access further education, secure employment and assist in migration processes. Whilst it is a European initiative, Australia became a signatory to the *Convention on the Recognition of Qualifications Concerning Higher Education in the European Region* (the Lisbon Convention) on the 19th September, 2000. Despite the early adoption of this convention, little progress has been made to ensure that Australian higher education qualifications and its providers meet the guidelines (DEST 2006b; Illing 2006). Under Article IX of the Lisbon Convention, all signatories to the Convention commit themselves to establishing transparent systems for the complete description of qualifications in higher education, a process which Australia has, for internal purposes, been refining for many years. As a signatory, Australia must promote and use the 'Diploma Supplement' or

another comparable document to improve the international transparency of its higher education qualifications. The supplement is designed to accompany the testamur, and provide information on the nature, context, level and status of the studies completed by the graduate (OECD 2004f).

In Australia, the Diploma Supplement is defined, in a pilot project, as a document issued to accompany a testamur designed to provide the following information:

- ➤ a description and explanation of the qualification such as whether the qualification admits the recipient to further study or registration as a professional;
- > information about the status of the awarding institution;
- > information about the higher education system;
- > other relevant information such as a description of any period of study or training undertaken in another institution, company or country; and
- information sources particular to the qualification, such as the higher education institution website (Watt and Gregory 2002).

Since December 2002, six Australian institutions (The University of Queensland, Queensland University of Technology, Central Queensland University, Swinburne University of Technology, RMIT University and Canberra Institute of Technology) have been involved in a pilot project funded by the Department of Education, Science and Training. The study sought to determine the costs and implications for institutions of issuing the Diploma Supplement and actually produced sample diploma supplements for use (Wu 2004, pers.comm. 12 October). The pilot project did not appear to address how the provision of the diploma supplement would be regulated, and decisions regarding the adoption of the supplement are yet to be made (DEST 2006b, p.11). In relation to security, it has been suggested that security paper will be used to minimize the forgery of diploma supplements (Watt and Gregory 2002). However, this issue has yet to be addressed and has not reached the stage of finalization (Ward 2005).

Whilst a recent Australian report suggests that the diploma supplement should, '...be free from any value judgements, equivalence statements or suggestions about recognition' (DEST 2006b, p.8), the author would argue that the process of producing and offering the diploma supplement has the potential to be construed as some form of official endorsement and therefore open to abuse. dos Santos (2002, p.108) maintained that if the Diploma Supplement became mandatory, then non-official higher education providers would be unable to avoid its use, suggesting that this would force these organisations to undertake a recognition process.

The author disagrees, as there are no mandated guidelines as to the format or content of the supplement, or who is authorised to create and issue such a document. For example, the previously mentioned non-official Athenaeum University International made the following offerings/ claims pertaining to the Diploma Supplement on its accreditation page:

As a fully licensed university with an incorporated active branch in a European Union country, Athenaeum is empowered to issue, in addition to regular degrees, European Union Diploma Supplements to all its graduates. For more information about the value of European Union Diploma Supplements, please visit the European Commission and CHEA websites. (Source: http://www.unicollege-edu.net/affiliation.html)

Similar claims have been made by Euclid University, which states on its accreditation page:

Because of Euclid's affiliation with ULI (Brussels, Belgium) and its commitment to take into account the Bologna process and ECTS guidelines, Euclid degrees are designed to be globally transferable within European Union member states and other signatories of the Bologna process agreement (Source: https://eucliduniversity.org/euclid/en/accreditation.asp).

These public statements have been made, without the institutions concerned gaining official status. A comparable claim has been made by the previously discussed Pebble Hills, University as follows:

Student/institutions can also apply (sic) award supplement for their degree. The award supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient recognition of qualifications (diplomas, degrees, certificates etc.); it is issued by SBC – SECRETARY OF EDUCATION of ANTICO PRINCIPATO DI SEBORGA. PHU degree can also be co-signed and sealed for authenticity by the Department of

Education, Seborga upon the request of any student or institution. (Source http://www.pebblehills.edu/recognition.html)

In this case, the claim is misleading as there is no Department of Education in Seborga, and Pebble Hills University has no official standing in this jurisdiction.

Within the Asia Pacific region, a recent study contended that a similar Bologna process type framework should be developed (DEST-AEI 2005, p.15), undoubtedly designed not only to assist recognition but also to provide a consumer protection approach. With the Diploma Supplement now being hailed as the 'passport' to academic mobility and the ready recognition of Australian qualifications (Morris 2006), there is a clear and urgent need to secure this document in order to minimise fraud. Europe appears to be addressing these concerns by incorporating the Diploma Supplement into a new document system called EuroPass http://europass.cedefop.europa.eu which contains a portfolio of digital documents. It is still unclear, however, what form of security will be employed for these supplements in Australia.

5.4.2 Guidebooks, listings and registers of 'non-official' providers

As a secondary approach to determining the recognition of an institution, some countries and researchers have developed lists or registers of non-official higher education providers. These listings are designed to assist in determining the acceptability of academic qualifications, or warn of illegal activity within a particular jurisdiction. The following sections outline both the current and historical efforts in this area.

5.4.2.1 Current listings

Recent years have seen a range of earlier initiatives in this area gradually wound down or stopped completely. Many providers have threatened legal action in order to have their names

removed; others have closed down a variety of projects due to questions about their legal status. Those listed below are exemplars of the currently accessible listings.

5.4.2.1.1 Bear's Guide to Earning Degrees by Distance Learning

Now in its 16th edition, Bear's Guide provides a listing of non-official higher education institutions classified as either 'other schools', 'degree mills' or 'miscellaneous' institutions. Since 1982, Bear has maintained a relatively up to date listing of non-official higher education providers throughout the world, and is freely available to higher education providers and recruitment staff. Historically this text has been a cost effective and comprehensive tool; however, the 2006 edition does not appear to have been updated since 2003.

5.4.2.1.2 Government/ state endorsed listings of unapproved providers

A review of various jurisdictions that provide lists of official higher education providers reveals that most do not maintain any list of non-official providers. This lack of public listings is undoubtedly due to the significant legal challenges surrounding such an information service and the cost of maintaining the currency of the registers. In order to overcome this, some jurisdictions have legislated on the issue (as previously discussed) and at the same time, published an online register of institutions from which academic qualifications would not be acceptable for use as a credential within the respective jurisdiction. To the author's knowledge, the following are the only jurisdictions (at the time of publication) which maintain such listings.

In the United States, a number of states are now hosting online registers of unapproved providers, mainly designed as a consumer protection initiative.

• State of Oregon: http://www.osac.state.or.us/oda/unaccredited.html

- State of Michigan: http://www.michigan.gov/documents/Non-accreditedSchools 78090 7.pdf
- State of Mississippi: http://www.ihl.state.ms.us/Academic_Affairs1/MCCANonApprovedEntitiesList2005.
 pdf
- State of Maine: http://mainegov-images.informe.org/education/highered/Non-Accredited/UnaccreditedSchools-042706.pdf
- State of Texas: Maintains two listings one for institutions with a known Texan connection http://www.thecb.state.tx.us/AAR/PrivateInstitutions/FraudTX.cfm & another as a global listing http://www.thecb.state.tx.us/AAR/PrivateInstitutions/fraudnotx.cfm
- State of Hawaii: Maintains a listing of non-official providers which have been sued due to non-compliance with its state laws http://www.hawaii.gov/dcca/areas/ocp/udgi/lawsuits.

The only other jurisdictions which currently provide an online public listing appear to be India and Pakistan. Due to significant problems in relation to the operations of non-official providers in these jurisdictions, both countries have developed registers of institutions which are operating unlawfully. The Indian University Grants Commission maintains a 'Fake Degree Alert' listing at http://www.ugc.ac.in/inside/fakealerts.html. As at August 24, 2006 this site identified 19 providers. The Pakistan Higher Education Commission maintains a Public Alert site at http://www.hec.gov.pk/htmls/hei/public_alert1.htm where, at the same date, over 80 non-official providers were listed. Pakistan appeared so concerned at these operations that education officials were seeking assistance in conducting a study:

In addition to above, numerous unlawful universities/institutions are operating in the country, for which the Commission has requested the public sector universities to locate and inform of such institutions operating in their areas of territorial jurisdiction. Also its Regional Centres have been asked to make survey of unlawful universities/institutions. Thus a nation wide survey is in offing to curtail operations of unlawful universities/institutions. For further information, please contact Mr. Muhammad Javed Khan, Director General (A&A) Tel: 051-9257508, E-mail: mjkhan@hec.gov.pk

5.4.2.1.3 Wikipedia listing of unaccredited higher education providers

One of the more intriguing, albeit least reliable listings, is that provided by Wikipedia http://www.wikipedia.org. Whilst this is a serious initiative, the unmoderated nature of the site allows for simple editing and changes, which are difficult to verify. A page maintained at http://en.wikipedia.org/wiki/List_of_unaccredited_institutions_of_higher_learning, seeks to provide a listing of unaccredited institutions of higher learning, along with other links of interest.

5.4.2.2 Past listings

In earlier years, a number of initiatives were undertaken to list non-official providers. Most appear to have ceased mainly due to the previously cited issues of potential legal cases. The author sees it as appropriate to profile all past efforts to maintain registers of non-official providers, as their mixed successes can be regarded as case studies in determining if this approach would be appropriate as a risk treatment tool later in Chapter 8.

5.4.2.2.1 US Department of Education

For a number of years, the US Department of Education has been considering the hosting of a public list of alleged degree mills. However, this has never eventuated. From his doctoral research, Reid maintained that the exposure of allegedly fraudulent institutions through a public listing would offer a '...real chance that American degree mills can be eliminated from the educational scene' (Reid 1959, p.78). In 1982 the US Centre for Adult Learning and Educational Credentials gathered information about alleged diploma mill activity and placed it into a database (Stewart and Spille 1988, p.183). This was designed for internal use only and was never made publicly available. Later in 1986 the Department considered a further project for listing degree mills, but the idea was not pursued due to the potential high risk of legal costs (Stewart and Spille 1988, p.154).

5.4.2.2.2 Council of Europe; list of 'Non-Recognized Institutions'

In 1972 the Council of Europe (COE) published a list of alleged 'degree mills' in response to what was seen as 'rampant diploma mill activity' emanating from the United States (Stewart and Spille 1988, p.177-178). Marked for 'internal government use only', the author was able to obtain updates to this publication, which were generated sporadically up until 1997 (Council of Europe 1986; 1991; 1993; 1994; 1997a). The last version consisted of 64 pages of non-official providers, with the overarching aim of providing national authorities and agencies with information for cases '... which might present a problem' (Council of Europe 1993, p.2). Based on anecdotal evidence received from a variety of professional credential evaluators, the author came to understand that the list was unreliable and not regularly updated. Furthermore, the list contained a significant number of errors such as the inclusion of official US, UK and Canadian providers who had been duly accredited. The only research which has cited this listing is that of Kokosalakis (1999, p.17-18) who commented on the 'alarming growth' in the length of the list and criticized the lack of public access and its secretive nature. The demise of the list appeared to come at the time when the full list was published in the Times of London. After a number of attorneys contacted the publisher, it was officially withdrawn from circulation (pers comm. John Bear).

5.4.2.2.3 University of Wales; list of 'Institutions of Doubtful Standing'

It seems likely that many official higher education providers maintain their own internal, private listings of institutions which they consider 'dubious' or not acceptable for credit transfer. Generally such a list would not be made public. The University of Wales, however, maintained such a list on the Internet where it was accessed by the author in 2005. The policy document listed both institutions that were acceptable and those of 'doubtful standing' (University of Wales. 2004, p.102-108), a full copy of which is located in Appendix 23, Volume 2, page 442.

5.4.2.2.4 DiplomaSEETM

Seeking to provide a proactive screening service to employers, a US based company called DiplomaSEETM (http://www.diplomasee.com) entered the market in 2005, claiming to offer the most comprehensive credential screening service to employers. In addition to providing lists of 'official' providers, the DiplomaSEE model maintained that it would provide information on:

- Dubious Institutions A list of known global diploma mills and other institutions that are deemed 'suspect'. Currently, the list contains over 1,000 entries.
- Valid Non-accredited US institutions While few in number, these are legitimate institutions that are mostly in the process of obtaining accreditation.
- Closed Colleges Once valid Institutions that have closed, merged, or changed their name, they became prime targets for so called 'replacement diploma' schemes.

A copy of the promotional email for this operation is located in Appendix 24, Volume 2, page 449. Attempts at communication with the President, Robert Hoffman, yielded no response. The website was removed, without warning, in early 2006. Further email messages were returned as undeliverable.

5.4.2.2.5 State of New South Wales; list of 'Unrecognized providers'

In order to address the perceived increase in non-official provider activity in the Australian State of New South Wales, a website was created by the Department of Education and Training in 2001 entitled 'Universities not recognized in New South Wales'. Originally located at http://www.highered.nsw.gov.au/reports/notapproved.htm (DET 2006a), the list contained the following institutions:

- Chancery International University
- CNBC University
- eBay University
- The University of Action Learning
- Warnborough University

The page for this listing was removed early in 2006, probably due to the fact that the site had not been updated for over five years.

5.4.2.2.6 The Australian newspaper listing

In the process of researching a variety of non-official institutions across the globe, Patrick Lawnham, a journalist for the Higher Education Supplement of The Australian newspaper, developed a listing of what was termed, 'Wannabe Universities' and 'CV Time Bombs'. This online list, hosted by The Australian newspaper, consisted of over 60 unaccredited higher education institutions and 155 alleged degree mills (Lawnham 2002b). Significant controversy surrounded its creation. One of the named institutions, the University of Newlands (http://www.universityofnewlands.com), sued The Australian newspaper for defamation in the Wellington High Court (Cohen 2004). The University of Newlands is a New Zealand based university company (deemed non-official as it has no approval to operate as a university), and claimed loss of business and trade due to the fact that the listing could be downloaded and viewed on the Internet from New Zealand. The judge upheld the claim and found that there was a case to be heard, basing his decision on the famous Gutnik precedent. The full listing of non-official providers and alleged degree mills was consequently removed in June 2004. In December 2005, however, The Australian appealed against this decision and had the case dismissed (Nationwide News Pty Limited v The University of Newlands & Anor [2005] NZCA 317 9 December 2005). In an effort to try and resurrect the proceedings, the University of Newlands sought to have the appeal overturned, but it was finally dismissed at a Supreme Court Hearing in March 2006 (University of Newlands vs Nationwide News Ltd. 2006). A full listing of the site's contents in its most comprehensive 2002 form is contained in Appendix 27, Volume 2, page 459.

5.4.3 Credential recognition organizations, mailing lists and newsgroups

In addition to standard publications listing both official and non-official providers, a variety
of other recognition resources are available. These range from fee based assessment

organizations, through to various free-to-air online mailing lists and newsgroups. The quality of these additional resources range from respected recognition services, to informal exchanges of information and views among people who deal with evaluating a degree's acceptability and authenticity.

5.4.3.1 Credential recognition organizations

Primarily used in the USA and Europe, credential evaluation companies form an important part of the recognition process, as previously identified in the Bear & Douglas study. These are private organizations set up to provide credential evaluation to individuals and the official higher education sector. In the United States, the American Association of Collegiate Registrars and Admissions Officers (AACRAO) http://www.aacrao.org and the National Association of Credential Evaluation Services (NACES) http://www.naces.org are the peak bodies representing a variety of prominent evaluation companies such as World Education Services (WES) and Global Credential Evaluators (GCE) http://www.gceus.com. In Europe, the European Association for International Education (EAIE) http://www.eaie.nl is the equivalent peak body, providing networking and professional development in credential recognition. Other professional peak bodies such as the Association of International Education Administrators (AIEA) http://www.aieaworld.org form useful networking opportunities for professional development.

5.4.3.2 Online mailing lists, knowledge communities and discussion boards

A number of online, moderated and semi-moderated newsgroups operate in order to provide a form of networking for individuals interested in evaluating and assessing academic credentials. INTER-L (http://groups.yahoo.com/group/inter-l) is managed via a free Yahoo account, with over 2,000 members emanating primarily from the USA. Postings range from

questions regarding credit transfer, document authentication to recognition of certain institutions. A disclaimer on the site states that the information should be checked for accuracy before use.

REGIST-L (http://www.samford.edu/groups/sturec/regist-l.html) is a similar initiative to INTER-L, designed to network college and university registrars, again primarily in the USA. This collegial network is maintained by registrars who share information on a range of issues, including issues of unofficial providers and the authentication of qualifications. IERES-L (http://www.geocities.com/ieres/listsv.html) and INTERNATIONAL-OFFICERS (http://www.jiscmail.ac.uk/lists/INTERNATIONAL-OFFICERS.html) are other similar mailing lists (the latter dedicated to UK higher education institutions) although both suffer from virtually no activity. The information posted and developed in some of the threads of discussion is very useful and can serve as a good model for risk treatment, despite the identification of a number of problems. These range from a lack of searchable databases, to the mailing lists suffering from continual 'out of office' messages. The author has found no evidence of any Australian organizations participating in any of these initiatives or mailing lists.

Perhaps one of the most promising initiatives is the NAFSA Association of International Educators 'Knowledge Communities' network. Although this is only available to members, it appears to provide a useful location for discussion on best practice issues surrounding a range of student administration areas issues, including credential evaluation and authentication. It is located at

http://www.nafsa.org/knowledge_community_network.sec/recruitment_admissions/admissions_s_and_credential. The use of knowledge communities will be investigated in subsequent chapters for the proposed risk treatment tool.

news groups has been created and is frequented by observers in the official and non-official higher education arena. Each is populated by individuals with like-minded views on qualification acceptability, particularly in relation to distance learning. Historically, the most active site was the Alt.education.distance newsgroup

(http://groups.google.com/group/alt.education.distance), although due to a lack of moderation, it suffered from significant spamming. As a result of this, new web based sites have been created such as Degreeinfo (http://www.degreeinfo.com), Degreeboard

(http://www.degreeboard.com) and Degreediscussion (http://www.degreediscussion.com).

While the sites provide interesting anecdotal information on a variety of recognition and higher education provision issues, the discussion threads can perhaps best be seen as illustrative 'battlegrounds', where individuals voice their hierarchic or individualist viewpoints, with little constructive interchange. As with the online mailing lists, the author has found no evidence of any Australian higher education or recruitment providers participating in these discussion boards.

In addition to administration-based newsgroups, a range of un-moderated and semi-moderated

5.4.4 Alerting mechanisms for 'non-official' and counterfeit providers

Instead of producing lists of non-official providers which are deemed unacceptable in a variety of jurisdictions, some countries are producing official alert websites. These sites do not name individual institutions (to avoid the previously mentioned legal implications) but are designed to educate and inform individuals, primarily prospective students and employers, as to the potential risks from non-official higher education activity, and the falsification of academic documentation. The following is a listing of all currently known country efforts designed to provide this type of information.

5.4.4.1 International

UNESCO has taken the important initiative of warning students of the implications of studying with various providers, and provides a page called 'Tools for Students'. Located at http://portal.unesco.org/education/en/ev.php-

<u>URL_ID=41624&URL_DO=DO_TOPIC&URL_SECTION=201.html</u>, this page provides a comprehensive check list of areas that prospective students should verify before they enrol in program of study. A complementary page hosted by UNESCO's Nairobi office http://www.education.nairobi-

unesco.org/index.php?option=com_content&task=view&id=762&Itemid=132 warns potential students of the false claims some non-official providers make in relation to UNESCO recognition/ accreditation. This UNESCO initiative is an important first step which holds promise as a constructive tool for the future.

5.4.4.2 Holland

Launched by the Vice-Minister of Education, Culture and Science, Mark Rutte, on July 13th 2005, a Center for Information on Diploma Mills (CIDM) was established by the Netherlands Ministry of Education under the auspices of the IB-Groep http://www.ib-groep.nl (IB-Groep CIDM 2005). Located at www.diplomamills.nl and http://www.degreemills.nl, these sites aim to provide employers, educational institutions and those wishing to enrol in transnational education, with advice on the official standing of higher education institutions.

5.4.4.3 United States

In 2005 the US Federal Trade Commission released a warning site at http://www.ftc.gov/bcp/conline/pubs/buspubs/diplomamills.htm, designed to provide advice about the problem of diploma mills and recommending steps to take in order to verify the

legitimacy of academic credentials. During the same year, the Council for Higher Education Accreditation launched http://www.chea.org/degreemills, a centralised site with links to each US state and authorising state agency. This site was recently updated in February 2007 to include a 6 Step Guide for Combating Site-Based and Distance-Based Degree Mills, available at http://www.chea.org/degreemills/Effective-Practices-Degree-Mills.pdf (full copy provided in Appendix 25, Volume 2, page 451). At a State level, Oregon provides a useful guide for employers when evaluating an academic degree – available online at http://www.osac.state.or.us/oda/doc/Employer's Guide to Degrees.pdf (full copy provided in Appendix 26, Volume 2, page 452).

5.4.4.5 United Kingdom

Given the previously discussed problem with recognition of qualifications in the UK, a site at http://www.dfes.gov.uk/recognisedukdegrees lists only approved UK providers. A link to a 'Bogus Degrees Warning' advises students about the lack of oversight on all other operators which provide degrees in the UK without recognised accreditation.

5.4.4.6 Australia

In 2002, in response to the perceived increase in non-official providers and access to falsified academic qualifications, the statements given in full below, were published on the Department of Eduction, Science and Training's (DEST) website http://www.dest.gov.au/highered/alert (DEST 2002). This page has since migrated to:

http://www.dest.gov.au/sectors/higher_education/policy_issues_reviews/key_issues/assuring_quality_in_higher_education/fake_degrees.htm. It gives the following important information regarding the risk of non-official and falsified academic qualifications.

Fake Degrees

There are instances of testamurs and academic transcripts being offered for sale generally via the Internet without any study involved. They could be transcripts for accredited Australian or overseas universities. They may include a clear disclaimer indicating the qualifications are fake/ to be used for novelty purposes. Universities are responsible for verifying qualifications offered in their name and protecting the use of their testamurs and academic transcripts, and take this responsibility seriously. The Australian Government and universities refer cases involving the fraudulent sale or use of fake degrees to the Australian Competition and Consumer Commission or to the Police as appropriate.

Bogus Providers

"Degree mills" – providers offering degrees after no or little formal study often via the internet, are a growing phenomenon. They may use an Australian or overseas address or require money to be sent to an Australian or overseas post box. Where there is a traceable link with Australia, the Commonwealth, State and Territory authorities can and do take action. Australian authorities also cooperate with authorities in other countries to pursue such providers. Universities and employers are very conscious of the need to check the authenticity of qualifications.

Unauthorised Higher Education Providers

There are cases of institutions with an Australian name or associated with Australia in some way delivering higher education awards and courses overseas that are not recognised through listing on the AQF. Only higher education providers listed on the AQF are recognised by the Commonwealth, State and mainland Territory Governments.

Two Australian states took the lead in publicising this sort of information along with the Commonwealth. New South Wales set up

https://www.det.nsw.edu.au/aboutus/higheredu/fakedegrees.htm (DET 2006b), with a 'Fake Degrees' brochure available at

https://www.det.nsw.edu.au/media/downloads/aboutus/higheredu/fakedegbroch.pdf (and provided in Appendix 28, Volume 2, page 463). Queensland established a site at http://education.qld.gov.au/strategic/accreditation/university/bogus-quals.html (DEA 2006).

All of these efforts are intended to curb the increased occurrence of qualification falsification and use of non-official qualifications in employment and education settings ("Phony degrees

proliferate down under" 2003; NSW to crack down on fake degrees 2003; Buckell 2003; Mulligan 2003). However, it is unclear how effective these warning sites are and the level of traffic they are generating.

5.5 Methods and tools used to determine the authenticity of higher education qualifications in countries around the globe

We obviously do need checks on formal qualifications, but what lengths do you go to? Professor Ralph Hall, President, Federation of Australian University Staff Associations (Aubert 1991, p.5).

As the author has previously asserted, once the acceptability of a higher education qualification is determined, it is then necessary to determine the authenticity of the documentation. The examples discussed demonstrate a clear and urgent need for users of academic documents to be aware of the elements that characterize authentic documents and for organisations to follow best practice procedures to safeguard their authenticity (AACRAO 1987; ICAC 2002a; AACRAO 2006b). There have been a range of measures developed to control or minimise the frequency of fraudulent qualifications and these are discussed below.

5.5.1 The process of establishing authenticity

The word 'authentic' derives its meaning from the Greek word 'authetikós'. Coming from 'eutón' (meaning self) and 'theoto' (related to the word 'thesis') the word is used in any context when one wishes to describe something that claims to be entirely truthful in its own form (Ferrara 1998). A recent study in Australia found that most claims to academic qualifications are signified by some form of documentation (Ridoutt et al. 2005, p.7 & 22). Modern societies routinely attest by their daily practices to the individuality, the utility, the efficacy, and the indispensability of these documents (Conway 1978, p.xi). Recent technological advances have not only assisted in the identification of fraudulent documents, but also enabled fraudsters to improve the quality and the promotion of their products. As

mentioned in the previous chapter, highly authentic copies of academic qualifications can be purchased with relative ease from a range of sources.

It has also been argued that a cost benefit ratio exists in relation to the phenomenon of deceit (Ford 1996, p.273). The control of fraudulent qualifications is therefore dependent on the amount of resources a society is willing to commit to authentication procedures. The logic Ford proposes is this: if there is a high benefit to be gained from deceit and little expenditure of energy for the deception, then deception occurs frequently. If there is little benefit from deception and it requires a high expenditure of energy, then there is a low frequency of deceptive behaviour. There is a similar relationship between the amount of energy required to detect deception as related to the benefits accrued for the effort. As such, an equilibrium exists, whereby the level of the risk of deception is reflected in the effort and resources which are spent in the detection of deceit (Ford 1996, p.274). However, the effort put into verifying academic qualifications is very much dependent on sociocultural perceptions of risk from this source.

In the qualification evaluation process, Tufts (1987, p.225) argued that an official academic transcript was the most important document issued by a higher education institution, and interested stakeholders had a responsibility to ensure its authenticity, both in the process of issuing (i.e. during the credentialing process) and once it had been issued (i.e. security of the document outside of the conferring institution). It is common policy in the USA that any academic document issued directly to a student should be seen as 'unofficial' and treated with extreme caution (Loyer and Schmidt 1989). Once the document in question has been handled by the student, then any decision on the accuracy of the information printed on it is not made until it has been authenticated through an appropriate process (Twenge 2003).

To demonstrate the complexity of the authentication process, the following list contains some suggested features which need to be checked when verifying the authenticity of academic credentials (Adán 2004, p.8; Cook 2005b, p.6):

- Years of study period do not make sense or match claims on application form;
- Program of study did not exist at the claimed time the candidate undertook the program;
- Misspellings, unprofessional language, or poor grammar are evident in academic documents;
- Unusually high grades are given and/ or the presence of high grades in countries where higher grade ranges are virtually nonexistent;
- Awkward or forced lettering;
- Inconsistent fonts and/ or incompatible type-face in a single document;
- Weak or incorrect seals/emblems, colours, shapes;
- Blurry emblems;
- Scanned images;
- Cut-and-past quality;
- Incorrect paper quality, texture, size (letter or legal), coloration;
- Incorrect terminology;
- Lack of watermarks or the obvious appearance of hand-made watermarks;
- Incorrect diacritical marks;
- Noticeable inconsistencies;
- Lack of holograms or other safety measures;
- Evidence of corrected personal data (name, birth date, gender);
- Evidence of white-out, burn-marks, erasures, corrections;
- Interrupted/obliterated lines where information is generally typed or printed;
- Missing pictures in diplomas or professional identification cards;
- Partial seals on the surface of superimposed pictures not on the document surface;
- Irregular spacing between words or letters, or insufficient space for the text;
- Ink colour and quality;
- Inappropriate or outdated signatures;
- Signature aberrations including shading and continuity;
- Cultural and anachronistic inconsistencies (dates, institutional name changes, institutional mergers, institutional closures);
- Educational aberrations (hours of study, uncharacteristic grading system, years of study, program cancellations);
- Non-traditional format of transcripts or grade certificates prepared in a language other than the official language of the country where the document originated;
- Numerical aberrations: credits do not add up and overall grade point averages are a mathematical impossibility;
- Creative translations showing American grades, American courses titles, an uncharacteristic or exorbitant number of credit or hours per class.

The above-mentioned checklist is likely to appear quite daunting to the layperson, and almost requiring of expertise in forensic document examination. This is coupled with the simple but

basic problem of not knowing what a particular academic transcript/ parchment should look like (i.e. what a testamur and academic transcript from the University of Calcutta should look like if it was issued in 1983). In addition to this, whilst some new academic documents may incorporate anti-counterfeiting technology how does the layperson understand these overt/covert technologies?

As a first line of defence, various jurisdictions have introduced a range of control measures designed to minimise the risk of fraudulent academic documents; the following section considers some examples of these measures.

5.5.2 Control measures to minimize the creation and use of falsified academic qualifications

It has been argued that control approaches to risk minimisation are most effective by addressing the suppliers and users of both non-official qualifications and falsified official academic qualifications. The main line of approach has involved legislative and policy initiatives which are profiled in the following section.

5.5.2.1 Legislation governing the use of falsified official academic qualifications

Many countries have enacted legislation and penalties for the use of falsified documentation in a variety of settings. Whilst it would be almost impossible to profile legislation from all jurisdictions throughout the world, it is pertinent to profile laws from the countries that have already been discussed in this study. Although laws vary from jurisdiction to jurisdiction, there is a common intent to protect workers and consumers (Nettler 1982).

Many providers of fake replica testamurs contend that the diplomas they provide are 'replacement of lost diplomas' or 'novelties' for the purpose of 'entertainment or practical jokes'. Laws seek to distinguish harmless exaggeration, as in advertising 'puffery', from some degree of misrepresentation that is deemed sufficiently damaging to be criminal. The distinction is difficult and ultimately rests on precedents within each jurisdiction (Nettler 1982, p.65). Law, according to Clifford (1983, p.24), aims to control rather than eliminate various forms of behaviour; it is designed to regulate as opposed to repress. As such, laws are not designed to interfere with human expression or rights, but only to intervene once an action challenges the human rights of others. Some laws, for example, redress excessive levels of indulgence or self-fulfilment, which disregard everyone else within a social system. Laws in relation to the falsification of academic qualifications fall within this realm. Examples of some of these are provided below.

5.5.2.1.1 United States

Fifteen states in the USA have general laws which make the counterfeiting of various consumer goods a felony (Hopkins et al. 2003). A federal law passed in July 1996 called the 'Racketeer-Influenced and Corrupt Organisations Act' provides civil penalties linked to the value of the authentic goods. The approach being adopted through new legislation on fake degree documents in various US states tends to be prosecution of the users of falsified qualifications, whereas earlier laws had targeted the producers.

Currently there are a variety of different states which specifically prohibit the use or sale of falsified academic qualifications; Idaho, Kentucky, Michigan, Nevada, Texas, Tennessee, Illinois, New Jersey, Maine, North Dakota, Washington State and Oregon. The State of Oregon has been perhaps one of the most active jurisdictions in addressing the use of falsified academic credentials, having legislation on its books for over 20 years (Potter 2003b). The

Oregon Office of Degree Authorization (ODA), which is part of the Oregon Student Assistance Commission, has a legal mandate to protect 'the citizens of Oregon and their postsecondary schools by ensuring the quality of higher education and preserving the integrity of an academic degree as a public credential'(Johansson, Stannard and Koenig 2004; Validation or Invalidation of claim to possess an academic degree 2005).

Tennessee already criminalizes the use of a fake degree to obtain an employment position or to enter university, punishable with a \$2,500 fine or 1 year in prison (AP 2003). In the State of Maine, a bill enacted in 2005 makes it illegal to issue, manufacture and use false academic degrees or certificates to obtain employment, to obtain promotion or higher compensation in employment, to obtain admission to an institution of higher learning or in connection with any business, trade, profession or occupation (Chapter 410 - False Academic Degrees or Certificates 2005). The State of New Jersey's law forbids the use of falsified academic qualifications, deceptive diploma practices and the appending of letters (i.e. PhD etc) if a degree is not earned (New Jersey Commission on Higher Education. 1986). In 2003 the State of North Dakota passed a law entitled 'Academic Credential Falsification' - Chapter 139, House Bill No 1068. It makes it illegal to 'issue, manufacture or use false academic degrees' for employment, educational, business, professional or occupational purposes (Academic Credential Falsification 2003; Carnevale 2003a). During the debate on this Bill, the State Republican, RaeAnn G. Kelsch, chair of the Education Committee, warned of the steep increase in Internet providers and scams, suggesting that the bill was a 'consumer protection type of bill' (Carnevale 2003b).

In 2002 the State Higher Education Board of Illinois became so concerned at the proliferation of websites selling replica testamurs from *bona fide* higher education institutions (Illinois Board of Higher Education. 2002) that an Act was passed in 2003 making it illegal to

'knowingly manufacture or produce for profit or for sale a false academic degree, unless the degree explicitly stated 'for novelty purposes only'. This crime is punishable as a Class A misdemeanour. In addition, the Illinois law prohibits the use of a 'false academic degree' for the purposes of employment, admission to a higher education institution or to an advanced degree program at an institution of higher learning, or for the purpose of obtaining a promotion or higher compensation in employment' (Criminal Code of 1961 2003). The emphasis of this legislation is specifically on replica testamur providers, including the use of a fake diploma, transcript or other document from a legitimate college (Foster 2002).

The State of Washington is one of the more recent US states to pass laws forbidding the use of falsified academic qualifications. State senators unanimously amended and approved a bill that makes giving or using a fake degree a Class C felony, a crime of fraud that entails five years in prison and a \$10,000 fine (Prohibiting false or misleading college degrees 2006). The legislation also makes it illegal to lie orally, as well as in writing, when trying to obtain employment or other kind of benefit (Guerry 2005; Heckman 2006; Roesler 2006). A fine of up to \$US1, 000 can be imposed on anyone who provides misleading or false information on their resume. The State of Kentucky is drafting a bill which would make the use of a falsified credential a class D felony, punishable by a prison sentence of up to five years (Potter 2003b; Maxam 2006; Spears and Mueller 2006).

5.5.2.1.2 Germany

According to German law the use of purchased degrees is a criminal act. The use of all academic and occupational titles is regulated by federal criminal law and by the laws of each Land (state). These laws also cover the use of foreign qualifications, regulating occupational-related designations and making it illegal to used designations or titles that could be taken for

authorized ones. Possible penalties include one year in prison or a fine (Johansson et al. 2004).

5.5.2.1.3 Australia

Within Australia, a range of federal laws exists in relation to counterfeiting; however, these mainly apply to the creation and sale of counterfeit currency, stamps, and equipment designed to create false items. These laws also extend to bonds, money orders and other securities (Crimes Currency Act 1981). Producing and/or supplying misleading, false or fraudulent documents is an offence under the New South Wales Crimes Act 1900 No. 40, and this legislation has been used to prosecute individuals for producing falsified academic documents.

In relation to the particular issue of falsified academic qualifications, South Australia was the first state to specifically legislate in the area, through the Criminal Law Consolidation (Identity Theft) Amendment Act. This Act, passed in 2003, was an amendment to the Criminal Law Consolidation Act of 1935 and is broad ranging in its approach. Part 5A of the Act specifically addresses Identity theft, with section 144B *False identity* etc contending that, '...A person who ... falsely pretends (i) to have particular qualifications.... is guilty of an offence and liable to the penalty appropriate to an attempt to commit the serious criminal offence'(Criminal Law Consolidation Act - South Australia 1935). This law specifically targets individuals who pretend to have tertiary qualifications in order to act in a certain capacity, and obtain financial advantage via deception (Clemow 2004).

While much of the above mentioned legislation in the USA and Germany, specifically addresses the production and use of false documentation, the new Australian amendments

concentrate on areas of false identity and all forms of misleading claims, an approach which appears to be far more encompassing. Whilst legislation is important, it is only one possible control measure; the following addresses other measures to ensure the integrity of academic documentation itself.

5.5.2.2 Anti-counterfeiting and other control measures

Whilst the above mentioned legislation is useful within a given jurisdiction, the globalised, transnational nature of higher education today means that academic documents are being transported and used throughout the world. As such, many new control initiatives have concentrated on ensuring the authenticity and integrity of the original document. These approaches use a range of technologies and methods in order to minimise the risk of falsification and maximise trust in the information contained within the documents.

Anti-counterfeiting technology which has been designed to assist the layperson to independently verify the authenticity of an academic qualification has improved in recent years. A range of security features which the potential counterfeiter would find very difficult or impossible to duplicated, have been incorporated into the production of the certificate.

Research and development in anti-counterfeiting technology has been centred on five main approaches (Hopkins et al. 2003, pp. 250 & 256).

- ➤ Overt technologies these are anti-counterfeiting technologies which are visible to the naked eye and can be verified without the use of a reading device. Common examples are holograms, intaglio printing and colour shifting materials. Other technologies include security inks, watermarks and printed security features. The advantage of these methods is that they can easily be seen by the evaluator and, coupled with an education campaign, can transform all individuals into instant 'investigators'. The disadvantages are that the technology is also apparent to the counterfeiters, so a high level of technology is imperative in producing these features.
- > Covert technologies these technologies are not visible to the naked eye, and require a reading device. Examples include the use of a decoder or lens to produce

specific markings eg the word 'Authentic' which is not visible to the naked eye. The use of 'taggants' is another example, being the application of varnishes, inks, coatings or films on the product, which are not apparent to the naked eye. Readers, such as chemical pens, discover the 'taggant' and prove the authenticity of the item. The disadvantages of this method are that the readers are not available to the common person and, as such, verification of authenticity often lies in the hands of law enforcement officials. Advantages include the difficulties of replication for counterfeiters, as they are not aware of the presence of this particular technology.

- ➤ Combination of overt and covert technologies A mix of the two previously cited technologies is often used and is referred to as 'layered' technologies. This approach uses the advantages of the two previously cited methods via the use of a hologram (overt technology) and a covert technology of taggants to provide for a 'two-pronged' approach.
- ➤ Machine-readable technologies These are either overt or covert and use high speed machines that do not require human presence or interaction. Common examples of this technology are readers for bus tickets, boarding passes for airlines etc.
- Track and trace technologies In addition to providing an authentication service, this method allows producers to monitor a product through its distribution channel. This technology contains both overt and covert technology and the use of numerical data in combination with a database to track an item's movement. An example of this technology is the use of an overt hologram with an individualised printed number or bar code.

A review of the particular approaches employed in different parts of the world in relation to the authentication of academic documents has been undertaken by the author, to ascertain some best practice examples (Brown 2005g; 2006). The following countries employ some of the most advanced academic qualification anti-counterfeiting procedures.

5.5.2.2.1 South Africa

A paper published by Taylor, Vorster et al (2002) pointed to the possibility of South African higher education institutions developing a fully automated online verification system. It is unclear if these original authors pursued the concept, although the global background screening company Kroll MIE (http://www.mie.co.za) has developed, in the author's opinion, one of the most globally advanced online verification systems. In 1999 the company

automated the verification process by linking each of the country's 22 universities and technikons. A centralised database now allows third party queries to be fielded. There are over a million qualifications listed on the system, and the number of enquiries per month amounts to 20,000. Further information on this system is provided in Appendix 29, Volume 2, page 465.

5.5.2.2.2 India

Some of India's higher education institutions have been looking at placing microchips within conferred testamurs as a way to combat an exponential rise in qualification fraud (Upadhayay 2004). The University of Mumbai has introduced new security measures for its certificates. These include logos with 3-D effects, a multi-coloured base, split lining, watermarks and an invisible logo and bar code (Vibhute 2005). Other initiatives in the country include the use of computer software, which allows verifications to be performed online via a barcode and photo technology (Software to help check on fake degrees 2005). The company, Signifera Software solutions (http://www.signifera.com/Depa.htm) is developing a lock and key mechanism called DEPA 1.0. A barcode is printed on the academic documents and is locked through encryption and then printed. In order to verify the authenticity of the academic document, software hosted on an official verification website reads the encrypted data on a scanned image of the document and provides verification within one minute, normally through email (pers comm. Signifera Pty Ltd).

5.5.2.2.3 China

As previously discussed in Chapter 1, China has encountered significant problems with authentication issues surrounding academic qualifications, and has been countering this problem through a variety of means. In 2000 there commenced a trial database project, designed to host a graduate's name, gender, birthdate, degree and diploma serial number (Mooney 2000), so that verification could take place. Later in 2002 the China Higher

Education Student Information Centre was launched. This body is authorized by the Ministry of Education to carry out verification of higher education qualifications using the 'Database for National Higher Education Qualification Certificates Information', collected since 1991. After verification is complete, the system produces an Inquiry Report of Higher Education Qualification Certificates (Verification Report), which is then electronically registered for an online inquiry (http://www.chsi.com.cn/about_en/). Despite this centralised and seemingly secure approach, since its inception, up to five fraudulent verification websites have been created (AEI 2004), causing significant problems. Due to the increasing levels of fraud, China now requires all Chinese residents returning to China to have their overseas gained qualifications verified in China for authenticity (China ready to authenticate all foreign degrees, diplomas 2005).

5.5.2.2.4 United Kingdom

In 2000 Experian (http://www.experian.com) a UK based background screening company sought to develop a centralised online verification system similar in approach to the South African and Chinese models above (Sayers 2000). Despite its innovative approach at the time, privacy legislation prohibited the venture from progressing any further than the conceptual stages. Other more recent initiatives by the UK Cabinet Office have been the assessment of anti-counterfeit certificates and security seals, using polymer banknote technology (similar to Australia, below), but it is unclear if all higher education institutions will be involved. The UK NARIC is also developing an online database of academic documents scanned into a system, an approach similar to the Dutch and US models, all designed to assist in authentication procedures (Vine 2006b).

5.5.2.2.5 United States

In the United States, many higher education institutions outsource their academic qualification verification services to private businesses. Due to the volume of verifications

that need to be performed, companies such as Credentials Inc. (http://www.degreechk.com) and the National Student Clearinghouse (http://www.studentclearinghouse.org) provide verification for currently enrolled and graduated students. Other institutions use alternative forms of technology. Pennsylvania State University, which has over 120,000 requests for academic transcripts each year, is in partnership with a company called GeoTrust to provide a Certified Transcript Service (CTS). This technology allows the registrar's office to issue Adobe Portable Document Format (PDF) files, which contain specific security fields (Wager 2006). Once the recipient opens the document (using any freely available Adobe Acrobat Reader software), the file automatically certifies that the academic institution which created the file had been verified by a trusted organization and that it has not been altered (Lockhart and Serotte 2005). Moves are now afoot to have this technology replicated to the Apostille process (see below), another area which is subject to fraudulent processes.

For those institutions that still issue paper based transcripts, many use tamper proof and secure paper in order to reduce the problem of falsification. Companies that provide this service include Scrip-Safe (http://www.scrip-safe.com/), DocuFide (http://www.docufide.com/index.html), National Transcript Centre (http://www.transcriptcenter.org/) International Security Products (http://www.transcriptpaper.com/).

5.5.3.2.6 Russia

The Federal Agency for Education's "Centre of Educational Activities", also known as InterEducation (http://www.ined.ru/), is the Russian central government organization which verifies academic qualifications. When a qualification is presented to this organization for legalization, up to 5 to 10 specialist staff check each document and perform up to 30 different tests to determine its authenticity. A database of nearly all diplomas issued in the Soviet

Union since 1948 is used to check the registration of individuals and the verification of stolen blank diplomas (NAFSA 2005).

5.5.2.2.7 Initiatives in other countries

In a similar approach to the South African and Chinese models, Sweden is currently refining an online verification program called LADOK (http://www.ladok.se). The LADOK is primarily a student information management system, but is being expanded to include a facility for academic qualification verification. A computerised profile of each student is maintained throughout their study and an identification number is generated for use when the student graduates. This identification number is then used by the student and provided to prospective employers or overseas higher education providers which may then verify the qualification through an online web portal.

In 2005 the United Arab Emirates (UAE) adopted extreme measures to address the problem of falsified qualifications. Using a private background screening company called Integra Screen (http://www.integrascreen.com/), all individuals seeking an employment position within the UAE must have their qualifications verified for authenticity. Individuals are required to submit their academic documentation via post offices (Empost) which subsequently is sent it to the company for verification (Rizvi 2005). This process has now been automated online (Rizvi 2006). The project was deemed so successful in reducing the falsification of qualifications that it is now becoming mandatory for all citizens to be screened. Any individual found with a falsified academic qualification (even if it is not relevant to their position) will be barred from entering the UAE in the future (Issa 2006). A recently publicised case demonstrates the zero tolerance of this model; an individual screened

had a PhD which was deemed 'fake', even though it was issued by a non-official US based university (Salama 2006).

Since 2001 the Netherlands NARIC and NUFFIC has been examining the use of an immigration software/ database called EDISON as a platform for creating an academic qualification verification system. EDISON is mainly used for the authentication of documentation such as passports, and includes strict security requirements. In 2006 the Netherlands commenced development of an online "Diploma Bank" database consisting of high quality scanned images of original documents, which can then be compared to documents presented to evaluators/admissions officers/recognition authorities and other stakeholders. By the end of 2007 it is envisaged to contain over 100 diploma scans, and is to be security tested before being launched (Leeuw 2007). The system is to be piloted in the Netherlands, and then proposed for adoption in Scandinavia, Germany, Belgium and the UK with each member state loading the database with their own national documents (pers comm. Herman de Leeuw). The project is seeking funding from the European Community.

In 2004 the Malaysian government was seeking to address the problem of qualification fraud by developing a centralised degree verification system (pers comm. Mathew Evans DFAT Kuala Lumpar), although this does not appear to have materialised yet. More recent suggestions have included the possible adoption of security paper, and the use of ultra violet light by employers to view documents (Chin 2005), but it is unclear if any of these projects has moved ahead.

5.5.2.2.8 Australia

In comparison with approaches used in the preceding countries reviewed, Australia has been at the forefront in minimising the risk of qualification fraud. A combination of deterrents has

been used, albeit in an uncoordinated and fragmented manner. In 2003 the New South Wales Department of Education was so concerned by the proliferation of falsified academic qualifications, that it developed a brochure entitled 'Is That Degree Genuine?' and made it available on its website (see Appendix 28, Volume 2, page 463 for copy). Dr Refshauge, the Minister for Education and Training at the time, announced that it would be distributed to:

...public schools, TAFE Colleges, public libraries, employer groups, consulates and embassies, seeking to reduce the risk of being stung by individuals who present fraudulent qualifications to try to obtain a job or professional recognition to which they are not entitled (Universities regulation 2003, p.1160).

There is no evidence to indicate whether this distribution occurred, or if it is has been systematically ongoing.

In relation to document security, discussions first took place in South Australia in 2003, with universities looking at the possible adoption of tamper proof paper for parchments and transcripts (Crouch 2003); however, this also did not eventuate. It was not until 2004 that RMIT University in Vietnam first adopted the use of polymer banknote technology in order to minimise fraudulent transcripts and testamurs (Overland 2004; RMIT University 2004). This polymer technology was developed by Note Printing Australia http://www.noteprinting.com, which prints all Australian currency on behalf of the Reserve Bank of Australia. The University of Melbourne, Monash University and the University of New South Wales have negotiated the combined use of this technology so as to minimise the cost of using the same complex clear window design. Further cost reductions were achieved by the ability to print transcripts in house on standard laser printers (Buckridge 2005; Cox 2005). At the time of finalising this study, nine Australian universities have signed up to use this technology.

In relation to online verification systems, Vocational Education and Training Assessment Services (VETASSESS), a company based in Victoria, is working in partnership with the Chinese Government, as the first agent outside of China to authenticate Chinese qualifications offshore. Applications are lodged online via their site at http://www.qualverify.com at a cost of \$60.00 per verification. Whilst this may appear a foolproof solution, claims are already emanating from the city of Shuangfeng in China that false verifications can be 'guaranteed' for up to ten years, by using corrupt employees within government organisations (Ryan 2005a). Apparently in competition with this product, Hobsons Service Centre Australia www.hobsons.com/aus/service is currently piloting a project entitled 'Qualifications

Verification' with Macquarie and Swinburne Universities. Commencing in July 2005, each of the participating universities has been periodically sending a batch of Chinese student applications (undergraduate and postgraduate) to the service centre for random verification. Once the pilot project is reviewed, it is envisaged that a further six universities, including the University of Technology Sydney will join the next phase, resulting in a total of fourteen universities participating in the program (Brown 2005e).

Perhaps one of the most comprehensive and successful projects which protects the integrity of qualifications issued from Australian universities is an online system called Qualsearch (http://www.qualsearch.com.au). Launched in 2005, this service provides a central source for verifications from a limited range of institutions (Healy 2005; O'Keefe 2005; Rood 2005). Created out of technology pioneered by the Queensland Tertiary Admissions Centre (QTAC), the system draws on the existing Automated Results Transfer System (ARTS) and facilitates third party queries via an online portal. The pilot study with a select range of Queensland institutions and members of the Recruitment and Consulting Services Association of Australia (RCSA) has been completed and the system is due to be rolled out across Australia. However, the extent of coverage which the system will offer is unclear, because some universities already have their information published in a fee-free format. The University of Melbourne, for example, has a free web based enquiry service located at

https://sis.unimelb.edu.au/cgi-bin/awards.pl. A charge of \$30.00 is made if a request needs further research to find out more information. The University of Wollongong lists its graduates online at http://www.uow.edu.au/student/graduation/gradroll.html, although this listing is available only from 2001. The University of South Australia maintains an online register at http://www.applications.unisa.edu.au/awardverification which went live in November 2005 (pers comm. Raewyn Todd).

Keeping track of individuals who have used falsified qualifications is a concern for many official providers, and a system for tracking perpetrators is offered by the AV-CC. In his research on qualification falsification in the USA, Keyes (2004, p.65) found that Yale kept a register of several thousand names of individuals who had falsely claimed qualifications from the university. In order to address this problem in Australia, a centralized approach has been maintained, in the form of an academic fraud register based on information provided by each of the tertiary admission centers and universities. The database contains 'persons of interest' and is used by a small number of university staff during the admissions process. Details kept on the database include the name, gender and date of birth of the person, any known aliases, residency status, details of the falsification, the reporting institution and their contact details. This information is not publicly available due to legal and ethical reasons, although it has been operating for over 10 years. The Queensland Tertiary Admissions Centre is the largest contributor to the database, with approximately 15 people identified as submitting fraudulent academic documentation each year. Universities access the information by calling the AV-CC and asking if a certain person is included in the listing. A yes or no answer is provided, with all other information kept confidential. Currently there are approximately 60 names on the database; a privacy policy allows anyone to check whether they are listed on the database, and what sort of information has been collected about them (pers comm. Conor King, AV-CC).

Further developments in the area of qualification verification for Australia are in the areas of biometrics, similar to that employed in Europe. It is the author's understanding that the Department of Immigration and Citizenship (DIAC) is looking at the development of an electronic database using the EDISON technology (as outlined above for the Netherlands) for documents other than travel documents (DIMIA 2005, p.88). Due to the highly confidential nature of the project, the author was unable to obtain any information from the Department. Other initiatives include the company Edentiti http://www.edentiti.com which offers a 'onestop-shop' to host all required identity information for individuals. Academic qualifications do not appear to be on the database yet. The use of voice recognition technology could be seen as a further development for the future.

At a state level, a series of stand alone systems have been created in South Australia, Tasmania and Victoria in order to register all awards conferred by both private institutions and TAFE institutes (Foreshaw 2005). The South Australian equivalent called "Client Qualifications Register" (CQR) has been operating for over three years, but none of its information is accessible to the public. These systems appear to be designed primarily as centralised records and are not intended for third party access. In addition to these systems, each state and territory maintains a Tertiary Admissions Centre (TAC), which, whilst concentrating mainly on Australian admissions, contains specialist staff who evaluates and screens overseas qualifications for admission into Australian institutions.

In relation to professional development initiatives, networking associations such as ISANA (http://www.isana.org.au/) have sought to address the issue of qualification fraud, and have sponsored seminars run by DIMA to provide professional development. A sub committee, formed to address various challenges surrounding qualification verification (see http://www.isana.org.au/InterestGroup.aspx?ContentElementId=51&ParentPageId=36) met in

2004, but nothing further has apparently progressed. Internal policy initiatives appear to be moving forward, with Macquarie University and the University of Wollongong possessing some of the more comprehensive policies and procedures addressing the problem of fraudulent qualifications being used for admission to their programs. Whilst in draft form, these are seen as good practice approaches in developing proactive measures in minimising qualification fraud. See Appendix 30, Volume 2, page 469 for samples of these policies.

5.5.3 Commonly accepted methods of authenticating academic qualifications

The preceding sections reviewed a range of existing legislative and control measures to minimise risk from academic qualification falsification. However, in the ongoing day to day business of checking the authenticity of academic documents presented by individuals for the purpose of employment or further academic study, a number of methods are employed. The following section details some of the most commonly available practices in the area of qualification authentication.

5.5.3.1 Direct confirmation from the conferring institution

One of the most basic but time-consuming processes to determine the authenticity of a claimed academic qualification is direct contact with the conferring institution. This approach is deemed to be one of the most secure approaches (Twenge 2003) and several of these direct verification methods are reviewed below.

5.5.3.1.1 Academic documents sent directly from the conferring institution

This approach entails the receipt of academic documents (generally academic transcripts) sent directly from the candidate's institution, at the request of the individual concerned. Although it does not appear to be common practice in Australia, the United States embraces this approach, seemingly in response to a study conducted by the American Association of

Collegiate Registrars and Admissions Officers (AACRAO) in 1985. This study found that a total of 2,901,000 requests for degree transcripts were made by students from their institution of degree conferral (Shutt 1986). The study highlighted the considerable risk issues involved when these documents were provided directly to the student. In response to a growing amount of fraud, the Michigan Association of Collegiate Registrars and Admissions Officers (MACRAO) developed an 'Official Transcript' policy. This policy asserts:

An official transcript is one that has been received directly from the issuing institution. It must bear the college seal, date and an appropriate signature. Transcripts received that do not meet these requirements should not be considered official and should be routinely rejected for any permanent use (Loyer and Schmidt 1989, p.280).

Whilst unofficial transcripts are seen as acceptable for a preliminary review of results, the policy stresses that they should not be used for decision-making purposes. A full version of this policy is outlined in Appendix 31, Volume 2, page 480.

5.5.3.1.2 Phone/ fax/ email confirmation directly with conferring institution

Another form of secure verification is to contact the conferring institution directly to confirm the graduation details of the individual concerned. The registrar or graduations officer is normally seen as the certifying officer for the institutions, with direct access to student academic records (AACRAO 1987, p.11). Within Australia, privacy laws do not prevent direct contact with graduation officers for a 'yes/no' response to the question of whether a particular individual holds a certain qualification. If additional details are required such as academic results, authorisation must be obtained from the individual concerned. Whilst this is sometimes seen as a time consuming process, it is another common method for verification.

5.5.4.1.3 Preemployment/ preadmission screening

Within the employment industry, the use of background screening companies is becoming more acceptable, but is sometimes deemed cost prohibitive and time consuming. A number of pre-employment screening bodies exist around the world. In the United States, the US

Investigation Services (http://www.usis.com) part of federal government personnel management, purchased the rights to Bears Guide (cited above) and used their services as part of their screening process. Within Australia there are companies such as Quest (http://www.questresearch.com/), Australian Background (http://www.grm.net.au/) which provide a similar background screening service.

Some overseas higher education institutions have employed the services of professional background screening companies to undertake the process of screening their students. A number of Ivy League graduate schools in the US use this process, including the Wharton School at the University of Pennsylvania, which hires an outside firm to perform background checks on every admitted student. Not all of these, however, have proven to be failsafe (Vinik 2005). The Dean of Wharton School, Patrick Harker, recently claimed that 'Cheating, from padding resumes to falsifying recommendations is more pervasive in the admissions process than ever before. If people come in as cheaters, it is hard to change them...' (Alsop 2006). As part of their efforts to minimize fraud in the area, The Empire State College, part of State University of New York, and the Harvard Business School send all the paperwork from admitted students to external evaluators for authentication (Mindlin 2004).

5.5.3.2 Documentation provided by candidate

Another frequently used method for assessing an applicant's claimed academic qualification is to accept documentation directly from the individual concerned. The approach is used in a variety of settings, mainly due to its convenience and low cost. The following sections outline the different forms this may take.

5.5.3.2.1 Original academic documents provided by applicant

This method entails the applicant providing the original academic transcripts/ testamur to the interested party. As mentioned earlier, this method gives the applicant the opportunity to make alterations to the document in the sorts of ways detailed in Chapter 4. Individuals who are not trained in document forensics or without a detailed and intimate knowledge of the academic documentation issued by most higher education providers would have difficulty in verifying the authenticity of such documents. After a spate of academic fraud issues in the early 1990's, Deakin University now requires new academics to provide, within 14 days of employment, original copies of academic documents or the offers of employment may be withdrawn (Jones 1992, p.17).

An individual may provide a photocopy of academic qualification or simply make claims in a CV, without providing additional documentation. One of the more common verification methods for photocopies of transcripts or testamurs is through the use of a Justice of the Peace. A review of this process reveals that a Justice of the Peace does not attest to the authenticity of a document that is being verified. The process merely certifies that the photocopy of the original document is a true and correct copy of that original document. A Justice of the Peace is not required to, and does not authenticate the original document presented by an individual. A review of the documentation provided to Justices of the Peace, including the Guidebook and Training Manual makes no mention of determining the authenticity or legitimacy of documentation that is being attested to (Royal Association of Justices of SA Inc 2004b; a). This fact is made clear through the JP's use of the stamp, which contains the following information:

I certify this	to a be a true and correct copy of the original document sighted at
(Place)	on (Date)
•	ID No)
(Print Name)	
A Justice of	the Peace in and for the State of South Australia.

Despite its possible drawbacks, the certified copy of an academic document is a common policy approach and one that appears to be most popular with both recruiters and higher education providers.

5.5.3.2.3 Apostille

The Apostille service is a mostly US and European process, similar to that provided by a Justice of the Peace in Australia, and does not determine the authenticity of the source document. Bear and Bear (2003, p.62) have argued that this form of verification is often abused by some non-official providers in order to feign legitimacy. They provided a simple and entertaining example of how this could occur.

Let's say you sit down in your kitchen and start a fake school, Godzilla University. You sell me a medical degree for a thousand dollars. You take the diploma (and the phoney transcript you just typed up) to your local Notary Public, who, for \$10, will notarize your signature (that is, compare it with the one on your driver's license and say yes, it is the same). Then you take (or send) the phoney diploma and notarized certificate to your state capital, where they will confirm that it is indeed a certificate signed by a licensed notary, relating to the diploma. And finally, you submit your packet – the fake diploma and transcript, the notarization, and the state confirmation-to the federal government (Department of State or an embassy) and they will issue the Apostille or authentication.

Providers such as Instantdegrees (http://www.instantdegrees.com) previously profiled in Chapter 4 offer this 'service' for degree recipients to validate and authenticate their qualifications. Ezell's (2005) research also found that many degree mills encouraged the use of the Apostille for persons using their transcripts and degrees abroad as, '...persons receiving these documents are blinded by the seals, ribbons, and signatures, and spend little time examining the underlying documents'. As a result of these concerns, the Hague Conference on Private and International Law http://www.hcch.net/ instigated a review of the procedure in

2005 with a view to possibly abolishing the notarisation service provided for academic documents. In the briefing document sent to over 28 countries, it contended:

...there is growing concern about falsified diplomas and diplomas from so called diploma and degree mills (i.e. diplomas that are being offered over the internet by institutions that are not officially recognised characteristically with no need for any course work as credit is given for 'life experience'). Diploma mills routinely offer the possibility of having an Apostille attached to a perfectly valid notarized copy of the diploma, thus creating the appearance of an official or otherwise recognised diploma (Permanent Bureau 2005, p.4).

The concerns raised over the problem of fraud and the attestation of Apostilled documents has caused the development of a pilot 'e-Apostille', using Adobe PDF technology to produce secure copies of documents which cannot be fraudulently altered (Bernasconi 2006).

5.5 Networking and the sharing of information on academic qualification acceptability and authenticity

Perhaps one of the most important control tools assessed by the author has not been in the area of tangible resources, but the global networking of professionals in the area. From a risk perspective, Renn (1998, p.66) contended that the social sciences should inform policy makers about public concerns, develop better methods of mutual communication, and provide models for the type of discourse needed. In area of academic qualification acceptability and authenticity it is argued that government agencies, along with other public networks need to develop monitoring and reporting systems leading to the identification of misleading activities (OECD 2003, p.13).

Historically, the relationship between academic qualifications and interested stakeholders has been based upon 'communities of trust' (OECD 2001), a process of networking whereby employers and other stakeholders were generally familiar with qualifications presented to them. It is apparent that the forces of globalisation and internationalisation have eroded these

trust networks, giving rise to gaps in the communication process which could allow fraud to be perpetrated (Clifford 1983, p.21). In order to overcome these problems, these networks need to be strengthened and nurtured to maintain currency with current trends in the area.

The majority of contributors to AACRAO's most recent publication on qualification fraud and non-official higher education have argued that the most effective approach to minimising the problems surrounding academic qualification evaluation is for interested parties to network, share resources and communicate (Adán 2006; Devlin 2006; Ezell 2006; Koenig and Shephard 2006). Other credential evaluators concur, contending that the most appropriate methods to treat the symptoms of non-official higher education is to network, share intelligence on best practice approaches and establish global enforcement contacts that engage stakeholders (Johansson 2005b; Vine 2006b). This networking and sharing of resources should be translated into training and awareness of qualification verification systems (Hamshere 2005) with a distinct focus on establishing and maintaining strong communication ties within the educational community (Cook 2005b, p.1).

A paper presented on behalf of the National Union of Students in Europe at a UNESCO conference mirrors these sentiments and criticised the current lack of effective communication and information sharing in relation to non-official higher education provision. The author posited:

The advice and the information about the quality of Transnational Education to the public are insufficient. This allows for rogue providers to offer their fraudulent qualifications to ill-informed citizens. This clearly shows the need for institutions, which monitor the activities of Transnational Education providers or report bogus institutions to appropriate national or international authorities (Scholz 2005, p.4).

The OECD in its previously cited publication 'The Guidelines in Quality Provision of Crossborder Higher Education' acknowledged these concerns and recommended that student bodies (amongst other stakeholders) should be educated and provided with resources so that informed decisions could be made regarding the offerings currently available (OECD 2005b). There is no evidence, however, that any significant attempts to provide these resources have taken place.

In his presentation to the Council of Europe seminar on recognition issues pertaining to the Bologna Process, Professor Stephen Adam of the University of Westminster argued that there was an urgent need to address the current information provision tools available in relation to recognition. In his paper, he did not criticise the available tools, but more importantly, the glut and confusion that was a result of the lack of coherent implementation strategies. He maintained that there needed to be a systematic, coherent approach to their provision (Adam 2002, p.7). More recently, Garrett (2005, p.15) concurred, suggesting there needed to be a more systematic use of credential evaluation agencies, while national authorities should provide updated information on officially recognized institutions and protect the titles of the awards they offered in order to assist in exposing 'bogus and fraudulent higher education institutions and activities' (dos Santos 2002, p.109 & p.110).

In relation to document authenticity, similar concerns have been expressed. For example, the use of polymer paper and online databases is seen as an excellent step in order to protect the integrity and security of academic credentials. Many of these new approaches are self-authenticating, although there has been no public education campaign on how to use the security features inherent within this technology. An efficient communication process on the use of these technological features to the general public is paramount for the technology to be actually used correctly (Renesse 2005, p.94).

Within Australia there is an identified lack of awareness training on the risks surrounding falsification of academic qualifications (ICAC 2002b, p.38), whilst in the area of acceptability, a recent discussion paper issued by the Australian Productivity Commission was critical of information dissemination regarding qualification recognition and access to information. It found:

...poor information on skills assessment and recognition processes and requirements in Australia can present obstacles for prospective immigrants. Although done well in many cases, skills assessing bodies could look to improve the dissemination of information to prospective immigrants about specific recognition, licensing and registration processes in Australia. The Commission supports measures and strategies to better coordinate and streamline such information at a national level (Productivity Commission 2006, p.167).

While existing information networks and databases hosted by respected and recognised bodies act as useful clearing houses for information pertaining to academic qualification acceptability and, to a smaller extent, academic qualification authenticity (OECD 2003, p.8), they only serve the national interests of particular jurisdictions. Furthermore, the author has determined that they are expensive, and are not actively promoted to interested stakeholders. The OECD conceded that communication between higher education institutions, academic recognition information centres, employers, professional bodies and the labour market was in need of significant improvement (OECD 2003, p.3; 2004g, p.13), yet few solutions have been offered. It is evident that the resources are available, and the networks exist, but the layperson does not know where to obtain the correct resources or how to use them effectively (Adam 2002, p.3 & 7).

It has been argued that, with the increased use of credentials, information technology should be used to ease the interpretation of academic qualifications (Bills 2003b, p.461) and facilitate more informed decisions. A report by the European Commission found that the Internet was the main medium used by prospective students to obtain information on higher education

institutions. As such, a central information portal of higher education providers was seen as the most important tool to be used by prospective students (Perceptions of European higher education in third countries: final report 2006, p.217). It is therefore evident that there is an urgent need for a reliable, transparent information system for the current global higher education and job markets, dedicated to determining the value of particular higher education qualifications (dos Santos 2002, p.104; OECD 2003, p.3; Hallak and Poisson 2007, p.253). The risk treatment model proposed for this study will explore such a proposition.

5.6 Summary and conclusions

This chapter has critiqued a broad selection of control measures, ranging from accreditation to assist academic qualification recognition processes, through to legislation and anti counterfeiting technology to address the falsification of academic documents. The development of control measures has created new sources of information with some countries allocating more resources than others for this purpose. The investment in the Bologna processes and Diploma Supplement, whilst slow to be adopted in Australia, is seen as an important step forward in the recognition process, whilst the attempts to create registers of alleged 'degree mills' and substandard institutions appear to be problematic.

Despite a comprehensive review of the literature, the author found that it was largely silent as to what resources and methods interested stakeholders used to assess academic qualifications in Australia. With such a myriad of resources available, the author is interested to understand what practices are apparent in the different populations which are the focus of this study. Do stakeholders within higher education and the recruitment sector check the acceptability and authenticity of claimed qualifications? Are the resources and methods available to assist in this process actually being used? If so, what is the take-up and what reliance is being placed

on the various acceptability and authenticity methods, and what levels of risk are stakeholders placing themselves in when using particular methods? These questions are addressed in the research investigations that follow. The following chapter outlines the research questions and methods adopted to collect and analyse data from recruitment agencies and the official higher education sector in Australia. The results are reported in Chapter 7 and Chapter 8 uses these results to propose a new approach to verifying the acceptability and authenticity of academic qualifications.

Chapter 6 – Risk analysis and evaluation: research design and methodology

This is not a big issue for Australian universities. Sure, they [fake operators] do turn up on occasions, but it's not as if every second piece of paper is a false one. John Mullarvey, Chief Executive of the Australian Vice Chancellors Committee, when asked about the risk of fake degrees affecting Australian Universities (Buckell 2003).

6.1 Preamble

The above statement by John Mullarvey, the then Chief Executive of the Australian Vice-Chancellors Committee, reveals the ambiguity and potential for common confusion between the two separate issues of non-official providers and falsified qualifications within the official Australian higher education sector. His statement is a revealing reflection of the poor level of understanding within Australia about the risk of inferior, sub-standard degrees implied in the term of "fake operators", as well as the risk of counterfeit or "false" degree documents. At the level of the Chief Executive of the AV-CC, there is a dismissal of the problem as not serious, even when there is no exact knowledge of the frequency with which counterfeit documents or qualifications from non-official providers are presented to Australian universities.

The remaining chapters of this thesis report an investigation into the way the two main users of academic qualifications in Australia – recruitment agencies and the official higher eduction sector (separated into private and public providers) deal with the potential risk of non-official and fraudulent academic qualifications being presented to them. As a precursor to this research, the author was interested to ascertain the level of risk which the falsified academic qualification market posed to the official Australian higher education sector. This was addressed through an exploratory research question.

6.2 Exploratory Research Question

Despite the known difficulties of research into areas of academic fraud (Eckstein 2003), the author undertook a small scale, exploratory investigation to try to determine the level of Australian counterfeit testamur fraud available through the Internet. The research question which guided this part of the investigation was a follows:

How many providers of falsified higher education qualifications currently operating on the Internet will sell an Australian qualification?

6.2.1 Exploratory research method adopted

Determining the level of Australian replica testamur fraud on the Internet is a challenging process. The author contemplated purchasing a range of offerings from some sites, but the risk of not receiving any item for a substantial amount of money made this unfeasible.

Notwithstanding this, the author was still determined to obtain some measure of provision and associated risk in relation to Australian qualifications.

In order to obtain this information on fraudulent providers, a fictitious persona was created in order to survey the providers located on the internet via an anonymous email account. This approach is similar to that employed by Reid (1963) who, in his attempts to determine the level of degree mill activity in the United States, created five fictitious, foreign-sounding "pen names" and wrote letters directly to a list of schools. He included deliberate misspellings and little information about the enquiring students, so as to convince the providers that they were dealing with a *bona fide* candidate. Using Reid's methodology, the author's correspondence purposely contained spelling mistakes to feign authenticity and appear legitimate to the providers. On the 10th September 2004, a free Google email account (http://www.gmail.com) was opened in the name of 'Jong Liu'. 'Jong' was seeking to purchase a replica testamur

from an Australian University, in particular an MBA from the University of Sydney. In order to preserve the anonymity of 'Jong', it was important not to send all emails in bulk, as this would have alerted the network of providers. As such, communication with the identified providers took place over an extended two and a half year period up until 14th January 2006. The outcomes of this exploratory research question are reported in Chapter 7.

6.3 Main research hypothesis and research questions

The sociological theories of human capital and screening theory outlined in Chapter 2 contended that higher education qualifications were valuable, and provided an important (albeit inaccurate) proxy measure of an individual's ability and capacity. Furthermore, it was argued that the forces of credentialism contributed not only to the burgeoning supply of, and demand for, official higher education programs, but also to a concurrent rise in non-official and falsified academic credential providers. Educational institutions use qualifications as a basis for entry into other qualifications, and qualifications are used by employers for entry into employment positions (Keating et al. 2005, p.11). During the career of an individual who has earned a degree, these interested third parties assess this academic qualification, and use a variety of documented evidence and resources to assist in making a determination of that individual's competence for future employment, promotion or further study.

Based on the above preamble, the author hypothesised that among Australian recruitment agencies and private and public providers in the official higher education sector, the proportion which assessed degree qualifications for their acceptability and authenticity, would be expected to be equivalent. Furthermore, each would place equivalent trust in a range of resources and methods to minimise risk in the academic qualification evaluation process.

This trust was measured by the purposeful use of resources and methods to determine the

acceptability and authenticity of academic qualifications. Underlying this was the assumption that the less frequent the determination of acceptability and authenticity, and the lower the use of resources and methods for determining acceptability and authenticity, the higher the risk of occurrence of accepting a) a non-official academic qualification as official and, b) a false official academic qualification as genuine. In limiting the overall hypothesis in the above ways, the author chose not to investigate the risk from non-official or fraudulent degrees in terms of consequences, either for individuals or organisations, but has raised this issue as one of concern for future research.

From this general hypothesis, the following research questions were posed:

Research Question 1:

For recruitment agencies, private official providers and public official providers of higher education in Australia, is there equivalence among the percentages of those that determine the:

- a) acceptability of higher education qualifications?
- b) authenticity of higher education qualifications?

Research Question 2:

Is there equivalence among the percentages of recruitment agencies, private official providers of higher education, and public official providers of higher education in Australia in the use of the most commonly available resources and methods to determine the:

- a) acceptability of higher education qualifications?
- b) authenticity of higher education qualifications?

Research Question 3:

Is there equivalence among recruitment agencies, private official providers of higher education, and public official providers of higher education in Australia in relation to the:

a) importance placed upon the criteria for a system of verifying higher education qualifications?

- b) perceived effectiveness of methods for authenticating higher education qualifications?
- c) preferred methods of communication for a degree verification system?

Research Question 4:

For recruitment agencies, private official providers of higher education and public official providers of higher education in Australia, what are the overall levels of risk they are exposing themselves to in relation to determining the:

- a) acceptability of higher education qualifications?
- b) authenticity of higher education qualifications?

6.3 Research design and methodology

The research design chosen for this study involved qualitative exploration of current practice, measured via a semi-quantitative analysis component, using a Delphi panel of experts. A research design is not deemed to be a neutral framework, but a set of procedures that are used to collect and analyse evidence (Balnaves and Caputi 2001, p.87). The design chosen for this study employed a mixture of quantitative and semi-quantitative data collection and analysis procedures in order to attain the research objectives. This was necessary due to the nature of the data collected, as no single society has been able to establish uniform criteria for all types of risk (Renn 1992, p.54). Perspectives clearly vary on the level and valuation of risk, and the problems associated with quantifying and measuring risk are significant. Due to these challenges, the levels of measurement utilised for this study required wide consultation with a range of experts in the area of credential evaluation and authentication in order to reach a broad consensus on an appropriate evaluation measurement.

In designing the approach, format and research questions posed for this study, the author was aware of a range of limitations. The literature review demonstrated that where researchers

had previously addressed areas of fraud, the generally accepted methods of social research could not be applied (Alatas 1968), with empirical data in the area extremely limited (Eckstein 2003). Some distinct challenges were also present in the area of nomenclature, and the use of finite definitions which could impact on data collection. This problem was experienced by Stewart and Spille (1988, p.36) with their pioneering research addressing the diploma mill quandary in the United States. They found that the imprecise definition of what constituted a diploma mill (discussed previously in Chapter 4) caused resistance to standard statistical approaches, and argued that any presented data should, '...be considered an art and not a science'. Garrett (2005, p.1) concurred, suggesting that fraud in the various forms perpetuated within higher education was a complex matter, and by definition eluded the accepted research strategies of comprehensive data collection, analysis and direct recommendations.

Since the phenomena under consideration could be seen as a 'shady transaction' (Alatas 1968), individual interviews, questionnaires and statistical analysis on qualification fraud could not be applied. Robust data on non-lawful practices in higher education is not available (Garrett 2005, p.3), mainly due to the fact that neither they (non-official and fraudulent providers), nor their clients, were anxious to broadcast news that might bring them into disrepute (Stewart and Spille 1988, p.36). The author was mindful of the problems with this research topic, and knew that any research effort designed to quantify the size of qualification fraud and the demand for non-official qualifications was difficult, if not impossible. Given these challenges a sociological approach was employed whereby observing the phenomenon, its effects, and then gathering as much confidential information as possible was seen as more effective. As opposed to applying in-depth statistical analysis on the supply of non-official and falsified academic qualifications, this research took an alternative approach, and addressed the risk mitigation responses to the perceived problem via the assessment of practice. It was

hypothesised that collection of data on the practice of academic qualification verification and the risk assessment provided by an independent expert Delphi panel would elucidate important data on the perceived risk levels to which each of the selected populations could be exposing themselves, through the processes they used to determine the acceptability and authenticity of claimed academic qualifications.

6.4 Subject populations for investigation

There are four main populations in the Australian context that see undergraduate academic degree qualifications as being important items. These are the general employment industry, the human resource recruitment industry, private providers of postgraduate qualifications and public providers of postgraduate qualifications in Australia. It is assumed that each of these populations uses undergraduate academic degree qualifications as a measure of perceived competence and as a prerequisite for either entry into employment or postgraduate study in Australia. When assessing these potential populations, the author recognised that obtaining a representative sample of the entire employment industry would be very difficult to achieve and decided to narrow the research to the latter three populations. These populations have been described as 'gatekeepers' of qualifications (Cole et al. 2003; DeFleur and Adams 2004), with members mandating and valuing an academic degree qualification for either an employment position or entry into postgraduate study. The following provides more detail on the populations being investigated.

6.4.1 Members of the Recruitment Consulting Services Association in Australia

The Recruitment and Consulting Services Association of Australia and New Zealand (RCSA)

http://www.rcsa.com.au is the peak body for the employment services industry of Australia

and New Zealand. This organisation represents both the private and public recruitment industries with a 3,200 strong membership drawn from a diverse range of organizations consisting of individuals, small owner-operated businesses, listed and non-listed Australian companies and large multinational corporations. Recruitment agencies are private companies, used by employers to expedite and minimise risk surrounding the recruitment process of individuals for positions of employment. Members of the RCSA were seen as important for this research as they were deemed to be the primary users of existing resources and procedures designed to authenticate and determine equivalency of degree qualifications for entry into requisite positions.

For the purposes of this study, only corporations and branches were surveyed as these represented the core business of employment recruitment and selection across Australia and New Zealand. Furthermore, only those agencies that mandated an undergraduate degree qualification for an employment position in Australia were invited to partake in the research.

6.4.2 Private official providers of postgraduate higher education in Australia The private sector of higher education is an important and growing sector within the official Australia higher education landscape, with over 60,000 full time students across Australia (Parker 2005). The author saw private higher education providers as an important part of the study, particularly those that mandated an undergraduate degree for entry into their

In order to determine the members of this category, the author consulted the Australian Qualifications Framework (AQF) Register (located at

postgraduate programs.

http://www.aqf.edu.au/register.htm#highered) and analysed each respective state and territory

register. Criteria for including a private provider in the population being investigated were that the organisation had to confer postgraduate qualifications in its own right, and not rely on degree granting authority from another institution. The institution was also required to offer a postgraduate program where a first undergraduate degree was mandatory for entry.

The first count of private providers offering postgraduate programs listed on each state register totalled 78. This initial figure did not double count providers registered in multiple states (accreditation and degree granting authority for higher education providers must be approved in each state and territory). Further analysis of the initial 78 providers found some institutions needed to be removed from the population due to the following reasons:

- The Armed Forces private providers listed on the ACT AQF Register (4 in total) needed to be removed from the count. The postgraduate programs offered by the Army, Air Force, Navy and Department of Defence are not open to external candidates. As such, none of the program mangers assessed external candidates for their programs and did not mandate an undergraduate degree for entry.
- The Centre for Intermodal Systems Management (listed on the NSW AQF Register) had changed its status and was no longer conferring its own degrees degree granting authority was derived from Melbourne University Private.
- The Mt Eliza Business School (listed on the Victorian AQF Register) at the time of the survey, had merged with the Melbourne Business School, with the degrees being conferred by the University of Melbourne.
- International Learning Management (Australia) (listed on the QLD AQF Register, and later renamed the Institute of Technology Australia) was yet to admit any students into its programs and therefore could not take part in the study.
- The University of Ballarat operated the IIBT in South Australia, but the degrees were conferred by the University of Ballarat.
- Mueller College of Ministries reported that they no longer offered postgraduate degrees and therefore could not participate in the study.

In addition, some private providers indicated that they were not accepting intakes for the 2005 academic year. These providers were also excluded as they would not have performed any recent assessment of candidates' qualifications for entry into their programs. Upon completion of this analysis, a total population of 69 private providers offering post-graduate programs was deemed eligible to participate in the study.

6.4.3 Public official providers of postgraduate higher education in Australia

The AQF Register was again consulted to determine the number of public and other self-accrediting providers of higher education offering postgraduate programs that would be eligible to participate in the study. At the commencement of the study, the register, located at http://www.aqf.edu.au/register.htm#university, listed 38 public self-accrediting universities and 6 self-accrediting 'other' providers of postgraduate qualifications, making a total of 44 institutions as the population. On June 6th 2005, Melbourne University Private withdrew its independent self-accrediting status and merged back into the University of Melbourne. In addition, during the surveying of private providers, the author had included The Melbourne College of Divinity as this was also listed as a private provider on the Victorian State AQF Register. Upon contacting The Australian Film, Television & Radio School, the author was informed that their specialised entry requirements did not mandate the requirement of a first degree for postgraduate programs. These institutions were therefore removed from the population, leaving 41 self-accrediting higher education providers as the total population eligible for the study.

6.5 Data collection procedures and statistical methods employed

Two main data collection and statistical methods were employed for this study, and were implemented over two discrete stages. The first stage consisted of collecting data from the three main populations under review for statistical analysis. The following section outlines the methodology for stage one of the data collection and analysis.

6.5.1 - Stage 1 - Data collection method for subject populations and tests of equivalence

6.5.1.1 Construction of the survey instrument

The first part of the data collection process was to develop a survey instrument to collect information on the academic qualification acceptability and authenticity practices employed by the institutions in each of the three separate populations. Three similar online surveys were developed. Registrars and/ or senior qualification evaluators in the private and public providers were asked to respond to the survey. From the recruitment sector, the most senior owner of the RCSA member institution was asked to respond. Online surveys were seen as the most appropriate data collection technique, since the author could not directly observe the subjects of study (Balnaves and Caputi 2001) carrying out the assessment of academic documents. Each survey was broken into three main sections.

- Section 1 sought to obtain demographic data from each of the respondent institutions.
 Due to the sensitive nature of the study, the author collected only basic information,
 on the assumption that participation rates would increase if respondents felt they could not be readily identified.
- Section 2 sought to determine if the respondent institutions checked the acceptability and authenticity of academic documents. If they did not, those responding for the institutions were asked to provide reasons behind this decision and then exit the survey. For those institutions that did verify, respondents were asked if they used a range of the commonly available resources and methods discussed in Chapter 5.

Options were provided for respondents to provide additional information on any other resources and/ or methods they used. Respondents were not asked to rate each method/ tool, but merely to state if it was used/ not used.

• Section 3 obtained the opinion of the person responding on a range of technology and communication processes in the area of qualification verification and authentication.

The resulting survey instrument consisted of a combination of nominal, interval, multipleitem and summative scale questions, designed to elicit the required responses and provide
variability of questioning technique. Question formats included multiple choice, Likert scale,
closed narrative questions, and open-ended narrative questions. The open ended questions
were used specifically to elicit responses that were not included among the provided choices.
A total of twenty questions made up the instrument, which used specific 'pathing' related to
the answers given to guide the respondents through. Contingency questions were also used in
order to reduce confusion and maximise the rate of usable responses gleaned from the
populations (Balnaves and Caputi 2001).

The length of the survey instrument was of a distinct concern to the author, and every effort was made to minimise the size and complexity of the questions posed. For the recruitment industry, it was acknowledged that these participants had little time to participate in research studies. Likewise, registrars and admissions staff within the public and private official providers of higher education had significant workloads that limited the efforts they could make in furnishing the information sought by this study. As such, the author tried to ensure that the questionnaire would take no longer than 10 minutes to complete. Overall, the structure of the instrument was purposely designed so that the operational definitions and methodology in measuring the constructs to be covered in the second phase of the

investigation were reflected in the issues presented in the questionnaire (Balnaves and Caputi 2001). A copy of this survey instrument for each of the three populations is to be found in Appendix 40 and 41, Volume 2, pages 498 to 509.

The wording of the questions for the RCSA survey was developed in consultation with the CEO of the RCSA and the Director of ValuesBank Research. This was to ensure that industry specific 'jargon' was incorporated where appropriate, and that the instrument was delivered in accordance with past studies conducted by the company. As Balnaves and Caputo (2001, p.81) have contended, the choice of words used in survey questions can have a dramatic effect on the result. Their work revealed the importance of ensuring that survey participants understood the underlying meanings of the questions posed to them. They recommended that a researcher should understand the frames of reference of the people under study, and the author made a determined effort to achieve this. Since the author had had significant experience within higher education administration, the nomenclature used for these surveys was consistent with the commonly accepted practice which he was familiar with.

Whilst every effort was taken to ensure that the questions were unambiguous and non-leading, it was expected that there still would be a tendency for individuals to display social desirability bias and give positive or socially acceptable/ desirable answers. Questions were purposely refined and tailored to try and minimise this effect.

6.5.1.2 Data collection and analysis procedures

The survey instrument was delivered to all three populations via two online survey platforms.

The first instrument, distributed to the RCSA, used a professional research company

ValuesBank Research http://www.valuesbank.com.au/, which acted on behalf of the RCSA

and the author. In order to protect the anonymity of the RCSA membership, the author was provided with a raw data file with no names attributed to the data. The other two surveys were conducted by the author using Surveymaker http://www.surveymaker.com.au, an automated web based system provided by Griffith University, Queensland.

All surveys commenced with a preamble, explaining the basis of the study and informing the participants that ethics approval had been obtained. Participants were guaranteed anonymity, and that demographic details could not be linked with individual responses. Whilst it is acknowledged that the interview or face-to-face method of surveying is generally viewed as the best method for obtaining a high response rate, this was not physically possible due to the national coverage of each population. Phone surveys were considered, since they are acknowledged as having a higher response rate, but were not deemed feasible. An online, web based survey was chosen as this was the least expensive, although prone to high non-response rates. Manual and automated follow-up emails were used to encourage participants to furnish their responses to the survey. The resulting data were collected and coded in SPSS for statistical analysis.

The statistical analysis tool of analysis employed for Stage 1 was equivalency testing. Although equivalence testing may be applied to any type of hypothesis testing, it is most appropriate when the primary interest is to verify rather than reject a null hypothesis, and to prove the non-existence of difference between groups (Wellek 2002; Streiner 2003). The traditional approach to hypothesis testing is null hypothesis statistical testing (NHST); this approach uses a mean difference of zero as the basis for computing the probability of obtaining the test statistic value (Rogers, Howard and Vessey 1993; Tryon 2001). The method is demonstrated in the following formulae; for the null hypothesis there is no

difference between two means ($u \, sub \, t$ and $u \, sub \, m$), whereas if the alternative hypothesis is accepted, there is a difference (Warner 2002):

$$H_0: \mu_{l} - \mu_{m} = 0$$

$$H_1: \mu_1 - \mu_2 \neq 0$$

Under this traditional approach, the null can never be proven; all that can be done is either to reject, or to fail to reject the hypothesis (Streiner 2003). Conventionally a probability value (P) greater than 5% (P>0.05) is called "not significant". The term wrongly implies that there is no difference, whereas all that has been demonstrated is an absence of evidence of a difference; these are completely different statements (Altman and Bland 1995, p.485). For example, using a NHST approach and finding that test reliability is not significantly different across groups is erroneously interpreted as equivalent test reliability (Tryon 2001, p.373). Statistical equivalence testing provides for a method to properly reach these conclusions, whereby the meanings of the null and alternative hypotheses are reversed, along with the meanings of Type I and Type II error and of power (Streiner 2003).

In a two sample difference of means test, equivalence testing has the following hypotheses (Warner 2002):

$$H_0: \mu_t - \mu_m \leq \theta_L \quad or \quad \mu_t - \mu_m \geq \theta_U$$

For the above null hypothesis, this is defined as the difference between two means (u sub t and u sub m) and either is less than or equal to zero minus the non-meaningful difference, designated as theta sub L, or is greater than or equal to zero plus the non-meaningful difference, designated as theta sub U. As such the difference is larger than plus or minus the non-meaningful difference, referred to as theta.

$$H_1: \theta_L \leq \mu_I - \mu_m \leq \theta_U$$

For the alternative hypothesis, this is the opposite of the null. The actual difference between the two means is greater than or equal to the zero minus the value of *theta* (the non-meaningful difference) and is less than or equal to zero plus the value of *theta*.

For this study, the author hypothesized that since undergraduate degree qualifications were mandated as pre-requisites for the three populations *vis a vis* acceptance into further study or into an employment position, there was likely to be equivalence in their approaches to verifying acceptability and authenticity. As such, the author theorised that there was at least a 5% difference between private and public providers of higher education and recruitment agencies in the methods and procedures for those that determined acceptability and authenticity of higher education qualifications.

To operationalise this hypothesis, a critical Type I alpha (error rate) level of 5% was chosen for each case, using a confidence interval level of 95%. If the 95% confidence interval for the difference encompassed any part of the + or – 5% allowable difference in percentages (proportions) between each of the samples, they were considered to be equivalent. If the true difference could not be expected to exceed the allowable difference (5%) on at least 95% of the occasions when such differences were observed, we could not reject the thesis that the true difference was equal to the allowable difference (5%) or less.

The data analysis for the three populations in relation to equivalency testing is presented in Chapter 7.

6.5.1.3 Sample size justification and response rates

The aim of sample size justification is to ensure that the overall results of a study are representative of the larger population under review. Sample size justification is tied to power

analysis, and the likelihood of achieving statistical significance. It follows that the larger the sample size, the more likely it is to be representative of the population under scrutiny and large enough to detect statistically significant effects in the populations. The determination of what is deemed an 'adequate' rate of response is largely subjective, and dependant upon a variety of factors. Research by Babbie (cited in Balnaves and Caputi 2001, p.85) contends that a 50% response rate for a questionnaire is adequate, 60% is good and 70% is very good. As the surveys for this study enjoyed more than a 50% response rate from each of the populations, this was deemed more than adequate for the study at hand. The following sections detail the response rate received from each of the three populations under investigation.

6.5.1.3.1 Recruitment and Consulting Services Association of Australia and New Zealand The RCSA, at the time of this study, consisted of a total membership of 3,200 individual members. However, as outlined previously, only corporations and branches were part of this study. Due to the diversity of its membership, it was necessary to use a panel of invited respondents to create a representative sample of business members, plus a general broadcast email. According to Brett Warfield, CEO of Values Bank Research, since implementing this method of recruiting respondents, the number of survey responses for past RCSA studies has varied between 118 and 134 (pers comm.). Purposive sampling was therefore implemented to ensure that there was maximum representation across the industry. An absolute response rate is deceptive for the RCSA population as this can be made up of a large number of small businesses. The use of an invited panel of large companies and self-selecting smaller companies ensured that the responses were representative of the entire recruitment industry. This current study's response rate surpassed the previously best response rate by 10 to achieve a total of 145 respondents. Julie Mills, CEO of the RCSA, confirmed that this was the highest response rate received for a survey undertaken by the RCSA to date (pers comm.)

Of the 145 survey responses received, 143 responses were assessed as usable. Further analysis determined that two responses contained data errors that could not be repaired, leaving a total of 141 responses representing a total of 241 RCSA member offices across Australia. Twenty-four of these responses emanated solely from New Zealand, and did not represent Australian practice. As this study was based solely on Australian practices, these had to be removed so as to not misrepresent the results. A total of 117 cases made up the entire usable sample. Of these 117 responses, 22 of the respondents stated that they did not recruit any individuals into a position where a degree qualification was mandatory as a prerequisite for the position. The final sample therefore consisted of 95 usable responses related to academic qualification usage.

6.5.1.3.2 Private Official Higher Education Providers of Post-Graduate Programs

Of the total 69 private official providers identified as the entire population within Australia, a total of 37 usable responses were received, representing a return rate of 55%. This was deemed acceptable as a representative sample of the entire population of private higher education providers in Australia. Of the 37 responses, 6 responding institutions offered postgraduate programs without mandating an undergraduate degree for entry into their postgraduate programs. As such, 31 usable responses were used as part of the study.

6.5.1.3.3 Public Official Higher Education Providers of Post-Graduate Programs

Of the total 41 official public providers identified as eligible to participate in the study, a total of 24 institutions agreed to participate. This figure represented a potential 59% sample of the entire population. At the conclusion of the survey, 22 usable responses were submitted, with all providers mandating an undergraduate degree for postgraduate entry into at least one program. This final figure represented a 54% response rate from the entire population of public official higher education providers.

6.5.1.4 Statistical significance versus practical application

Whilst the tests for equivalence were important aspects of this study, the author was also interested in the risk levels associated with this process. Whereas the equivalence approach could mean the statistics were reliable, it did not mean that the findings were important in the sense of having decision-making utility; as such, tests of equivalence were only the initial stage of the analysis process. Where equivalence had been proven, this did not necessarily mean that no action should be taken. Where statistical significance (i.e. lack of equivalence) had occurred, this merely indicated that the observed differences were not likely to be due to sampling error. Since the samples for this study were representative, statistical significance was possible with very small population differences (Graziano and Raulin 2000).

Practical meaning looks at whether the difference was large enough to be of value in a practical sense. Alternatively, where equivalence had been proven, this equivalence could be in practices which were not deemed to be 'best practice' in determining academic qualification acceptability and authenticity, a finding which could be a cause for concern and action. The identification of real group differences was not important in itself; the use of the Delphi panel in providing an additional semi-quantitative measure to each finding assisted in highlighting practical significance (where appropriate). This aspect is elaborated further in Chapter 7 where the data are analysed.

6.5.2 Stage 2 - Data collection method for risk assessment; a modified Delphi approach

For Stage 2 of the investigation, the author used the data collected from Stage 1 and chose the Delphi method as an approach to predicting the level of risk apparent for each of the populations under study. Recent research suggested that various diagnostic methodologies using perception surveys provided promising results in relation to measuring risk (Hallak and

Poisson 2002, p.23). As part of the data analysis process for this study, the author sought to determine the level of risk each of the populations might be placing themselves in, when assessing an academic qualification. Since risk perception does not lend itself to standard, finite assessment, and the author required a method that minimised ambiguity and maximised consensus about the two main areas under research. The Delphi method was chosen as it could '...benefit from subjective judgements on a collective basis' (Linstone and Turoff 1975, p.4) and was applicable when a researcher sought interpretations on factual information which consisted of a mix of scientific evidence and social values (Webler, Levine, Rakel and Renn 1991, p.256). Furthermore, in relation to the assessment of risk, the Standards Association of Australia has encouraged the use of group participation decision methods:

A consultative team approach is useful to help define the context appropriately, to help ensure risks are identified effectively, for bringing different areas of expertise together in analysing risks, for ensuring different views are appropriately considered in evaluating risks and for appropriate change management during risk treatment (Standards Association of Australia 2004, p.11).

The following section provides an analysis of the Delphi approach and a rationale for its application to this study.

6.5.2.1 Overview and characteristics of the Delphi method

The Delphi method has been used as a research methodology across a broad spectrum of areas and is applicable in many disciplines (Linstone and Turoff 1975; Crisp, Pelletier, Duffield, Nagy and Adams 1999). It has contemporary application in areas such as information systems (Schmidt 1997; Okoli and Pawlowski 2004), farming (Webler et al. 1991), nursing (Hasson, Keeney and McKenna 2000) and education (Murry and Hammons 1995; Osborne, Collins, Ratcliffe, Millar and Duschl 2003; van Zolingen and Klaassen 2003). The classic, albeit broad, definition of the Delphi approach was given some years ago, as:

...a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem (Linstone and Turoff 1975, p.3).

The method was first used in the early 1950s by the US Air Force as a means of eliciting opinions from an expert group (Dalkey 1969; Sahakian 1997). The approach was chosen so as to '...obtain the most reliable consensus of opinion of a group of experts ... by a series of intensive questionnaires interspersed with controlled opinion feedback' (Dalkey and Helmer 1963 cited in Linstone and Turoff 1975, p.10). The method of devolving the interpretation and decision making process to a panel of experts actively involved in the evaluation of academic credentials was seen as the most applicable approach to measuring the level of risk for this study. Whilst the process appears simple and has its detractors, the Delphi approach, in various formats, has proved to be a rigorous course of action for consensus building so long as certain elements are present. A review of the literature indicated that the following must be included, if the process is to be effective.

- 1) All responses are anonymous. Formal questionnaires used to collect information from participants and respondents need to be kept confidential, as in a survey methodology. In order for the Delphi method to be effective, a series of anonymous interactions must occur between members of the group (Dalkey 1969; Murry and Hammons 1995; Sahakian 1997; Crisp et al. 1999). This reduces the dominant effect of some individuals that may be present within the Delphi panel.
- 2) Iteration and controlled feedback are provided. A systematic approach of collecting the group members' responses, analysing these responses and reproducing the responses with controlled feedback for all members of the panel (Dalkey 1969; Crisp et al. 1999) is seen as an essential component of the process.

3) Statistical measures are used to aggregate the responses of group members. The groups' opinion is determined by aggregating the individual responses in the final round of consultation (Dalkey 1969; Crisp et al. 1999). Providing opportunities for group decisions during the earlier rounds is also deemed an invaluable part of the process.

When the above elements are systematically incorporated, group bias is minimised, irrelevant communication is removed and conformity of responses is more likely to be achieved (Dalkey 1969, p.v; Crisp et al. 1999).

6.5.2.2 The Delphi approach and choice of expert panel members

The Delphi method chosen for this study employed a modified Delphi adopting some aspects of the approach to the rating and revising of a range of criteria presented to a group used by Murry and Hammons (1995), together with an approach to risk issues called the Group Delphi approach used by Webler, Levine et al. (1991).

In an approach similar to that used by Murry and Hammons (1995), the author eliminated the first round process of unstructured questions which has traditionally been associated with a classical Delphi. Since data had already been collected in Stage 1 of the study (above), the author was seeking critical responses to a range of predefined results. This allowed the panel to focus their immediate attention on assessing the level of risk evident in the data they were given (Murry and Hammons 1995, p.431).

The group form of the Delphi process, in contrast to a standard Delphi, provides clear information on the dissent among members, the justification for this dissent, and the direct testing of the dissent via peer review (Webler et al. 1991, p.263). Considering that the perception of risk had the capacity to cause significant differences of opinion, the author used

this approach so as to maximise feedback to the participants (Sahakian 1997, p.1). In practice, results provided in the qualitative feedback showed that participants had read the dissenting views provided and considered these when providing their own feedback.

The members of the Delphi group were chosen from the main professional credential evaluation agencies across the globe. The literature suggested that an appropriate panel size for a Delphi study should consist of between 10 to 18 members (Okoli and Pawlowski 2004, p.19). In order to obtain an appropriate cross-section of participation, the author contacted 24 individuals from Australia, USA, Canada, UK, Finland, Sweden, Estonia, Germany, Holland and Norway. Each of the prospective members was provided with an overview of the study, the methodology of the research and the workings of a Delphi panel. An emphasis was placed on the fact that they had been approached due to their expertise in the area of credential evaluation, and their membership of their respective ENIC, ENIC-NARIC, NACES and AACRAO organisations. Finally, a panel of 15 members agreed to participate in the research and their identities were kept anonymous until the end of the study.

6.5.2.3 Construction and format of the research instrument

The Surveymaker online platform was used again for this component of data collection. For the Stage 2 survey, the instrument consisted of two sections with information drawn from the Stage 1 survey. Section 1 contained a list of resources and/ or processes used by the three populations to determine the acceptability of an academic qualification. Section 2 consisted of a list of commonly available resources and/ or methods used to determine the authenticity of academic qualifications. In order to rate each of the presented items in the two main areas under review, the experts were asked to use a 'Risk Perception Scale', developed by the author (see Appendix 33, Volume 2, page 489). This scale was developed using a ranking

approach similar to that employed by Okoli and Pawlowski (2004, p.16) and a measurement of risk and risk perceptions used by Jarvenpaa, Tractinsky and Vitale (2000). The risk levels contained within the Risk Perception Scale were chosen after carefully reviewing a variety of risk measurement techniques employed across a diverse range of studies (Goldstein 1975, p.218; Turoff 1975, p.91-122; Jian, Bisantz and Drury 2000; Weber, Blais and Betz 2002, p.290). The allocation of a numerical value to the perceived risk levels represents a semi-quantitative analytical approach, and certain precautions need to be taken when interpreting these results (see below). The aim of this process was to develop a more expanded ranking scale than is usually achieved in qualitative analysis. However, the scale cannot be taken to suggest absolute values for risk, such as is attempted in quantitative analysis (Standards Association of Australia 2004, p.18).

The resulting scale consists of five options, although only four levels were allocated ordinal data. The final selection 'No Judgement' is applicable only where an expert feels that they do not have the required knowledge or expertise to rate a particular item. No neutral response is permitted in the Delphi method, as the main aim of this approach is to force respondents to critique the issue at hand and obtain consensus amongst participants. The lack of opportunity for respondents to take a neutral stance is a criticism sometimes levelled at Delphi by those who believe that consensus is the only valid objective of the method (Turoff 1975); this is countered, however, by its useful approach in elucidating rich discourse and debate.

In order to ensure the survey was ready for use, the author piloted the Stage 2 instrument using an approach similar to that used by Murry and Hammons (1995, p.431). The survey instrument was piloted with two of the potential experts in the area; these individuals filled out the online survey, and provided feedback on the format, structure and interpretation of the questions. This feedback was incorporated into the final design of the instrument prior to use.

6.5.2.4 Data collection and analysis procedures

The instrument was sent as Round 1 to each of the 15 experts on the Delphi Panel. When rating each item, the experts were required to provide a brief rationale as to why they chose a particular risk level, and space was provided in the online questionnaire for their response. By expecting participants to provide this qualitative rationale, the author could collate the anonymous dissenting views which participants could read in the following rounds.

Once the panel's initial ratings were received, the author collated the data and returned the results to the panel; that completed Round 1. The aim of Round 2 was to address the discrepancies or lack of consensus, which had appeared in the first round of results. The Delphi group was asked to concentrate on these particular areas and re-rate their responses until greater consensus was reached. Members were asked to modify their earlier positions and judgements as they shared information, and to learn from one other (Sahakian 1997).

Within Round 2, only experts who participated in the first round received the updated results. The information given included a frequency distribution of the panel's collective response for each item, the mean response for each question, and anonymous qualitative rationales for dissenting views. Instructions were provided, requesting participants to re-rate or confirm their original rating, and provide additional comments related to the qualitative views (Lanford 1972; Brooks 1979; Cochran 1983; Whitman 1990; Martorella 1991; Murray 1992 cited in Murry and Hammons 1995, p.432). The resulting data were distributed for a Round 3 evaluation. Since an accepted level of consensus had been reached for the majority of questions, and no further time was available, the study was closed. The Round 3 evaluations were then used to develop a final 'risk profile' for each of the populations.

In order to determine consensus amongst panel members, Kendall's W coefficient of concordance was used. This coefficient is anchored: 0 = no agreement, 1 = total agreement (Uwadia, Ifinedo, Nwamarah, Eseyin and Sawyerr 2006). A consensus level of 75% (0.75) is seen to be appropriate for this research question, similar to Delphi approaches employed by Murry and Hammons (1995, p.432) and Okoli and Pawlowski (2004, p.26). When W was found to be less than 0.75 for any item, then this question was sent back to the panel for rerating, together with a) the mean response for the question; b) the previous rounds response; c) an indication of the current level of consensus based on the value of W; and d) a paragraph summarising the other panellists' comments on why they rated the particular item at that particular level of risk (Okoli and Pawlowski 2004, p.26).

6.6 Research validity and reliability

Due to the nature of the problem under study, the validity and reliability aspects required special attention. As previously discussed, risk, by its very nature, does not lend itself to standard approaches to quantification and other common methods of measurement. Hence the methods adopted need to be analysed in the context of the three major aspects of research validity – construct validity, internal validity and external validity. Construct validity relates to how well the constructs of the study are operationalised and represent the phenomenon under study. Internal validity is the extent to which the research design allows conclusions to be drawn about the operational definitions and relationship between variables (Balnaves and Caputi 2001). External validity pertains to sampling and obtaining a representative response, which mirrors the opinions or actions of the entire population under review.

The challenges faced in measuring risk and uncertainty is in the realm of judgement, not of calculation (Adams 1995, p.26). As such, judgements from a range of experts in the field

were considered necessary in order to validate the measurement tool chosen for this study. Validity was provided by the Delphi approach as it helped to interpret complex information which could not be addressed by other conventional statistical approaches (Webler et al. 1991, p.256). The search for a numerical measure to attach to the harm or loss associated with a particular adverse event varies enormously, as the importance placed on these events varies from individual to individual (Adams 1995, p.22). Accordingly, the validity of findings could not be judged by the statistician's correlation coefficients and t-tests, but by the way it accorded with people's experience. Furthermore, its utility could be judged only by the extent to which people found it helpful in their attempt to navigate the sea of uncertainty (Adams 1995, p.38).

Stage 1 of the study was purposely non-experimental. This was because the author did not have control over the variables provided by respondents from the three populations (Bloemers and Wisch 2003) and was seeking to *describe* 'what is', rather than to *test explanations for* 'what is' (Bouma 2000, p.36). Stage 2 of the study used an abductive approach, suitable for conjecturing about reality via the use of a validated measurement tool (Balnaves and Caputi 2001). In addressing construct and internal validity, attention was directed to the item scale and method questions chosen to minimise bias or error. Halo bias exists when there is a tendency for overall positive or negative evaluations of an item being rated. Generosity error can also occur when raters overestimate desirable qualities, which they believe to be important. Contrast error can occur when some individuals avoid extreme categories (eg strongly agree) purely due to the fact they are opposed to such extremes (Balnaves and Caputi 2001, p.81). These biases are acknowledged and strategies to minimise these shortcomings were incorporated in the questionnaires' development.

External validity is related to sampling and is concerned with the extent to which the sample obtained is a genuine representation of the population being studied (Balnaves and Caputi 2001). As previously discussed in the section above, external validity was obtained. For the RCSA study, the CEO particularly chose a set of participants from the RCSA membership, which represented small, medium and large enterprises. The use of a purposive sampling technique (Bouma 2000) ensured that a representative sample of the entire population was obtained. For the private and public official providers of higher education in Australia, the entire populations were surveyed, as they were relatively small. The response rate of over 50% was high enough to ensure a representative sample.

The measurement tool used to assess the levels of perceived risk was tested for reliability and analysed using factor analysis as it was piloted. The author developed this new tool in response to the widely recognized absence of any agreed unit of measurement when it comes to assessing risks, and the lack of prior success at devising a common denominator for risk data (Adams 1995, p.21).

6.7 Research challenges, assumptions and limitations

Whilst the author does acknowledge that the majority of individuals seek to undertake and obtain higher education qualifications via orthodox methods, the focus of this study is on those individuals who seek to obtain qualifications via processes which range from non-official to fraudulent means. Although the supply side of non-official and falsified academic qualifications can be documented with some level of accuracy, the author acknowledges that the demand side is very difficult to quantify. Indeed, it is evident that this could never be achieved. From his early work in the area, Reid (1963, p.3) found that impostors do not readily confess, and that, '...the demand side must remain somewhat neglected...because a full survey of seekers of phoney degrees...has not yet been made'. Walley and Smith (1998)

reviewed a range of literature, determining that although studies pertaining to individual honesty had been undertaken, there was an inherent difficulty in believing their accuracy. More recently, Garrett (2005, p.1) contended that fraud, especially in higher education, was a complex matter on which there was a lack of comprehensive data and straightforward recommendations. Despite these limitations, the author considered that it was possible to investigate the perceived risk factors in relation to non-official and fraudulent qualifications, by assessing the various control systems in place and their perceived effectiveness in reducing risk in the area. Nevertheless, there were still problems that need to be acknowledged.

First, the use of the chosen data collection method (surveys) for Stage 1 of the study to assess practices in the university sector assumed that the responses received were representative of all qualification acceptability and authenticity approaches employed across the university sector. These institutions differ in their structures: some have Registrars, some have Directors of Admission. Where possible, the author sought responses from the most authoritative individual dealing with student admissions covering both domestic and international admissions. However, due to their different organisational structures, it needs to be acknowledged that this might not always have been achieved. These concerns were not present for the private providers of higher education and recruitment agencies where the author was able to obtain responses from the most senior representatives and sole individuals responsible for assessing academic qualifications.

Second, the issues raised in the questions being posed can be perceived as 'sensitive'.

Notwithstanding this, an assumption of truth must be made as to authenticity of the responses received. Third, this study has also been limited by the currency of information available.

Since most of the providers of non-official and falsified qualifications operate solely on the Internet, many open and close within a matter of months. Fourth, in relation to sample sizes,

the author had to rely on the assurances of the RCSA CEO and the CEO of Values Bank research that allowed the survey to be conducted. Both parties assured the author that the responses received were representative of the RCSA membership. However, the author was unable to independently verify these assurances due to privacy concerns. Thus, the representativeness of the sample can only be assumed.

Fifth, it is also acknowledged that the semi-quantitative approach to studying qualification verification and authentication has limitations. Care must be taken because the numbers chosen to rank risks might not properly reflect relativities and this could lead to inconsistent, anomalous or inappropriate outcomes. Semi-quantitative analysis may not differentiate properly between risks, particularly when either consequences or likelihood are extreme (Standards Association of Australia 2004, p.18). Notwithstanding this, the author considers the risk levels calculated are commensurate with general consensus in the area.

In relation to the Delphi approach chosen for the second stage of this investigation, a range of limitations and concerns have also been identified. The selection of experts was a concern, and the author endeavored to include the most skilled in the area to ensure a representative array of perspectives in the discipline. Cultural bias was seen as a concern, as questionnaires could contain subjective responses which some of the experts would not share. In order to address this, there was diversity among the members so that the impact of bias could be minimized. Participation was also seen as a concern, as it could have proved to be a labour intensive exercise; drop out rates could have been high whilst those that did embrace the process might have proved over zealous in their approaches. Heuristic biases could also have been present due to the subjective opinions of the various group members. It is also acknowledged that the organizers of a Delphi group could be deceptive in collating and disseminating information back to respondents by modifying the results to suit their own

desired outcomes (Webler et al. 1991, p.255-256; Murry and Hammons 1995). The author endeavoured to be as transparent as possible throughout the data collection and dissemination processes.

The author was also concerned with the validity of the measurement tool used to determine the risk levels for the study. In order to address these concerns, the purposeful engagement of experts across the globe ensured that a good representation of opinions was obtained in relation to the global resources assessed for the study.

Achieving consensus amongst the group of experts for the Delphi was important in order to validate and operationalise the concept of risk. The author was aware of the following issues that could have compromised the approach:

- Imposing the author's views and preconceptions on the respondent group by over specifying the structure of the Delphi and not allowing for the contribution of other perspectives related to the problem;
- Assuming that Delphi can be a surrogate for all other human communications in a given situation;
- Poor techniques of summarizing and presenting the group responses and of ensuring common interpretations of the evaluation scales used in the exercise;
- Ignoring and not exploring disagreements, so that discouraged dissenters drop out and an artificial consensus is generated;
- Underestimating the demanding nature of a Delphi group and the fact that the respondents should be recognised as consultants and properly compensated for their time if the Delphi is not an integral part of their job function (Linstone and Turoff 1975, p.6).

Okoli and Pawlowski (2004, p.19-20) provided a useful comparative analysis in relation to the strengths and weaknesses of the survey approach versus the Delphi approach as outlined in Figure 16, below. The author chose to employ both methods as it offered a triangulated approach to ensure robustness in data collection, and a more critical analysis of the survey results.

Evaluation criteria	Traditional survey	Delphi study
Summary of procedure	The researchers design a questionnaire with questions relevant to the issue of study. There are numerous issues concerning validity of the questions they must consider to develop a good survey. The questionnaire can include questions that solicit quantitative or qualitative data, or both. The researchers decide on the population that the hypotheses apply to, and selects a random sample of this population on whom to administer the survey. The respondents (who are a fraction of the selected random sample due to non-response by some) fill out the survey and return it. The researchers then analyze the usable responses to investigate the research questions.	All the questionnaire design issues of a survey also applied to a Delphi study. After the researchers design the questionnaire, they select an appropriate group of experts who are qualified to answer the questions. The researchers then administer the survey and analyze the responses. Next, they design another survey based on the responses to the first one and readminister it, asking respondents to revise their original responses and/or answer other questions based on group feedback from the first survey. The researchers reiterate this process until the respondents reach a satisfactory degree of consensus. The respondents are kept anonymous to each other (though not to the researcher) throughout the process.
Representativeness of sample	Using statistical sampling techniques, the researchers randomly select a sample that is representative of the population of interest.	The questions that a Delphi study investigates are those of high uncertainty and speculation. Thus, a general population, or even a narrow subset of a general population, might not be sufficiently knowledgeable to answer the questions accurately. A Delphi study is a virtual panel of experts gathered to arrive at an answer to difficult question. Thus, a Delphi study could be considered a type of virtual meeting or as a group decision technique, though it appears to be a complicated survey.
Sample size for statistical power and significant findings	Because the goal is to generalize results to a larger population, the researchers need to select a sample size that is large enough to detect statistically significant effects in the population. Power analysis is required to determine an appropriate sample size.	The Delphi group size does not depend on statistical power, but rather on group dynamics for arriving at consensus among experts. Thus, the literature recommends 10–18 experts on a Delphi panel.
Individual vs. group response	The researchers average out individuals' responses to determine the average response for the sample, which they generalize to the relevant population.	Studies have consistently shown that for questions requiring expert judgment, the average of individual responses is inferior to the averages produced by grou decision processes; research has explicitly shown that the Delphi method bears this out.
Reliability and response revision	An important criterion for evaluating surveys is the reliability of the measures. Researchers typically assure this by pretesting and by retesting to assure test-retest rehability.	Pretesting is also an important reliability assurance for the Delphi method. However, test-retest reliability is no relevant, since researchers expect respondents to revise their responses.
Construct validity	Construct validity is assured by careful survey design and by pretesting.	In addition to what is required of a survey, the Delphi method can employ further construct validation by asking experts to validate the researcher's interpretation and categorization of the variables. The fact that Delphis not anonymous (to the researcher) permits this validation step, unlike many surveys.
Anonymity	Respondents are almost always anonymous to each other, and often anonymous to the sesearcher.	Respondents are always anonymous to each other, but never anonymous to the researcher. This gives the researchers more opportunity to follow up for clarifications and further qualitative data.
Non-response issues	Researchers need to investigate the possibility of non-response bias to ensure that the sample remains representative of the population.	Non-response is typically very low in Delphi surveys, since most researchers have personally obtained assurances of participation.
Activition effects	For single surveys, attrition (participant drop-out) is a non-issue. For multi-step repeated survey studies, researchers should investigate attrition to assure that it is random and non-systematic.	Similar to non-response, attrition tends to be low in Delphi studies, and the researchers usually can easily ascertain the cause by talking with the dropouts.
Richness of data	The richness of data depends on the form and depth of the questions, and on the possibility of follow-up, such as interviews. Follow-up is often limited when the researchers are unable to track respondents.	In addition to the richness issues of traditional surveys Delphi studies inherently provide richer data because of their multiple iterations and their response revision due to feedback. Moreover, Delphi participants tend to be open to follow-up interviews.

Figure 16 - Comparison of strengths and weaknesses of Delphi versus Traditional survey methods.

6.8 Summary and conclusions

This chapter has outlined the methods of data collection and analysis adopted in order to investigate the risk levels related to assessing non-official and falsified academic awards for Australian users of these qualifications. Details were given of the Stage 1 survey on procedures and methods used to check academic qualifications and sent to key respondents within the recruitment agencies and official higher education sector in Australia. The Stage 2 establishment of a Delphi Panel of experts to review the data generated from the survey and develop a consensus assessment of the level of risk involved in the different contexts was explained. Because the study of fraud as it relates to higher education is a difficult and challenging area, the author needed to justify the research methods used and carefully considered the limitations. The chapter that follows reports the results obtained from the preliminary research question and the main two stage investigation.

Chapter 7 – Risk evaluation: Assessment of academic qualification acceptability and authentication procedures undertaken by the official higher education and recruitment sectors of Australia

7.1 Preamble

This chapter reports the empirical evidence derived from the two stages of an investigation to evaluate the risks involved in the procedures used for assessment of academic qualification acceptability and authenticity in Australia. The overarching research hypothesis for this study posited that academic degree qualifications had equal value to each of the three populations identified for this study, namely the RCSA, Private and Public official higher education providers of postgraduate programs in Australia. The main research investigation reported in this chapter consisted of two parts. Stage 1 measured the equivalence of the three populations in relation to their reported approaches to determining qualification acceptability and authenticity. Stage 2 then took components of these equivalence findings and supplied them to an expert Delphi panel, in order to elicit a semi-quantitative risk level for each of the profiled control tools identified in Stage 1. A summary of the actual risk levels was then calculated, resulting in a 'risk profile' for each separate population. The results from this chapter assist in informing the structure and format of the risk treatment plan proposed in Chapter 8.

Before the results from the main research investigation are discussed, however, the next section reports the results from the exploratory research designed to find out how many providers of counterfeit Australian qualifications were operating on the internet during the period of this study.

7.2 Investigating internet providers of Australian counterfeit qualifications

In relation to the exploratory research question posed (see 6.2 page 267), the author found that over a two and a half year period, 46 main provider sites were identified as being operational (see Table 8 below). An additional 52 websites were also identified during this research period (see Appendix 16, Volume 2, page 422), but these were closed down before they could be contacted by the author. It is also worth noting that a number of the operators maintained two or more (up to seven in one case) web addresses.

Of the 46 main sites identified, 25 (54.4%) of the providers responded to the email of 'Jong Liu', stating that they would provide the requisite qualification (an MBA from the University of Sydney). Only 4 (8.7%) offered to supply a free copy of a sample testamur, while the others declined, citing 'copyright' issues regarding their own artwork. Six providers (13%) stated that they could not, or would not, provide the particular qualification requested. The remaining 15 (32.6%) sites did not respond to the email request for the qualification. The requests and response rates are summarised in Table 8 below.

During the research phase, the communication and sample pictures received from one particular provider of falsified qualifications, a Michael deMartini, highlighted the ease with which such a qualification could be obtained. deMartini offered to provide a range of falsified academic testamurs and transcripts from universities around the world, and the author sought to obtain possible exemplars of Australian parchments. As a result of the email discussions, the author was able to obtain photographs and scans of parchments for Monash University, Edith Cowan University and the University of Melbourne (see Appendix 18, Volume 2, page 424 for examples). As can be seen from the photographs, particularly of the Monash degree, the offset printing and quality of these products is extremely authentic.

This exploratory research has demonstrated that the level of falsified Australian academic qualification provision appears to be considerable. The actual number sold, the overall quality and the usage of these falsified documents in industry could not be quantified.

Notwithstanding this, this preliminary research clearly demonstrates that there is a reasonable risk of individuals possibly using these falsified academic qualifications for either employment or further study. In order to test the risk minimisation strategies that may be in place, the following section discusses the results of the investigation into the three populations under study and their efforts to mitigate these potential risks.

7.3 Overview of the main survey respondents

As discussed in Chapter 6 in relation to research limitations, the sensitivity of the investigation was of distinct concern to the author. In order to maximize response rates to the surveys, only basic demographic information was requested from respondents so as to preserve the anonymity of the participants. Figure 17, below, breaks down the surveyed participants by advertised positions per annum that mandated a degree qualification for either employment or entry to a postgraduate program. As shown, a sufficient cross-representative sample of small, medium and large providers of both higher education and recruitment agencies was obtained for this study. The 45% representation of smaller sized participants came primarily from private providers of postgraduate programs and smaller owner/ operated RCSA members.

	URL	Date message sent	Date response		
			received	provide?	
		70.01	100 mg - 100 Mg	20.00	
	http://www.aliasids.com	19.5 06	ייטווכ וברבוייכם		
ri	http://www.askthetrainer.org	22 6 06	27 6 06	Yes	- Kegistrar service
,	him was backallarmes com	16 5 05	17 5 05	Yes	
7	http://www.hogisahd.com/	14805 & 17905	19 9 05	Yes	
	http://www.boxfreeconcents.com/download/index/html=Diploma	16 5 05	17 5 05	No	
ه اه	http://www.hivdiplomaonline.com	14.8.05	14 8 05	Yes	
5 -	http://www.collegedinloma.net	10.9:04	10:9:04	Yes	Sample supplied
÷ ∝	http://www.californiadiploma.com	19.9.04	20/9/04	No.	
٥	http://www.dinloma-center.com	30/9/05	None received		
ء ا	╀	23/5/06	90/90/50	Yes	
2 =	+	14/8/05	14/8/05	No	
- 2	╅	14/8/05 & 17/9/05	01/10/02	No	
2 2	┿	10/9/04	11/9/04	Yes	
	+	10/2/05	10/2/05	Yes	Sample supplied
4	http://www.uip/olitateplacementservice.com?	2/10/04	3/10/04	Yes	
15.	+-	2/10/04	7/10/04	Yes	
12	╁	15/4/06	None received		
<u>: 2</u>	+	10/9/04	14/9/04	Yes	
10.	┿	22/6/06	22/6/06	Yes	
2 5	╁	14/8/05 & 17/9/05	None received		
3/2	+	10/9/04	11/9/04	No	
23	┿	22/6/06			
3 15	┿	22/6/06	22/6/06	Yes	
24	+-	29/1/06	29/1/06	Yes	
2,5	+-	15/4/06	None received		
25/25	┿	14/8/05 & 17/9/05	None received		
97 5	+	22/6/06	None received		
70,	http://www.lakcdiplomas	14/8/05	None received		
67	+	21/3/06	None received		
20,5	+	22/6/06	23/6/06	Yes	
36.	+	14/8/05	15/8/05	No	
33.	+	30/9/05	None received		
14	4	000			

	URL	Date message sent	Date response	Can	Comments
)	received	provide?	
33	http://www.degree.icvspicv.com	23 4 05	24 4 05	Yes	
7.	http://www.hostagenoveltydiplomas.com3	30 9 05	None received		
35	http://www.ineedadiploma.com	30 9 05	None received		
2	1_	30 9 05	None received		
37	1	30 9 05	30 6 08	Yes	
×	┸	16 4 06	17 4 06	Yes	Sample supplied
2	┺	19904	20 9 04	Yes	Sample supplied
9	http://www.righttrackref.org/pages index.htm 5	2 10 04	3 10 04	Yes	
4	+	23.4 05	25 3 05	Yes	
42	+	30.9.05	1 10:05	Yes	
43	http://www.uksupportservices.com.pages.2 index.htm	14/1/06	15:1:06	Yes	
4	₩	22/6/06	22/6/06	Yes	
45	Ь.	22/6/06	22/6/06	Yes	
46		30/9/05	None received		
į		ALL DATE A A. Classe I in.			

Table 8 - Summary of responses received from the requested sale of a Sydney University MBA to 'Jong Liu'.

This provider also operated the site http://www.noveltydegree.com

2 This provider also operated the site http://www.diplomaprintingservice.com & http://www.qualitydiploma.com

3 This provider also operated the site http://www.geocities.com/dosman777/spec.html

4 This provider also operated the site http://www.phoneydiploma.com & http://www.fastdiploma.com & http://www.replicadiplomas.com & http://www.closeduniversity.com & http://www.realisticdiploma.com & http://www.realisticdiplomas.com

5 This provider also operated the site http://www.diplomagraphics.com

6 This provider also operated the site http://www.diplomaservices.com & http://www.bestfakediploma.com

Note: The above 15 sites (labelled 1-6 and referenced to an operator named in the table) were identified as being operated by individuals already included in the table and were therefore removed from the total count.

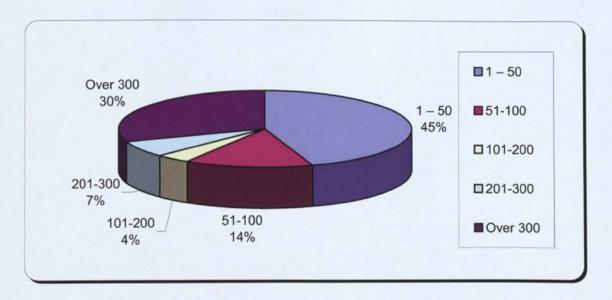


Figure 17 - Number of employment and/ or postgraduate places offered per annum (all participating RCSA, Private and Public Higher Education Providers).

In relation to the respondents, the author considered it important that only senior level staff participated in the study; this was to ensure that a representative response from the organisation was received. For the RCSA, only senior staff members from each organisation directly responsible for recruiting individuals for employment positions completed the questionnaire. Likewise, from the public and private providers of higher education it was senior admissions staff and Registrars, overseeing the admission of students, who were surveyed.

7.4 Stage 1 - Tests of equivalence

This study posited that academic qualifications were valuable proxy measures of potential ability and capacity and were mandated by the official Australian higher education providers, both private and public, as well as recruitment agencies being investigated in this study. It was therefore assumed that there would be equivalent levels of attention paid to assessing these documents *vis-à-vis* their acceptability and authenticity among the three populations.

Equivalency testing was applied to a range of practices and approaches employed by the three populations. The results of this equivalency testing helped to determine where each of the three populations sat on the risk continuum developed for the study.

7.4.1 Tests of equivalence amongst those that determine the acceptability and authenticity of academic qualifications

The first part of the survey sought to ascertain the level of due diligence paid, by the organizations for whom the respondents worked, to verifying the acceptability and authenticity of academic qualifications presented to them for either employment or further study. Participants were asked if they verified the acceptability and authenticity of qualifications and what type of resources and methods they used to perform these verification tasks. The results are discussed in the following two sections, the first related to qualification acceptability and the second to qualification authenticity.

7.4.1.1 Test of equivalence for Research Question 1A

This section compares the proportion that performed acceptability checks on qualifications in order to ascertain if an undergraduate bachelor degree qualification was adequate for entry into further higher education or for a job position. Determining the acceptability of an academic qualification involves the process of verifying that the claimed academic qualification has been earned from an acceptable higher education provider. The successful completion of this check, leading to rejection of a degree from a non-official provider, or the acceptance of one from an official provider, reduces the risk of accepting a qualification of unknown quality.

Amongst all respondents from the three populations sampled, 65.5% contended that they did check, in some way, the acceptability of the source of the academic qualifications presented to them. Of considerable concern was the complementary finding that 34.5% of all surveyed respondents did not verify the acceptability of higher education qualifications. This result is further explored below. Among those that did verify acceptability, however, the author was interested if equivalent attention was paid to this process amongst the three populations, as indicated in Research Question 1A, page 268. In order to answer this research question, the author proposed the following hypothesis:

There is a difference of no more than 5% between the percentages of recruitment agencies, private providers of higher education, and public providers of higher education that determine the acceptability of higher education qualifications.

To test the hypothesis, the difference between each pair of population types in the percentages that determined the acceptability of higher education qualifications was determined. In each case, if the 95% confidence interval for difference encompassed any part of the + or - 5% allowable difference in percentages, the two percentages were considered equivalent. If the true difference cannot be expected to exceed the allowable difference (i.e., 5%) on at least 95% of the occasions when such difference is observed, then we cannot reject the thesis that the true difference is equal to the allowable difference (i.e., 5%) or less.

Amongst the 65% of respondents that checked the acceptability of academic qualifications, public providers of higher education were the most diligent (100%) followed by private providers (93.5%). RCSA members were the least attentive to this issue, with only 48.4% of responding members undertaking this process, as outlined in Figure 18, below.

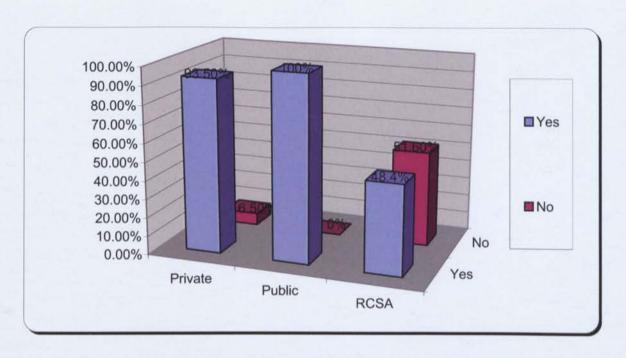


Figure 18 -Percentage breakdown of response by population for those that verified/ did not verify the acceptability of academic qualifications.

Tests of equivalence between the percentages of those that verified the acceptability of academic qualifications were performed as follows in Table 9, below:

	SE _{Diff}	Diff	Continuity Corrected Difference	CI.95	Conclusion
Private vs. Public	.053	.065	.026	039 to .169	Equivalence supported
Private vs. RCSA	.102	.451	No Need for Continuity Correction	.252 to .650	Equivalence rejected
Public vs. RCSA	.117	.616	.588	.359 to .817	Equivalence rejected

Table 9 - Equivalence tests for those that verified the acceptability of academic qualifications.

As outlined in the table above, amongst the three pairwise differences, equivalence was supported for private and public providers of higher education, but not in the pairings with the RCSA. These statistical results pointed to a considerable difference toward verifying the acceptability of qualifications presented between the official higher education sector and recruitment agencies. As outlined in Figure 18, above, the fact that 51.6% of RCSA members

indicated that they did not undertake any checking of the acceptability of a degree qualification appeared to create a considerable risk position for its members. Explanations and investigations as to why such a low level of acceptability verification was being undertaken by RCSA members is presented later in this chapter.

7.4.1.2 Test of equivalence for Research Question 1B

This section compares the proportion of respondents that performed checks on claimed academic qualifications in order to determine if the undergraduate qualification was authentic. Determining authenticity refers to a process of ensuring that a claimed academic qualification is *bona fide* and has not been falsified, altered or fraudulently obtained by the candidate.

Amongst all respondents from the three populations sampled, 64.9% claimed that they checked the authenticity of claimed academic qualifications presented to them. Of concern once again was the finding that 35.1% of all respondents did not verify the authenticity of claimed higher education qualifications. This figure is investigated later in the chapter. For those that did verify authenticity, however, the author was interested to determine if equivalent attention was paid to this process amongst the three populations, as outlined in Research Question 1B, page 268. In order to answer this research question, the author proposed the following hypothesis:

There is a difference of no more than 5% between the percentages of recruitment agencies, private providers of higher education, and public providers of higher education that determine the authenticity of higher education qualifications.

To test this hypothesis, the difference between each pair of population type in the percentages that determined the authenticity of higher education qualifications was assessed. In each case, if the 95% confidence interval for difference encompassed any part of the + or - 5%

allowable difference in percentages, the two percentages were considered equivalent. If the true difference cannot be expected to exceed the allowable difference (i.e., 5%) on at least 95% of the occasions when such difference is observed, we cannot reject the thesis that the true difference is equal to the allowable difference (i.e., 5%) or less.

Amongst the 64.9% of all respondents that checked the authenticity of presented academic qualifications, public providers were again the most diligent (95.5%). The percentage of private providers which undertook authentication checks was lower (74.2%). RCSA members were again the least attentive to this issue, with only 54.7% performing authentication checks as outlined in Figure 19, below.

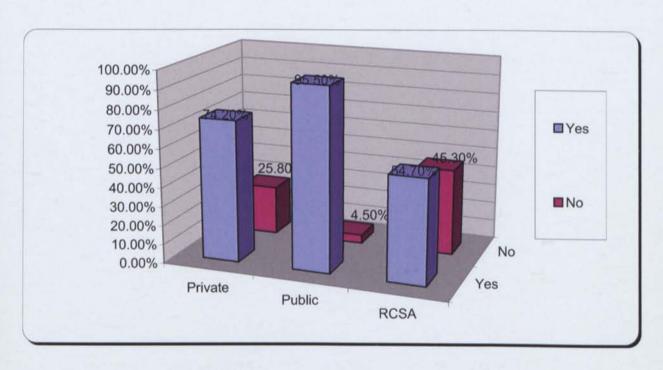


Figure 19 - Percentage breakdown of responses by population for those who verified/did not verify the authenticity of academic qualifications.

Tests of equivalence of percentages between those that verified the authenticity of academic qualifications were performed as follows:

	SEDIII	Diff	Continuity Corrected Difference	Cl.95	Conclusion
Private vs. Public	.105	.213	.174	031 to .379	Equivalence supported.
Private vs. RCSA	.102	.195	No Need for Continuity Correction	004 to .394	Equivalence supported.
Public vs. RCSA	.115	.248	.220	.005 to .445	Equivalence supported.

Table 10 - Equivalence tests for those that verified the authenticity of academic qualifications.

Some interesting results were obtained for this test. As previously indicated, the allowable limit set for equivalence was +/- 5% (i.e., .05) around zero. In the case of Private vs. RCSA, the .95 confidence interval was -.004 to .394. Since the equivalence range fell within the .95 confidence interval, the difference was not enough to reject the hypothesis of equivalence. At a minimum, one end of the equivalence range has to overlap into the .95 CI in order to establish equivalence. In the case of Public vs. RCSA, the .95 CI was .005 to .445. Again, the upper end of the equivalence range fell within the .95 CI, not allowing rejection of the hypothesis of equivalence.

These statistical results point to the critical importance of setting a viable limit for equivalence in these calculations. The chosen limit of +/- 5% proved in this instance to be not sensitive enough to highlight the differences between groups. An allowable limit of +/- 2% or +/- 3% might have proved more useful in reflecting the difference. Whilst there was statistical equivalence amongst the three pairwise differences that checked authenticity, the practical importance of the different levels reported would suggest that further investigation needs to be undertaken. Explanations and investigations in relation to the surprisingly high levels of those that did not authenticate academic qualifications (RCSA (45.3%)) and Private providers (25.8%)) are given later in the chapter.

7.4.1.3 Tests of equivalence for Research Question 2A

Amongst the 65.5% of those that verified the acceptability of academic qualifications the author was interested in determining if there was equivalent use of a range of the most commonly available resources and methods, previously reviewed in Chapter 5.

Respondents were asked if they used a particular listed resource, and requested to list additional resources/ methods if these were not provided. As outlined in Figure 20, below, amongst paper-based resources, the most popular resource was the National Office of Overseas Skills Recognition (NOOSR) Guides, although only 41.2% of all respondents used this. The least popular printed resource was Bears Guide to Earning Degrees Nontraditionally, with 95.9% of all respondents stating they did not use this. There was also limited use of the International Handbook of Universities (IHU) and the Commonwealth Universities Yearbook (CUY), with 80.4% and 76.3% of all respondents respectively, stating they did not use these resources.

In relation to other commonly available non-print resources and methods to check acceptability, there was a higher level of usage. As outlined in Figure 21, below, the Internet was the most popular tool used to check the status of an academic institution, with 60.8% of all respondents using this resource. The web-based AQF Register was the second most popular resource, used by 49.5% of all respondents. Contacting the Ministry of Education (or equivalent authority) to verify the status of an academic institution was the least popular approach to determining acceptability, with 71.1% of all respondents stating they did not do this.

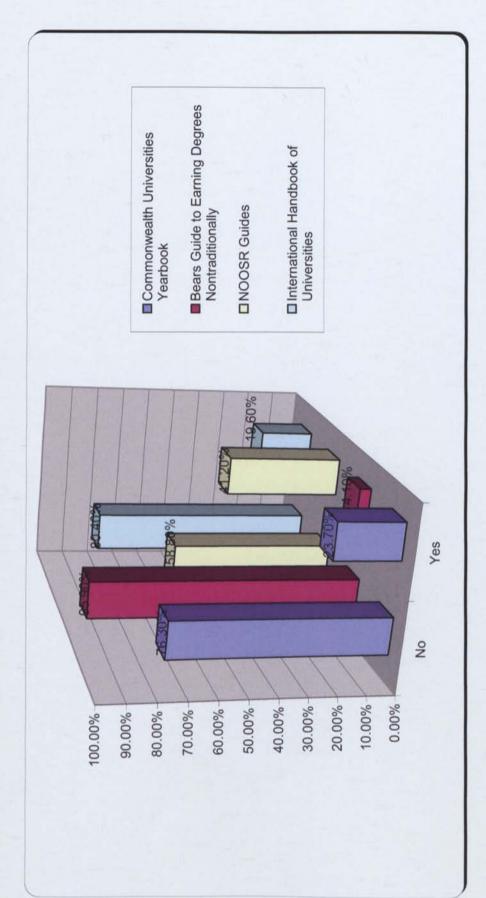


Figure 20 - Percentage use of selected paper based resources to check acceptability of academic qualifications (all respondents).

With regard to other resources designed to check the acceptability of an institution, 46.9% of all respondents used something other than what was provided in the survey. Amongst RCSA members, 51.1% claimed to use other resources and methods, which included the use of the FAIMER Medical Directory, checking for acceptability with the potential employer and verification of acceptability with a professional association. Thirty one percent of private providers used other resources such as checking with their respective accreditation body, or verification through an annual practicing certificate. Amongst university providers, 59.1% used other resources such as professional networks, the Universities Admissions Centre, Qualsearch, the Chinese Handbook of Universities and the UK NARIC resources.

Amongst those that used these resources and methods to check a qualification's acceptability, the author was interested in determining if there was equivalent usage amongst the three populations, as indicated in Research Question 2A, page 268. In order to answer this question, the author proposed the following hypothesis:

There is a difference of no more than 5% between the percentages of recruitment agencies, private providers of higher education, and public providers of higher education that use the most commonly available resources and methods to determine acceptability of higher education qualifications.

To test this hypothesis, the statistical analysis to test the differences between the percentages for the hypothesis consisted of determining the difference in the percentages between each pair of agency types for use of the available resources to determine acceptability. In each case if the 95% confidence interval for difference encompassed any part of the + or - 5% allowable difference in percentages, the equivalence of the two percentages was considered to be supported.

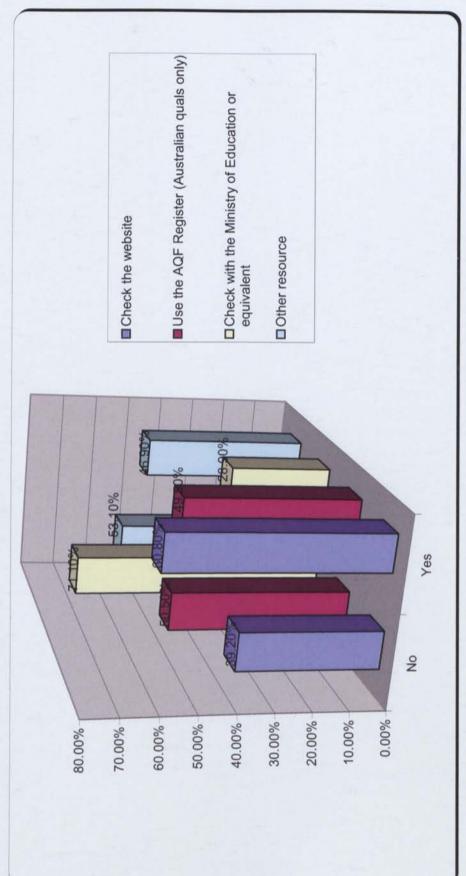


Figure 21 - Percentage use of non-print based resources to check acceptability of academic qualifications (all respondents)

Such a finding indicated that the true difference cannot be expected to exceed the allowable difference (i.e., 5%) on at least 95% of the occasions when such differences were observed.

Tests of equivalence were performed for Research Question 2A between the three populations, and are provided in Appendix 34, Volume 2, page 490. The equivalence column in the table reports that equivalence was supported in 16 of the 21 RQ2A comparisons. Whilst this might appear to be a consistently high level of equivalence, the figures require further interpretation. In order to facilitate this investigation, a risk assessment of these resources was undertaken as Stage 2 of the investigation.

An equivalent high level of use across all three populations was present for the use of the Internet to verify the acceptability of institutions. A conversely low equivalent usage was present amongst RCSA, Private and Public providers in relation to use of Bears Guide, the IHU, and the CUY. The option to check with the Ministry of Education (or equivalent authority) also had low levels of equivalent usage across the three populations.

Equivalence was not supported for the use of the NOOSR Guides and the AQF Register amongst the three populations. It was observed that these two resources had the highest level of use with public providers (95.5% & 77.3% respectively). A conversely low level of use of these resources was apparent amongst both the private providers and RCSA members. Further analysis of the risk profile of each separate population on the basis of these results was undertaken in the Stage 2 of the investigation.

7.4.1.4 Tests of equivalence for Research Question 2B

Amongst the 64.9% of all respondents that verified the authenticity of academic qualifications, the author was interested in determining if there was equivalent usage of the most commonly available resources and methods, which were reviewed in Chapter 5.

All respondents that checked the authenticity of academic qualifications were asked if they used a particular listed resource/ method. They were also requested to add other methods which were not listed. As outlined in both Figures 22 and 23 below, the most popular method of authenticating an academic qualification was to require candidates to provide original copies of their academic documents, with 70.5% of all respondents using this process.

Requiring copies certified by a Justice of the Peace was the second most popular methodology overall, with 61.4% of all respondents using this approach.

Only 48.9% of all respondents used the option of original academic documents being provided directly by the conferring institution. The least popular authentication methodologies were obtaining verbal confirmation of the qualification from the conferring institution (9.10%), email verification (23.9%) and faxed verification directly from the conferring institution (31.8%).

Additional verification measures listed were the employment of education agents and the use of IDP representatives, an option which only applied to higher education providers. Only 35.7% of all higher education respondents used these processes, with the largest component of this response predictably coming from the public sector universities (80%). Almost two thirds (63.2%) of these providers accepted the decision of IDP to verify the authenticity of an academic qualification. In relation to other education agents, public providers were again the largest user, with 57.9% accepting the authentication decision of an education agent.

When asked to name other authentication methods which were not listed in the survey, private providers indicated that they did not use any other resources. Up to 21.1% of public providers did use other methods; these included the use of the ARTS system, Qualsearch and the Universities Admissions Centre. For RCSA members, 8.9% used other authentication methods which included the use of professional associations and direct questioning techniques.

Amongst those that used these authentication resources and methods, the author was interested if there was equivalent usage amongst the three populations, as suggested in Research Question 2B, page 268. In order to test this research question, the author posed the following hypothesis:

There is a difference of no more than 5% between the percentages of recruitment agencies, private providers of higher education, and public providers of higher education that use the most commonly available resources and methods to determine the authenticity of higher education qualifications.

To test this hypothesis the differences between each pair of agency types in the percentages which used each of the available resources to determine authenticity were measured. In each case, if the 95% confidence interval for difference encompassed any part of the + or - 5% allowable difference in percentages, the equivalence of the two percentages was considered to be supported. Such a finding indicates the true difference cannot be expected to exceed the allowable difference (i.e., 5%) on at least 95% of the occasions when such differences are observed.

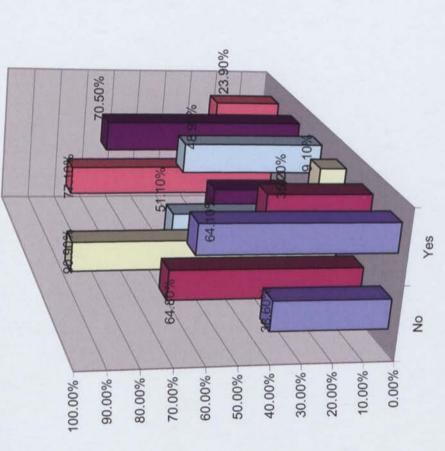




Figure 22 - Percentage use of resources/ methods to check authenticity of academic qualifications (all respondents) - Part A.

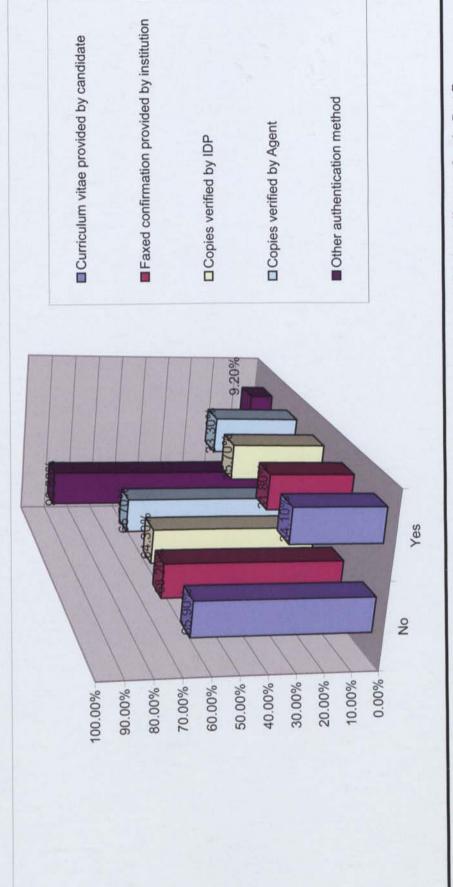


Figure 23 - Percentage use of resources/ methods to check authenticity of academic qualifications (all respondents) - Part B.

Tests of equivalence were performed for Research Question 2B between the three populations, as outlined in the table in Appendix 35, Volume 2, page 491. The equivalence column in the table reported that equivalence was supported in 21 of the 26 comparisons. Whilst this may appear to be a consistently high level of equivalence, the figures require further interpretation. A risk assessment of these resources was undertaken as Stage 2 of the investigation in order to facilitate this process.

Amongst all three populations there was an equivalent high level of practice of accepting certified copies of academic documents by a Justice of the Peace, original copies provided by the conferring institution and original copies provided by the candidate. Conversely, there was an equivalent low use of verbal confirmation, email verification and faxed confirmation from the conferring institution. Equivalency was not supported in relation to the acceptance of photocopies of academic documentation provided by the candidate. There was an equivalent low acceptance of this methodology between private and public providers of higher education, but a high level of acceptance of this methodology by RCSA members. Equivalence was also rejected between public and private providers of higher education in relation to the use of IDP and/ or authorized agents to authenticate documents, with public providers seen to use this method more frequently than private providers.

7.4.2 Tests of equivalence in perception of the importance and effectiveness of academic qualification verification processes

The second part of the survey sought to ascertain the opinions of respondents in relation to the importance they placed on an academic qualification verification system, and the effectiveness of various verification procedures. The author was interested if there was

equivalence in the opinions and perspectives of respondents from the three different populations. It was hoped that the results from this section would help in the development of a tool to minimize the risk of accepting a qualification from a non-official provider and assist in verifying the authenticity of academic qualifications.

7.4.2.1 Tests of equivalence for Research Question 3A

For this section, the author was interested in the views of respondents on the desired attributes of an academic qualification verification system if one was to be introduced. As outlined in Figure 24, below, the majority of respondents placed an 'important' to 'very important' emphasis on all of the presented characteristics which might be included within an academic qualification verification system. Accuracy of verification was seen as the most important criterion, followed by ease, cost, the ability to verify Australian and overseas qualifications and the speed of the verification process.

The author was interested if there was an equivalent level of importance placed on these characteristics amongst each of the three populations, as indicated in Research Question 3A, page 268. In order to answer this research question, the author proposed the following hypothesis:

There is a difference of no more than 5% between the means of recruitment agencies, private providers of higher education, and public providers of higher education in relation to the perceived level of importance surrounding the qualities of a qualification verification system.

To test the hypothesis, the author calculated whether the group means were equivalent. This statistic therefore differed slightly from the analyses for the two preceding research questions, which focused on differences in proportions. For Research Question 3 means were compared, and the t-distribution was used to assess the p-values of Type 1 error, the Tukey HSD

correction to the number of degrees of freedom was used to correct for experiment-wise error rate.

Equivalence was supported in 100% of the comparisons conducted for this question on the desired qualities of a verification system, as outlined in Appendix 36, Volume 2, page 493. This meant that respondents from the RCSA, Private and Public Providers of higher education gave an equivalent level of importance to all of the criteria presented. These findings proved useful in the later development of a risk treatment tool.

7.4.2.2 Tests of equivalence for Research Question 3B

For this section, the author was interested in the opinions of respondents in relation to the perceived effectiveness of various academic qualification verification methods that are currently available. This could be taken as an indication of the level of trust the separate populations placed in each of the available resources and methods.

As outlined in Figure 25, below, amongst all respondents, the use of an online, web based verification system was seen as being the most effective method of determining the *bona fides* of academic qualifications. Verifying directly with the conferring institution via a range of communication methodologies was seen as the second most effective method. Candidates providing documentation (notarised by a Justice of the Peace or providing original copies) was rated as less effective; the level of 'neutral' and 'not effective' opinion in relation to documentation provided by the candidate was comparatively high. The method of placing microchips into academic documentation and the use of polymer paper as a security measure drew a comparatively large 'neutral' response, perhaps indicating a lack of knowledge of these authentication procedures.



Figure 24 - Importance placed on the characteristics of an academic qualification verification system (all respondents).

The author was interested in whether there was an equivalent level of perceived effectiveness amongst the various verification procedures between each of the populations, as reflected in Research Question 3B, page 268. In order to solve the research question, the author proposed the following hypothesis:

There is a difference of no more than 5% between the means of recruitment agencies, private providers of higher education, and public providers of higher education in relation to the perceived effectiveness of various methods designed to authenticate academic qualifications.

To test this hypothesis, statistical measures were used to evaluate whether the group means were equivalent. Since means were being compared, and the t-distribution was being used to assess the p-values of Type 1 error and the Tukey HSD correction to the number of degrees of freedom was used to correct for experiment-wise error rate.

Equivalence was supported in 100% of the comparisons conducted for this question on the effectiveness of methods of verification as outlined in Appendix 37, Volume 2, page 494. These findings suggested that there was a consensus across the range of the populations in relation to verification procedures, a finding which further assisted the development of the risk treatment plan to assist all stakeholders participating in this study.

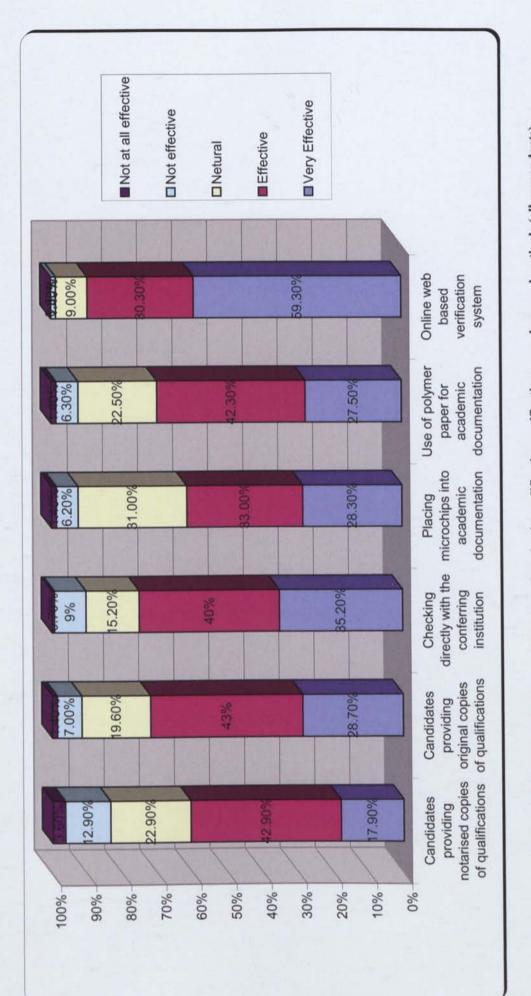


Figure 25 - Perceived effectiveness of a range of academic qualification verification procedures and methods (all respondents).

7.4.2.3 Tests of equivalence for Research Question 3C

For this question, the author was interested in respondents most favoured methods for communicating information concerning the verification of academic qualifications and if there was equivalence amongst the three populations. The author was interested in determining the preferred approaches, as this would influence the development of a risk treatment tool.

As outlined in Figure 26, below, the use of email and the Internet (web) were seen as the preferred methods of communication for a qualification verification system. The other remaining options (telephone, fax, letter) all had very low support as a communication method.

The author was interested if there was equivalence in the preference for communication methodology amongst each of the populations, as outlined in Research Question 3C, page 268. In order to answer the research question, the author proposed the following hypothesis:

There is a difference of no more than 5% between the percentages of recruitment agencies, private providers of higher education, and public providers of higher education in relation to the preference for a communication methodology for the verification of higher education qualifications.

To test this hypothesis proportions were again being compared. A determination was made as to whether the 95% confidence interval of the difference between means infringes upon the + or -5% range of allowable difference. It was found that equivalence was supported in 12 of 15 of the comparisons conducted for RQ3C, as outlined in Appendix 38, Volume 2, page 495.



Figure 26 - Preferred communication methods for the verification of academic qualifications (all respondents).

An equivalent high level of preference was found amongst the three populations in relation to the use of the web (Internet) for communication. This is also apparent for the use of email; however, the test of equivalence in this case was again affected by the choice of confidence interval. An equivalent low level of preference for the use of fax is apparent, along with telephone and letter communication, although private providers did show more of an affinity for the latter. Overall, it was apparent that the use of Internet technologies appears to be the most preferable medium, and this will be explored in the next chapter.

7.4.3 Reasons for not verifying the acceptability and authenticity of academic qualifications

All participants in Stage 1 of this study asserted that they mandated an undergraduate academic qualification as a pre-requisite for either further study or an employment position. The author was therefore intrigued when a considerable proportion of respondents (over one third) indicated that they did not perform any form of verification. It has been argued that if an organisation did not have a academic degree verification process in place, then it should be considered a high risk operation (Aumann 2006, p.87). The author was therefore interested in determining which main populations did not perform the verification, and the reasons behind this non-verification. This would assist in development of the risk treatment plan.

7.4.3.1 Analysis of reasons for not verifying the acceptability of academic qualifications

Findings from Research Question 1A found that whilst 65.5% of all respondents checked the acceptability of academic qualifications, the remaining third (34.5%) indicated that they did not. An analysis of this figure determined that this non-verification of acceptability emanated

primarily from RCSA members (96.1%). Tests of equivalence were therefore not conducted due to the high level of non-verification evident mainly in RCSA participants. Respondents were asked to provide reasons as to why they did not verify acceptability, and these are listed in Figure 27, below. Of those that did not verify, 42% asserted that it was not their responsibility to perform this function, whilst 34% contended that they did not know who to contact in order to obtain the verification information. Up to 32% argued that a degree qualification was the same from any institution, implying that verification of acceptability was not required, whilst 16% provided other reasons as to why they did not check acceptability. These reasons ranged primarily from the client being responsible for determining acceptability of the academic qualification, through to a lack of time to undertake the verification procedure.

7.4.3.2 Analysis of reasons for not verifying the authenticity of academic qualifications

The data from Research Question 1B found that whilst 64.9% of all respondents checked the authenticity of academic qualifications, the remaining third indicated that they did not. An analysis of this figure determined that this non-verification of authenticity emanated primarily from both RCSA members (82.7%) and Private Providers (15.4%); only 1.9% of university providers suggested that they did not authenticate academic qualifications.

In relation to reasons why they did not authenticate academic qualifications, 36.8% of all these respondents stated that they trusted candidates to be truthful when purporting to hold a degree qualification. Ninety two percent of this response came from RCSA members, suggesting that they trusted applicants to be truthful when claiming an academic qualification and therefore there was no need for it to be authenticated.



Figure 27 - RCSA members' reasons for not verifying the acceptability of academic qualifications (%'ages).

Amongst the other main reasons outlined in Figure 28, below, 25% of both RCSA members and private providers argued that the process of authentication took too long, whilst 30.4% of RCSA members stated that they did not know who to contact in order to perform the authentication. Although only 22.1% of all the respondents stated that it was not their responsibility to verify authenticity, 93.3% of this response came from RCSA members. Within this response, 75% admitted that it was their responsibility to check authenticity, but they did not do this.

Although 25% of all respondents cited other reasons as to why they did not authenticate, no private or public providers gave any information as to why this was the case. Amongst RCSA members, the main reasons were that only the final short listed candidate's qualifications were authenticated and only degrees that were relevant to the position were checked. A reliance on the honesty of the candidate was cited, along with the need to place candidates quickly into positions, and a consequent lack of time to verify authenticity. Some degree qualifications were authenticated, but not all, was another reason cited, whilst authentication was noted as the responsibility of licensing boards in some instances.

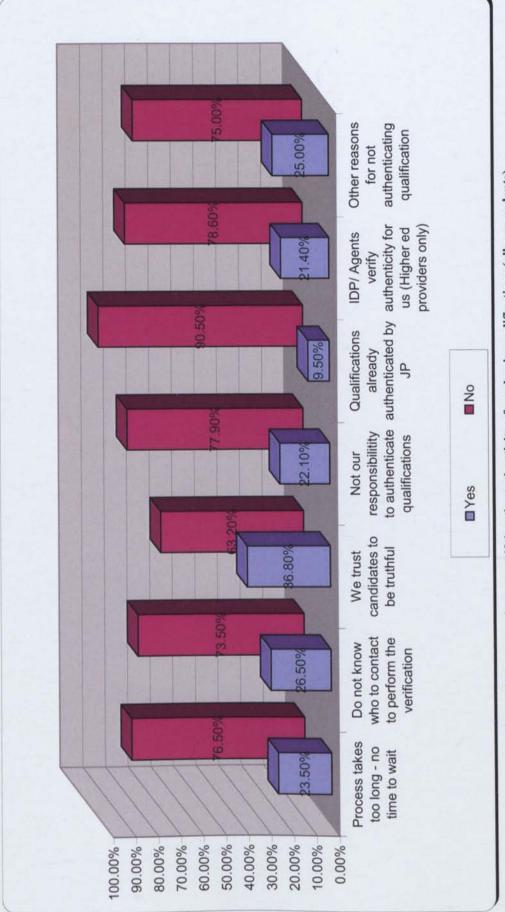


Figure 28 - Reasons for not verifying the authenticity of academic qualifications (all respondents).

7.4.4 Other results concerning the falsification of academic qualifications

Respondents were asked if they had ever discovered a candidate for an employment position or potential student for a postgraduate position with a falsified academic qualification.

Amongst all respondents, 53.7% had discovered a falsified academic qualification during the recruitment or admissions process. Within this figure, 100% of public providers had discovered a falsified qualification, whereas only 53.7% of RCSA members and 20.8% of private providers had discovered one during the assessment process. When asked to quantify the level of falsified qualifications per year, 49.1% of all respondents stated this level was between 1%-5% per annum, with 40.4% suggesting the figure was below 1%. Over 10% of all respondents claimed to have experienced a falsification rate ranging from 6 to over 20% per annum. As a response to such discoveries, 80% of all respondents removed the applicant from the selection process and informed them of the reason.

7.5 Stage 2 – The Delphi Group's Risk assessment

The second part of this study sought to determine a semi-quantitative risk level for each of the main resources and methods based on the data collected from the three groups in Stage 1. To determine this risk level, a Delphi panel was formed, as outlined previously in Chapter 6.

7.5.1 Data collection, measurement and analysis

Once participants had agreed to be part of the Delphi group, members were sent a copy of the *Participant Guidelines, Glossary of Terms and Risk Rating Table* (see Appendix 39, Volume 2, page 496). They were informed that the risk assessment process related to the assessment of a Bachelor degree qualification as a mandatory prerequisite academic credential for entry into either an employment position or further higher education study. In order to standardise the data collection process, the survey was separated into two sections: the first related to

evaluating the acceptability of a qualification; the second, to its authenticity. A copy of the survey instrument is located in Appendix 42, Volume 2, page 518.

Section 1 consisted of the range of resources and/ or methods which, in Stage 1 of the study, had been identified as being used in order to determine the *acceptability* of a higher education qualification. Delphi participants were asked to assess each resource/ method as a stand alone method, and to indicate the perceived level of risk in using this resource in relation to the risk of accepting an individual who presented a non-official higher education qualification.

For Section 2, Delphi participants were asked to assess the resources/ methods presented in Stage 1 which could be used in order to determine the *authenticity* of a higher education qualification. Again, Delphi participants were required to assess these approaches/ methods on their individual merit, and determine what the level of perceived risk in using these resources in relation to the risk of accepting an individual who presented a falsified/ non-authentic qualification. Participants were again asked to refer to the Risk Rating Table and a glossary of terms was provided (see Appendix 39, Volume 2, page 496).

The data derived from the Delphi Study were analyzed following a process similar to that employed by Brooks (1979) cited in Murry and Hammons (1995, p.432). Statistical summaries of the panel responses were calculated and provided to participants at the end of each round. A four point rating scale was converted to numeric values, and where panelists could not respond because they had no expertise in the area, no numerical value was attributed to this response. A consensus level of 75% was determined as appropriate, given the size of the panel and the difficulty in defining exact criteria.

7.5.1.1 Results for Delphi Round 1

A total of 23 questions was posed to Delphi participants in Round 1. At the end of Round 1 the responses were collated, graphed and provided in a variety of formats so that respondents could view the results and comments from other participants. A broadcast email was made to the panel, informing them of the summarized results available online at http://users.chariot.net.au/agbrown/index.htm. This site also provided a printable PDF file and Excel file of the results.

After Round 1, the Delphi panel reached consensus on only 1 question (Question 5) from the 23 questions posed. In relation to stability of responses, this was attained on all questions pertaining to acceptability (Questions 1-11). However, for Questions 12 and Question 20 (questions pertaining to authenticity), a mean could not be computed. Where a respondent chose 'No judgment' for a question, this result was not included in any calculation of mean response or statistical calculation. Due to a lack of consensus being achieved in the majority of questions, participants were requested to participate in Round 2.

7.5.1.2 Results for Delphi Round 2

For Round 2 of the Delphi, 22 questions were required to be re-rated. One question was removed as consensus had been achieved in Round 1. For this round, the author prepared a summary of results from Round 1 and tailored this specifically for each respondent. Each summary contained the individual's original response to each question, followed by a request to undertake one of the following four steps during the re-rating process.

• Where a participant's response fell within the most popular choice, respondents were informed that they could either re-input this response again for Round 2, or if they felt

inclined, re-rate their response based on their review of the rest of the group's responses.

- Where a participant's response did not fall within the most popular response for a question, participants were informed of the most popular response and requested to rerate their response based on this information, or maintain their original response.
- Where a participant chose 'No judgment', respondents were informed that they could either re-input this response for Round 2 or, if they felt inclined to do so, choose another rating based on their review of the group's response.
- For question 12 and question 20, all respondents were informed that an average could not be determined due to lack of stability. As such, all participants were requested to re-rate these questions based on a review of the Delphi panel's overall comments.

Whilst the aim of a Delphi study is to obtain consensus, the author did not want to be seen as coercing or forcing respondents to choose a particular response, based on the group mean. As such, the requests for re-rating included the statement that they were free to remain with their original Round 1 choice if they so pleased.

A total of 22 questions were to be rated for Round 2; a summary of the requests to each of the 15 panellists are shown below:

# of respondents	# Questions to totally re- rate	# Questions to leave or optionally re-rate
4	9	13
2	8	14
2	6	16
2	7	15
1	16	6
1	13	9
1	12	10
1	10	12
1	4	18

Table 11 - Summary of requests to Delphi Panel for re-rating or optional rating in Round 2.

For Round 2, only 13 of the original 15 participants were able to participate due to other pressing work commitments. Calculations were adjusted accordingly to accommodate this reduced level of participation. During this round, 6 questions achieved consensus. While this was an improvement on Round 1, these results still required further rounds to be undertaken.

7.5.1.3 Results for Delphi Round 3

In Round 3 of the Delphi, only 16 questions were required to be re-rated. During Round 2, 6 questions had reached the required 75% consensus level and were therefore removed from the survey. Due to a lack of significant movement in response from Round 1 to Round 2, the author decided to inform the panel that Round 3 was to be the final round. As with Round 2, a summary of results tailored specifically for each respondent was prepared. Each summary contained the individual's original response to each question from Round 2, followed by a request to undertake one of the following four steps for each question during the re-rating process.

- Where a participant's response fell within the most popular choice, respondents were informed that they could either re-input this response again for Round 3, or if they felt inclined, re-rate their response based on their review of the group's responses from Round 2 which were available online.
- Where a participant's response did not fall within the most popular response for a
 question, participants were informed of the most popular response and requested to rerate their response based on this information, or maintain their original response. At
 no time were participants forced to change their responses.
- Where participants chose 'No judgment' in Round 2, they were informed that they could either re-input this response for Round 3 or, if they felt inclined to do so, choose another rating based on their review of the groups response.

As with Round 2, participants were informed that stability could not be reached for
questions 12 and 20. As such, all participants were requested to re-rate the question
based on a review of the Delphi Panel's overall comments.

The author was again mindful to not be seen as coercing or forcing respondents to choose a particular response based on the group mean. As such, the requests for re-rating in Round 3 included the statement that they were free to remain with their original Round 2 choice if they so pleased.

A total of 16 questions needed to be rated for Round 3; a summary of these requests for round three are shown below.

# of respondents	# Questions to totally re- rate	# Questions to leave or optionally re-rate
4	5	11
2	8	8
2	4	12
1	10	6
<u> </u>	9	7
1	7	9
<u>:</u> 1	3	13
<u>.</u> 1	2	14

Table 12 - Summary of requests to Delphi Panel for re-rating or optional rating in Round 3.

Participation in Round 3 of the survey remained at 13, similar to that of Round 2.

Upon completion of the three rounds of Delphi questioning, the results for applying the levels of risk for each of the populations were ready for analysis. The Delphi method can be seen as equally valuable in identifying issues on which there was a lack of consensus as in identifying issues on which there was consensus. In fact, the minority of instances in which minimum consensus could not be reached lent further credibility to the cases in which consensus was reached.

The possible reasons for lack of consensus on the items, where it occurred, are important and should be explored in further research. These may reveal different experiences with the risk levels from using the various approaches, or different bases for evaluating the risk of particular approaches. This may prove to be a source of further hypotheses that could be tested.

7.5.2 Semi-quantitative risk levels for acceptability of academic qualifications

The final results from the three rounds of the Delphi Panel were used to determine a semiquantitative risk level. In relation to the most commonly available qualification acceptability resources and/ or methods, the 11 approaches presented resulted in a 72.7% consensus rate overall, with 75% consensus in relation to risk levels being achieved for 8 items. Table 13. below, outlines the percentage consensus level obtained for each resource/ approach. The panel determined that using the AQF Register for verifying Australian higher education qualifications and the use of the ENIC-NARIC network posed no risk in determining academic qualification acceptability and hence these were the most trustworthy of all resources. Using the Commonwealth Universities Yearbook, NOOSR Guides, International Handbook of Universities, using a Universities Admission Centre and checking with the relevant Ministry of Education were all regarded as posing a moderate risk in the evaluation process and were therefore seen as good resources. Seen as posing substantial risk to the credential evaluation process was the use of Bears Guide, Professional Associations and the use of the FAIMER-IMED directory. Amongst all resources/ approaches presented, the checking of an institution's website to find out whether it was accredited was seen as an extremely risky proposition in determining the acceptability of an academic qualification.

Name of resource/ method	Risk level	Agreement	Consensus Comment	Comment
	determined	level	reached?	,
AQF Register (Aust quals only)	No risk	%19.16	Yes	
ENIC-NARIC network	No risk	61.54%	No	
Commonwealth Universities Yearbook	Moderate risk	84.20%	Yes	
Check with Ministry of Education	Moderate risk	84.62%	Yes	
NOOSR Guides	Moderate risk	84.62%	Yes	
International Handbook of Universities	Moderate risk	84.62%	Yes	
Universities Admissions Centers	Moderate risk	%00.08	Yes	
Professional Associations	Substantial risk	90.91%	Yes	
Bears Guide	Substantial risk	%0/-99	No	
FAIMER IMED Directory	Substantial risk	57.14%	No	
Check website of provider	Extreme risk	84.62%	Yes	

Table 13 - Risk levels evaluated by Delphi Panel for resources/ methods to determine acceptability of an academic qualification (sorted by levels of risk).

7.5.3 Semi-quantitative risk levels for authenticity of academic qualifications

Amongst the commonly available methods used to determine the authenticity of academic qualifications, only 6 of the 12 options presented reached consensus with the Delphi panel, equating to only a 50% consensus level for all items. Having academic documents sent directly from the conferring institution was judged the most risk-free approach. Although over 69% of the panel regarded this as posing no risk, the panel could not reach the 75% level of consensus on this item. Of the moderate risk approaches which achieved consensus amongst panel members, email and fax verification from the conferring institution were seen as effective, whilst verbal confirmation, copies of academic documents verified by an authorized education agent and use of a professional association were also seen as moderate risk approaches, although consensus could not be reached on these items.

Authentication approaches which the panel found as posing substantial risk were the use of IDP in verifying the authenticity of presented academic documents. At the extreme risk level, accepting photocopies of academic documents directly from the candidate and claims of academic qualifications from a CV were seen as riskiest of all approaches. It was interesting to note that stability of response could not be achieved in relation to the use of photocopies notarized by a Justice of the Peace and provided by the candidate, one of the most common approaches used in Australia. The panel was extremely divided in its responses to this method. The response to the use of Qualsearch was also not clear, mainly due to it being a new product and not widely known. Only three of the expert panel members chose to comment on this resource, with their opinions being divided about its effectiveness in risk minimization.

Name of resource/ method	Risk level determined	Agreement level	Consensus	Comment
		D	reached?	
Original documents supplied	No risk	69.23%	No	
directly by the institution				
Original documents supplied by the candidate	Moderate risk	76.92%	Yes	
Email confirmation of	Moderate risk	84.62%	Yes	
documentation by conferring				
institution				
Faxed confirmation provided by	Moderate risk	76.92%	Yes	
conferring institution				
Copies verified as authentic by	Moderate risk	53.85%	No	
authorized agent				
Professional association verifies	Moderate risk	%09	No	
authenticity				
Verbal confirmation by the	Moderate risk	53.85%	No	
institution				
Photocopies notarized by JP &	Moderate/ Substantial/	38.46% - Extreme	No	Extremely divided over risk
provided by the candidate	Extreme			level of this method
		30.77% - Substantial		
		23.08% - Moderate		
Photocopies of originals	Extreme risk	76.92%	Yes	
provided by the candidate				
CV provided by the candidate	Extreme risk	100%	Yes	
Copies verified as authentic by IDP representative	Substantial risk	85.7%	Yes	
Oualsearch		No outcome	No	Only 3 participants
				commented
		- 75 - 67		oliffootion (contod by lovole of rich)

Table 14 - Risk levels evaluated by Delphi Panel for resources/ methods to determine authenticity of an academic qualification (sorted by levels of risk).

7.5.4 Determining the semi-quantitative risk level of acceptability and authenticity of academic qualifications for each population

The final two research questions were designed to ascertain an overall level of risk for each of the three population groups, based on the data analysed in the previous two sections.

Research Questions 4A and 4B were concerned with the overall risk levels in relation to determining the acceptability and authenticity of higher education qualifications. In order to calculate these levels, it was necessary to analyse each Stage 1 respondent's choice of resources/ methods and apply the appropriate risk level to each item used.

The author acknowledges that in an evaluation situation, an individual would most likely use a range of resources in order to make an informed decision about an academic qualification. For this study, the author has assumed that each Stage 1 respondent consistently used, for all degree assessments, the lowest risk method which he/ she listed. For example, where a respondent chose 'Check website' which was rated by the Delphi as 'high risk', this level was superseded if they also used the NOOSR Guides, which was rated by the Delphi as 'moderate risk'. The lowest risk item essentially 'cancelled out' any other higher risk method/ resource mentioned. Where a respondent chose 'AQF Register' which was rated as a 'no risk' item by the Delphi, this was superseded if the NOOSR Guides was also chosen. Given that the NOOSR Guides incorporate the information included in the AQF register and provide a more encompassing approach to determining qualification acceptability, this resource was assumed to be used as the most frequently used risk minimisation tool. It was also assumed that each participant used the most recent version/ edition of the listed resources.

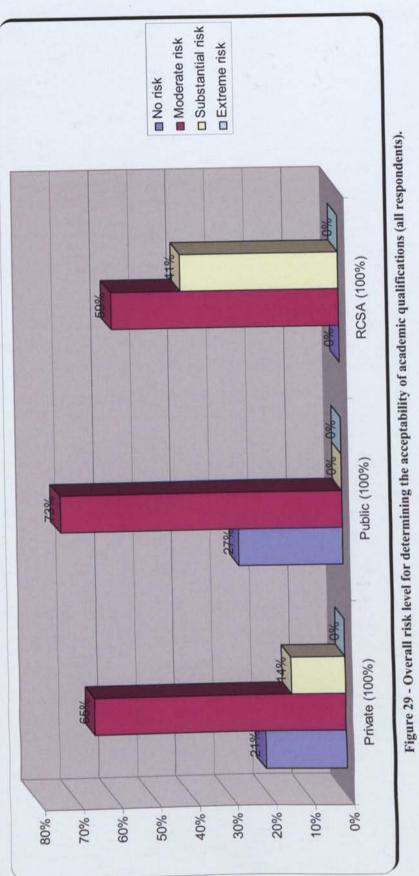
For these research questions, the author accepted as contributing to the overall assessment of risk level all items that reached a consensus level of 50% and above by the Delphi panel. This

excluded two items only. Because Qualsearch appeared to be known only by a few this was dropped. Since 'Photocopies notarized by a JP and provided by the candidate' was a popular authentication method for all three populations, this was included at the middle level and allocated 'substantial' risk.

7.5.4.1 Overall risk level for Research Question 4A

Amongst the three populations, the author was interested in determining the overall level of risk each separate population was exposing itself to when assessing the acceptability of an academic qualification, as outlined in Research Question 4A page 268.

In order to answer this research question, the author applied the risk levels evaluated by the Delphi Panel to each Stage 1 respondent's choice of acceptability method. Once each Stage 1 respondent had been assigned an overall risk level, frequency totals for the various risk levels in each population were calculated. As outlined in Figure 29, below, public providers of higher education placed themselves in the lowest risk position, with these respondents demonstrating either a moderate (73%) or no risk (27%) approach to verifying the acceptability of academic qualifications. Private providers had a higher risk approach to determining acceptability, ranging from 21% no risk to 65% moderate risk and 14% substantial risk position. RCSA members placed themselves in the highest risk position, showing a 59% moderate and 41% substantial risk approach to verifying the acceptability of academic qualifications.



7.5.4.2 Overall risk level for Research Question 4B

Amongst the three populations, the author was also interested in determining the overall level of risk each separate population was exposing itself to when assessing the authenticity of an academic qualification, as outlined in Research Question 4B, page 268.

In order to answer this research question, the author applied the risk levels evaluated by the Delphi Panel to each Stage 1 respondent's choice of authentication methods. Once each Stage 1 respondent had been assigned an overall risk level, frequency totals for the various risk levels in each population were calculated. As outlined in Figure 30, below, public providers of higher education again placed themselves in the lowest risk position, with a considerable no risk approach (68%) to verifying the authenticity of academic qualifications. In contrast to the previous question, RCSA members were found to have a medium level risk approach to determining authenticity (52% no risk, 30% moderate risk, 9% substantial and 9% extreme risk). Private providers, however, gave evidence of placing themselves in the highest risk position, with a considerable moderate to substantial risk approach to verifying the authenticity of academic qualifications (30% no risk, 35% moderate risk, 30% substantial risk and 5% extreme risk).

7.6 Discussion of overall risk findings

The preliminary research question demonstrated that a potentially considerable level of risk exists in relation to the provision of falsified Australian academic qualifications. The example given in the Appendix suggests that some falsified academic document providers offer products of excellent quality. These findings demonstrate that it is necessary to authenticate all academic qualifications in order to minimize the risk of falsified academic

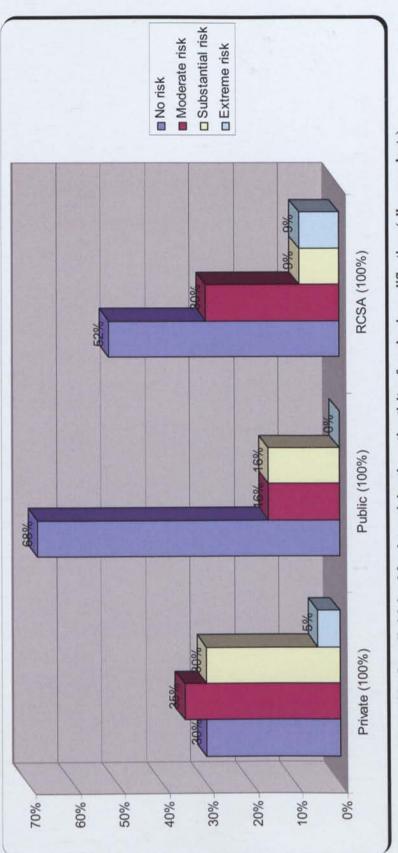


Figure 30 - Overall risk level for determining the authenticity of academic qualifications (all respondents).

qualifications being presented in a prospective employment or higher education admission process.

For the survey of the RCSA and providers of postgraduate higher education, the data analysis for this section yielded some important findings. The fact that over one third of all respondents did not perform any verification of acceptability or authenticity of academic qualifications was a cause for concern. The majority of this response resided with RCSA members (96.1% and 82.7% respectively), with the author theorizing that most devolved this responsibility to employers. The results found that only 42% of RCSA members who did not verify the acceptability of an academic qualification suggested it was not their responsibility, while for those that did not verify authenticity, only 25% argued it was not their responsibility to perform this task. These figures are a cause for concern and should be investigated.

Likewise, 25% of private providers of postgraduate higher education admitted to not checking the authenticity of academic qualifications presented to them. Reasons for not undertaking an authentication process were not convincing. The fact that 50% placed trust in the JP notarization of qualifications presented to them may be cause for concern.

The tests of equivalence performed on the three populations also provided some interesting insights. With reference to determining acceptability of academic qualifications, there was an equivalent high level of use of high risk items (e.g. the Internet), and an equivalent low use of moderate risk minimization resources such as the International Handbook of Universities and contacting the Ministry of Education in the respective country. Use of the lowest risk items for determining acceptability was centered primarily with public providers of higher education.

In relation to determining authenticity of academic documents, there was a relatively low equivalent use of low risk minimization methods employed across the three populations. *Prima facie*, RCSA members used the highest risk methods for document authentication. Of the 35.2% of all respondents who accepted a photocopy of academic documents provided directly by the candidate as authentication of a claimed academic qualification, 83.9% of this figure was RCSA members; this represented 56.5% of the entire RCSA population. Similarly, of the 34.1% of all respondents that accepted the claims of a qualification documented in a CV as an authentication method, 73.3% of this figure came from the RCSA membership and represented 47.8% of the entire RCSA population. Whilst these figures appear concerning, they were countered by a higher level of use of other low risk methods which ultimately positioned them in a lower risk category than private providers when it came to authenticating academic qualifications; this is discussed further, below.

Over half of all respondents had discovered a falsified academic qualification during the recruitment or admissions process. This figure is of concern and could be much higher, particularly when one considers that one third of all respondents do not perform any verification of academic qualifications. Amongst all respondents, it was evident that the methods they used to verify acceptability and authenticity were perhaps not as effective as other possible options. The use of online, web based approaches was perceived as the most effective approach by all respondents and these are to be explored for the development of a risk treatment tool in Chapter 8.

With regard to the findings of the Delphi panel and the risk ratings, some unexpected results emanated from this process. Of particular interest was the rating of 'original documents provided by the candidate' which were ranked as moderate risk by the panel. The author is surprised at this finding, as many official international polices have suggested that

documentation should not be accepted if handled by the recipient. The Delphi panel was extremely divided in its response to the use of photocopies notarized by a Justice of the Peace and provided by the candidate, one of the most common approaches used in Australia. This issue should be investigated further. The response to the use of Qualsearch was also not clear, although this was mainly due to it being a new product and not widely known. Only three of the expert panel members chose to comment on this resource.

The data analysis concluded with the determination of a risk profile. In relation to determining the acceptability and authenticity of academic qualifications, amongst the three populations, public providers placed themselves in the lowest risk position. Private providers were less diligent when it came to determining the acceptability of academic qualifications, whilst RCSA members placed themselves in the highest risk position for this process. For the determination of academic document authenticity, however, RCSA members authenticated qualifications more effectively than private providers of higher education. Although a higher percentage of RCSA members did not authenticate academic qualifications, amongst those that did, they used lower risk resources and methods as opposed to private providers. The implications and findings from this data analysis section suggest that there may be an opportunity for RCSA members to obtain further professional development from their peers in relation to acceptability methods, whilst private providers should network with public and RCSA members to improve their authentication procedures.

With reference to the previously discussed continuum models outlined in Chapter 3, the perception of risk for each population may now be placed on continuums of acceptability and authenticity as follows:

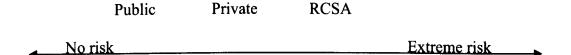


Figure 31 - Continuum of perception of risk for the RCSA, Public and Private providers of postgraduate higher education qualifications in relation to determining the acceptability of academic qualifications.

RCSA

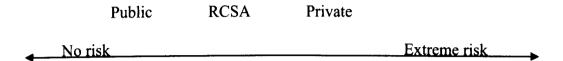


Figure 32 - Continuum of perception of risk for the RCSA, Public and Private providers of postgraduate higher education qualifications in relation to determining authenticity of academic qualifications.

While it has been previously accepted that these semi-quantitative measurements of risk are not an exact assessment of practice, placing each of the populations on the continuum models provides a useful visual depiction of the overall risk position which each population may be placing themselves in when assessing academic qualifications.

7.7 Summary and Conclusions

The results of the data collected for this section of the study suggest that there was limited equivalence of low risk processes employed by higher education providers and recruitment agencies within Australia in relation to verifying academic qualifications. These results suggest that both the recruitment industry and private providers could benefit from working with public providers of higher education in relation to methods of qualification verification and authentication. While many of the recruitment agencies did not regard the verification of the acceptability of academic qualifications as their responsibility, a larger proportion did suggest that the onus was on them to verify authenticity. As long as this non-verification of acceptability requirement is communicated adequately to their clients, this may suffice.

However, devolving this risk to an employer is, in the author's view, not the most effective risk minimisation strategy. Given the criticisms previously levelled in major reports pertaining to the recruitment of staff (as outlined in Appendix 2, Volume 2, page 382), further work should be undertaken in this area. Furthermore, with over half of all respondents having discovered an individual with a falsified academic qualification during an assessment process, there is a clear and evident need for the development of a new risk treatment process in order to minimise risk in the area of academic qualification acceptability and authenticity.

Amongst the three populations there was a high level of usage of web based technology, such as the Internet and email, for communication and determining acceptability and authenticity of academic qualifications. All respondents from all three populations asserted that an online, web based form of verification system would be the most advantageous and useful tool to use when verifying academic qualifications. Given that the Delphi panel rated the use of the Internet as extreme risk resource, if this medium is to be used as an effective tool, it is necessary to develop a low risk approach that will capitalise on the preference for the Internet as a tool. A new risk treatment model, providing an overall consolidated multi-method approach to verifying the acceptability and authenticity of academic qualifications is proposed in the final chapter of this study.

Chapter 8 – Conclusions: a risk treatment model for academic qualification acceptability & authenticity

We should be looking at best practice and we should be sharing information among the universities. John Mullarvey, past Chief Executive, Australian Vice-Chancellors Committee, when asked what would could be done about addressing the problem of falsified qualifications (Buckell 2003).

8.1 Preamble

A range of challenges and issues which pose a risk to the effective process of determining the acceptability and authenticity of academic qualifications have been explored in this study. The various resources and methods currently being used by Australian official postgraduate higher education providers and recruitment agencies were investigated in terms of their frequency of usage and their level of risk. Results from this research suggested there was a lack of a systematic and comprehensive procedure, which incorporated a number of the low risk treatment tools, including those recently developed, to check both the acceptability and the authenticity of an academic qualification. There appeared to be a need for a new process to facilitate ease of communication and sharing of risk minimisation resources amongst a range of stakeholders. The author contends that this approach to risk reduction could be achieved through a central online clearinghouse for the domains of knowledge relating to qualification acceptability and authenticity.

8.2 Overview of the investigation for a risk treatment tool

In general terms non-official higher education presents a problem in all countries, concerning regulation, transparency and quality assurance and the question of fraud and bogus titles cannot be excluded anywhere (Kokosalakis 1999, p.45).

This study set out to investigate the level of potential risk incurred by official postgraduate education providers and recruitment agencies in Australia through their methods of

determining the acceptability and authenticity of academic qualifications. The study followed the Risk Management Process (see figure below) as a theoretical framework and used three main phases to guide the investigation.

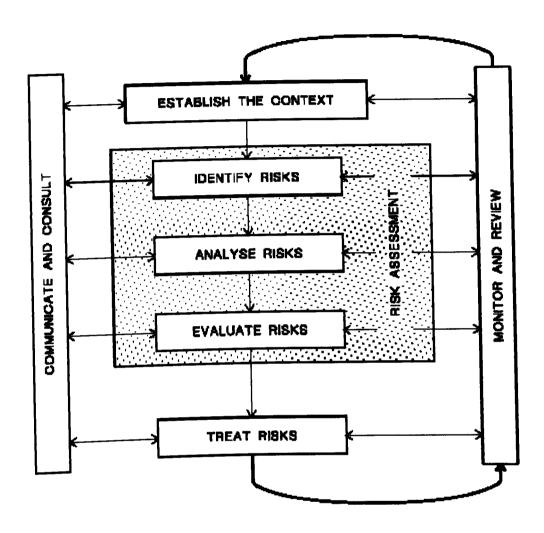


Figure 33 - Risk Management Process - Overview.

Source: Standards Association of Australia (2004, p.9)

Phase 1 of the Risk Management process was covered in Chapter 2, whereby the Risk Context for the study was established. It was found that academic qualifications were becoming increasingly important as countries strove to create 'knowledge nations', with investments in both personal and national human capital. Notwithstanding this, an academic qualification was found to be an imperfect proxy measure of ability and capacity. The emphasis on academic qualification acquisition has led to an increase in credentialism, reliance by

employers on the credential as a screening tool, and an increased demand for qualifications which has spawned the offerings from non-official and falsified higher education qualification providers.

Phase 2 of the study consisted of the Risk Assessment Process. This process encapsulated risk identification, risk analysis and risk evaluation. Chapter 3 reviewed the origins of higher education academic qualifications and the documentation issued as part of the process. The credentialing function underpinning this document provision and the traditional acceptance of academic qualifications issued by universities was discussed. It was found that significant challenges were posed by new forms of non-official and falsified academic qualification provision, particularly in the areas of acceptability and authenticity. Given these challenges, Chapter 4 focused on the potential high risk providers identified on the continuums of acceptability and authenticity. Although it was found that an encompassing typology of providers could be created for falsified academic qualification provision and use, particular challenges were posed in the non-official area due to jurisdictions differing in their forms of recognition and regulation around the globe. The level of risk appeared to be augmented in countries which suffered significant levels of corruption; given the global market for academic qualifications, this higher level of risk could potentially affect those outside these countries.

Chapter 5 addressed the Risk analysis component of the Risk assessment phase, by assessing the main control tools and assessment methods that were currently used, or under development, in order to minimise risk in the area of academic qualification acceptability and authenticity. The chapter found that legislation and its accreditation component as an overarching control system was fragmented. Laws within each jurisdiction varied considerably, posing significant risk to both the evaluator and user of non-official and

falsified academic qualifications. The resources and methods for determining the acceptability and authenticity of higher education qualifications were also found to be diverse in both quality and accessibility. Threats of litigation have forced many initiatives to fold, whilst the most comprehensive resources are only available to those that can pay subscription and licensing fees for their use.

At a more functional level, the chapter found that although various resources had moved from paper based to a more accessible web based model, it was unclear how these were being communicated to interested stakeholders. It was evident that there was no systematic approach to providing risk minimisation strategies to verify the acceptability and authenticity of academic qualifications, with many different approaches being used across a variety of jurisdictions. Whilst it was understood that different educational systems have varying structures for recognition, the lack of systematic approaches to academic qualification acceptability and authenticity was seen to be of distinct concern.

In an effort to assess Australia's risk position in relation to academic qualification acceptability and authenticity, Chapters 6 & 7 undertook a Risk evaluation, as the final part of the risk assessment phase. The research methodology for this investigation took the resources and methods reviewed in Chapter 5 and tested the equivalence of their use amongst official postgraduate higher education providers and recruitment agencies in Australia. A Delphi panel of experts was then used to evaluate the level of risk involved in the use of each of these resources and methods. Finally, an overall risk level for each population investigated was calculated, based on the resources which the respondents claimed to use and risk levels assigned to these by the Delphi Panel. Overall, it was found that official public providers of postgraduate higher education placed themselves in the least risk position. RCSA members

and official private providers of postgraduate qualifications had higher risk when it came to determining acceptability and authenticity of academic qualifications.

Another important finding was that 35% of all respondents (predominantly RCSA members) did not perform any form of qualification screening. Of particular note and application to the final stage of the risk assessment process was the fact that 34% suggested that they did not know who to contact to perform the verification, whilst 32% argued that a degree qualification was the same from any institution and therefore it did not need to be checked. These results indicated that there was a distinct need for a centralised and easily accessible resource to perform verifications of both academic qualification acceptability and authenticity. The use of such a resource would satisfy the requirements of the 'communicate and consult' and 'monitor and review' areas of the Risk Management Process diagram and provide an all encompassing approach.

8.3 Limitations of the study

It is important to recognise the limitations of this study. Because this is the first attempt to investigate the whole range of issues associated with the verification of academic qualifications by recruitment agencies and higher education providers, it has been necessary to devote substantial chapters to explaining the background and nature of the different facets of the problem in the global context. There has been a thorough review of reports and studies which have focused on specific aspects of the problem and attempts to deal with it, but these have come mainly from the English speaking world.

The research investigation has concentrated on evaluating the risk posed by non-official and fraudulent qualifications only to official tertiary education providers (public and private) and

recruitment agencies in the Australian context. It was intended to use these three groups as populations for the collection of data. The response rate was considered to constitute a sufficient sample for the statistical measures being calculated. However, it is recognised that there are considerable numbers of potential respondents that did not participate. Furthermore, all three populations in the Australian context are relatively small. It would be most useful, therefore, for similar studies to be carried out in other countries, with larger number of participants in order to see whether their findings were consistent with this study's.

It has already been pointed out that the evaluation of overall risk levels for the three populations investigated were semi-quantitative measurements, based on the level of risk assessments made by the members of the Delphi Panel. Although these individuals were chosen for their expertise in the area of qualification verification, their responses represented their individual and personal evaluations. In no way, therefore, can the final risk levels calculated be regarded as entirely objective or absolute measures. Assumptions were also made that all respondents used the most recent version of the resources and methods available, and used the lowest risk resource to determine acceptability and authenticity 100% of the time.

8.4 Practical recommendations from the findings

There are a number of practical recommendations which the findings indicate could assist in any risk minimisation process related to academic qualification verification. These are outlined briefly below, before a more detailed discussion of the new risk treatment tool proposed.

- 1. A concerted international approach to quantify the increase in non-official higher education provision and the proliferation of both fake degree providers and the use of fake degrees should be undertaken. The figures obtained could lend themselves to quantitative risk management techniques which could provide a best practice approach at calculating the probability of future risk perspectives. A follow up report similar in methodology to that of Kokosalakis (1999) is recommended.
- Consistent and more stringent legislation in relation to the use of non-official and fraudulent degrees should be developed in Australia to mirror the laws enacted in a number of US states.
- 3. A reduction in the reliance of academic qualifications as a proxy measure of ability and capacity of individuals could deal with the issues of qualification verification at the most basic levels. Rather than merely requiring academic qualifications as a standard screening tool, other cost effective and convenient tools could be developed to demonstrate the knowledge and skills of a candidate to perform in a position. A move to a competency based higher education system which allowed key competencies to be overtly demonstrated to employers in a cost effective, timely manner that could not be falsified would be the most optimum solution.
- 4. The Australian National Office of Overseas Skills Recognition (NOOSR) should be provided with additional resources to take on a far more extensive role. The department should provide ongoing seminars and workshops on its services in relation to academic qualification acceptability. The development of a parallel authentication process would be of great benefit to those using this service.
- 5. National policies and processes should be developed in relation to the verification and authentication of individual's academic qualifications. The Australian Standards and the new National Protocols should include detailed reference to low risk methods and

- procedures. Penalties should be imposed on those who do not use due diligence in screening individuals.
- 6. The use of polymer technology for transcripts and testamurs should be extended to all sectors of higher education, both public and private. This should be coupled with an intensive promotional campaign so that stakeholders understand how to verify the authenticity of academic documents.
- 7. The promotion of Qualsearch as an effective verification tool should be undertaken.
 The system should include academic qualifications issued by private providers and
 TAFE Institutes and integrate the listing of Diploma Supplements issued by providers.
 The system should also be promoted overseas through Ministries of Education in other countries.
- 8. The AV-CC central database of individuals who have presented falsified academic qualifications should be expanded and maintained as an online version which could be accessed by all stakeholders wishing to verify academic qualifications.
- 9. Further research funding should be allocated to the development of biometric technology and its application to the verification of academic qualifications.

8.5 The proposal for a new risk treatment: building on the UNESCO Info Tool

The sections that follow address the final Phase 3 of the study, being a new risk treatment tool proposed as the main outcome of the study. Despite researchers calling on authorities and higher education policy makers to devise adequate consumer protection for stakeholders (Kokosalakis 1999, p.46), the difficulties in achieving complete consensus in the Delphi Panel are an indication of the potential problems of implementing an overarching global, all encompassing approach. Whilst global regulation and standards would appear to be the optimal solution, the differences in sociocultural perspectives makes this an unrealistic

proposition (Damme 2001, p.10). In the case of consumer protection models which are founded primarily on regulation and enforcement, any efforts to mandate a set of strict accreditation and fraud agreements across all jurisdictional borders would appear virtually impossible to achieve. Furthermore, the evidence presented in this study suggests that no matter what form of regulation is put into place, it would not be possible to entirely remove the risk issues surrounding non-official and falsified higher education qualification provision, in the current environment of an unregulated Internet.

Despite these challenges there is a pressing need for some form of international mechanism to augment existing efforts to monitor increased cross border delivery (Knight 2006b, pp. 224-225), to minimise the risk of fraud and to provide information to decision making parties.

Academic fraud does not spare any country (Hallak and Poisson 2007, p.240), and it is evident that the approach of monitoring risk via a verification procedure must be based on global communication (as outlined in 5.5). The use of this method would not only provide the most effective approach to risk minimisation, but as previously mentioned, also satisfy the 'monitor and review' and 'communicate and consult' processes mandated along the sides of the risk management diagram.

The proposed holistic approach to gathering and disseminating best practice information on qualification acceptability and authenticity requires a central location to act as host. At present there is no trusted, 'free to air' repository for meaningful and informed information, which can be searched by individuals for information on the choices of higher education and issues pertaining to qualification authentication. In the area of academic qualification acceptability, the need for an easily accessible listing of global providers accredited by competent authorities has been acknowledged by both UNESCO and the OECD (OECD 2003, p.8; 2004g). There is, however, no evidence of any attention being given to procedures

for academic qualification authentication. The creation of a reliable, user-friendly information system would enable stakeholders to verify both the *bona fides* of institutions and assist in determining the authenticity of degree documents. At the same time, it would reduce the corruption affecting trans-border education (Hallak and Poisson 2005, p.17), mainly as a result of the existence of 'less trustworthy, fraudulent and corrupt providers of educational services' (OECD 2004g, p.6).

As a solution to this quandary, UNESCO and the OECD have been working on an 'International Information Tool on Recognized Higher Education Institutions', designed to provide a centralised, online portal that lists all recognised providers of higher education in the world (OECD 2005c). The aim of this has been to provide a consumer protection tool for all stakeholders, including students, credential evaluators, employers, professional bodies, educational institutions and the general public (OECD 2003, p.9). This initiative has been seen as one of the most important steps in creating an authoritative 'one-stop-shop' for the recognition of higher education providers (Knight 2005a, p.177). However, the project has been many years in the making. In 2001, Farrington first mentioned this initiative, suggesting that an online database listing all 'accredited' institutions of higher education was under development, although its completion appeared to be, 'a long time off' (2001, p.84). In 2004, a paper presented by Professor Ingrid Moses, the then Vice-Chancellor of the University of New England, argued that there was distinct need for:

... a comprehensive list of accrediting agencies world wide to ensure that unsuspecting students do not enrol in so-called 'degree mills'.... We are awaiting the outcomes of the attempts by UNESCO and OECD to establish an international database of 'recognized' higher education institutions (Moses 2004, p.7).

At the time of writing this study, the project was still in its very early pilot stages and those sponsoring it have yet to agree on how the database is to be constructed, how the information is to be managed, and most importantly, how the currency of the information is to be

maintained (NUFFIC 2006; UNESCO 2006a). The author therefore contends that it is an opportune time to expand and build upon this proposed model, and move it from a semi-static listing of purely official providers of higher education, to a virtual community of practice which could foster the sharing of best practice information in the two key areas of academic qualification acceptability and authenticity.

8.6 An Internet based process for comprehensive academic qualification verification

The risk treatment process proposed as a result of the findings from this study provides for an effective reduction in risk by dealing with both acceptability and authenticity of academic qualifications. This risk minimisation strategy aims to:

- Reduce the likelihood of the risk occurring, by informing global policy makers on new and emerging legislation in relation to the use of non-official and falsified academic qualifications;
- Change the consequences, to reduce the extent of the losses, by assisting the development of more effective screening procedures and the use of best practice approaches throughout the world;
- Share the risk and spread responsibility amongst stakeholders, by informing individuals who may seek non-official or falsified qualifications, and by educating stakeholders who evaluate these claimed qualifications (Standards Association of Australia 2004, p.21).

The development of risk treatment involves a process of cost/ benefit analysis; the cost of managing risks needs to be commensurate with the benefits obtained. When making such cost versus benefit judgments, the context should be taken into account (Standards Association of Australia 2004, p.22). As has been demonstrated in this study, the social and cultural context of qualification verification is complex. The Australian Standard pertaining to risk management has suggested that the legal and social responsibility of addressing risk may override a simple financial cost-benefit analysis. The implications of individuals holding non-official or falsified degrees as outlined in Appendix 3, Volume 2 page 386 and Appendix 20, Volume 2, page 428 have demonstrated that the personal and organizational ramifications

for using such qualifications are distinctly problematic, although in many cases unquantifiable. This new risk treatment tool considers the values and perceptions of stakeholders (from the individualist and hierarchist perspectives) and the most appropriate ways to communicate them.

The model proposed would embody the use of global resources and methods which could integrate the country specific context of the enquirer and the resources/ methods to a particular jurisdiction. It is envisaged that the same information would be available to all individuals across the globe, in a variety of languages specifically targeted at high risk/ corrupt countries. In order to facilitate this model, the author proposes the development of a virtual community of practice for the verification of academic qualifications.

8.6.1 The use of a community of practice as a risk treatment tool

Feeling that you have a peer at the other end of the road dealing with the same kind of problems gives you some comfort that you are not just fighting windmills on your own. Local coordinator for a global community of practice (Wenger, McDermott and Snyder 2002, p.123).

The risk treatment procedure proposed to maximise the effectiveness of qualification verification and minimise risk is based upon the theory of communities of practice. The advantages of a community of practice model are compelling and appear to provide the key solution to the qualification acceptability and authenticity quandary. A significant amount of research has been carried out on the community of practice model, and Appendix 43, Volume 2, page 528 provides a comprehensive literature review conducted by the author on the theory underpinning this approach.

As usually understood, a community of practice consists of networks of individuals with shared interests and a need for common information that is either directly related to their work or required for decision making. Given that academic qualification acceptability and authenticity is important to a range of stakeholders and underpins their information needs, the application of a community of practice approach is appropriate. Communities of practice differ from other groups of individuals in that the participants have a desire to share best practice in a particular domain of knowledge and/ or its application. In this study the two core domains are academic qualification acceptability and authenticity. For these domains of knowledge to be useful to participants, it is necessary to capture the tacit and explicit knowledge held by individual participants and reify or objectify this into tangible information available in the public arena. Knowledge management underpins the community of practice model, a process which turns general day to day activities into a living and breathing curriculum of information. In order to maintain the currency of this information and provide access to a global audience of stakeholders, the author argues that the community of practice in relation to the verification of academic qualifications should be transformed into a virtual community through the use of Internet technologies. The following section provides information on this process.

8.6.2 Rationale for the development of a virtual community of practice

Research in the area of communities of practice suggests that the transition from a physical community of practice to a virtual model is a natural progression. Information contained in Appendix 44, Volume 2, page 531 examines the theory underpinning the move of communities of practice into a virtual, online context. Communities of practice are seen as becoming electronic networks of practice, sharing tacit knowledge as in a traditional community, but moved into a virtual environment. Although the basic use of email is useful,

by itself it does not allow for the rich use of databases which could host threads of discussion and be moderated so that new knowledge could be created for the domain.

From a structural perspective, forums are seen as the most useful platform where discourse can be shared in an asynchronous environment. Social, commercial and professional orientations to virtual communities are found to operate on the Internet, although those that involve a pecuniary interest are found to be the least effective as members are generally spread across different environments. The use of rhythms, virtual prompts which encourage discourse and debate amongst members, are seen as important in fostering commitment and sharing information amongst members of the community. Email alerts and listservs help to maintain an ecology of participation and alert members to new information or ideas that are being shared.

8.6.3 Creating the risk treatment procedure in a virtual environment

Whilst the UNESCO Info Tool is yet to come to fruition as an operational portal, the potential for this to be the central, sole location for a verification procedure for the acceptability of higher education qualification providers and the authenticity of degree documents in an online accessible format is significant. The use of UNESCO as an impartial information provider is important, with its imprimatur and global recognition coverage providing the most optimum platform. The results from this study found that if a new system for academic qualification verification and authentication were to be introduced, then the majority of stakeholders would be receptive to a communication medium involving Internet based technologies. To be effective, however, it must follow the normal conventions associated with risk treatment strategies or methods.

The Australian Standard pertaining to Risk Management has recommended that a number of criteria be addressed for effective implementation of risk treatment. The remaining sections of this chapter address the following criteria:

- Structure and format what will be done to control the risk, and devolve risk responsibility?
- Resource requirements what physical and human resources will be required to implement the risk treatment?
- Responsibilities who implements the risk treatment plan and manages the process?
- Timing when will it be implemented and over what duration?
- Performance measures how will the risk treatment plan be evaluated for its effectiveness?
- Reporting and monitoring requirements how will the risk treatment plan be reviewed and reported on for effectiveness? (Standards Association of Australia 2004, p.22).

These aspects are addressed in the sections that follow.

8.7 The Global Resource Information Portal for determining the Acceptability & Authenticity of Academic Qualifications (GRIPAAAQ)

The new risk treatment tool proposed could be called the 'Global Resource Information Portal for determining the Acceptability and Authenticity of Qualifications' (GRIPAAAQ). This tool is proposed as a self-contained virtual community of practice domain which could be hosted on the UNESCO website, integrating both the proposed UNESCO Info Tool and a new section for academic qualification authentication. Research suggests that for a virtual community of practice to commence effectively, it should have a clearly articulated goal and a set of guiding principles (Callahan 2004b, p.269). It is important that the proposed portal have a clear focus on the provision of information to participants. The goal for the GRIPAAAQ's could therefore be:

The sole entry point for a global 'free to air' information sharing service on the verification of higher education qualifications. In achieving this goal, members will provide a rich, all-encompassing community of best practice for all stakeholders to verify the acceptability and authenticity of higher education qualifications.

8.7.1 Structure and format of the GRIPAAAQ

It is envisaged that the GRIPAAAQ would operate in a similar model to Wikipedia and devolve the management of risk to all the stakeholders involved in academic qualification verification. External stakeholders and interested participants (explained further below) in the areas of academic qualification acceptability and authenticity would be able to enter the site and contribute information and ideas to the two domains of knowledge. These contributions and/ or discourse would be moderated and reviewed by UNESCO to ensure currency and validity. In order to explain how the model would work, Figure 34, below, provides an overview, and explanations.

8.7.1.1 Overview of access and operations

At Level 1 (indicated by the bold number in top right hand corner of Figure 34 below) an individual would enter the site via a login, and create a user profile. Typically, the main interested parties would be prospective students, employers, recruitment agencies and higher education providers (discussed further below). At Level 2, the enquirer would be guided into choosing between two choices - to verify the acceptability of academic qualification (Level 3) or to verify the authenticity of an academic qualification (Level 4). Both Levels 3 and Level 4 would consist of the domains of knowledge pertaining to academic qualification acceptability and authenticity, and both would be linked to ensure against data redundancy. Once a user had entered either Level 3 or Level 4, they could perform searches of these knowledge domains for information relevant to their requirements. For example, a user may search for a higher education institution. If the name were not listed, then the query is deemed 'non-official' and the user would be sent to a profile of the institution and information on the status of this institution. This information could also be used by in-country authorities to address the risk posed by these operations. These domains of knowledge would be broken down into country specific areas, relevant to the context of the user.

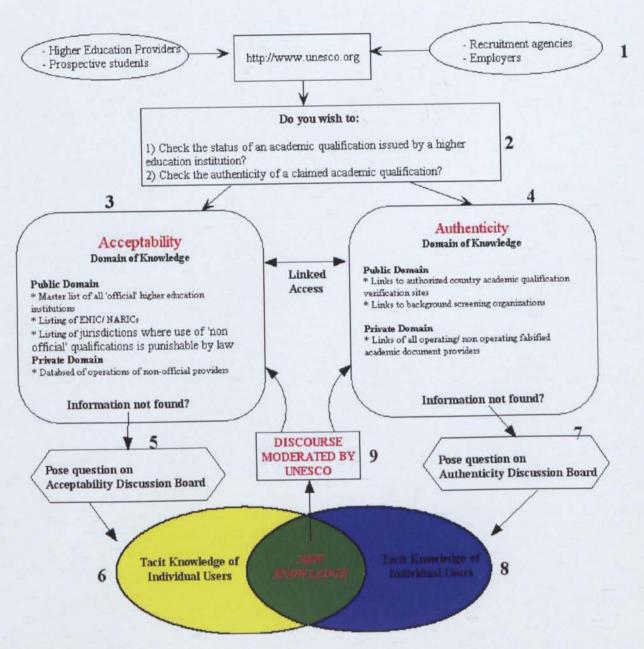


Figure 34 - The Global Resource Information Portal for determining Acceptability and Authenticity of Academic Qualifications (GRIPAAAQ) – overview.

There would also be levels of access for the public and private domains of knowledge, with access permitted for general or private users. Both of these domains of knowledge would, initially, contain the resources and tools critiqued in Chapter 5 of this study. For example, the Acceptability Domain would include:

The Info tool listing all official providers of higher education - over 9,000 institutions.
 In their review of online provision of information on higher education providers, an
 OECD Expert Panel identified 68 countries which had some form of authoritative

- listing of higher education providers freely available on the Internet (OECD 2004e) and these would be included.
- Overview of legislation in each country for the recognition and use of certain qualifications in each jurisdiction.
- Listing of institutions that falsely claim UNESCO affiliation/ accreditation.
- Listing of accreditation agencies that are not GAAP accredited.

The Authenticity Domain would incorporate:

- Details of security paper used and samples of transcripts and parchments.
- A scan of each parchment and transcript from each of the institutions, and what security features to look for on each of them.
- Legislation in each country pertaining to the use of falsified academic qualifications.
- Links to background screening organisations.
- Links to online verification databases (free to air and pay per view).

If individuals were unable to locate the information they were seeking, they would be directed to either Level 5 or Level 7. At these levels, they could post their particular question pertaining to either academic qualification acceptability or authenticity on discussion boards. These questions would be integrated into threads of discourse creating tacit knowledge in the two knowledge areas provided at Levels 6 and Level 8. The melding of the two areas of tacit personal knowledge at this level would create new public knowledge which could be moderated by UNESCO staff members (Level 9) and then fed back into the two main domains of knowledge (Levels 3 and 4) as appropriate. This cyclical and continuous improvement approach would satisfy the 'communicate and consult' sections of the risk management model.

8.7.1.2 Proposed participants

In addition to prospective students, employers, higher education providers and recruitment agencies, a number of associations could be participants. These organisations could operate to provide opportunities for higher education admissions staff to network, although none appear to have a mandate or focus for professional development in qualification verification and authentication. To have a wide variety of organisations and individuals participating in

the GRIPAAAQ would provide both competence and experience to the community and result in new learning taking place (Wenger 2002). This would ultimately create new knowledge in the areas of academic qualification acceptability and authenticity. Appendix 45, Volume 2, page 534, provides for a sample listing of possible organisations, the members of which would be approached to form the nucleus of membership for the GRIPAAAQ. Government agencies and their professional networks are seen as important tools in raising awareness in the areas of fraud affecting higher education (OECD 2004g, p.10) and these would be encouraged to participate in the GRIPAAAQ, although it is acknowledged that this may be difficult.

8.7.2 Resource requirements for the GRIPAAAQ

Given that significant research and work has been put into the UNESCO Info Tool in the area of acceptability, much of the cost has already been absorbed by UNESCO for this part of the initiative. Notwithstanding this, the model proposed here would still require significant human and technical resources allocated to the further development and maintenance of the GRIPAAAQ. The following sections outline the possible resource requirements for the GRIPAAAQ in these particular areas.

8.7.2.1 Human resources

The GRIPAAAQ tool can only be successful if it is built and informed by the current knowledge both of experts and practitioners in the area of qualification assessment, and of the general public, which would seek to inquire about the status of particular providers. As previously mentioned, this initiative would expect to work initially on the Wikipedia model, whereby individuals making enquiries about particular institutions and/ or verification of information would help to create new information in the area. Volunteers and individuals

passionate in the area would also contribute and assist in moderation of material. This would best be undertaken under the auspices of UNESCO to ensure transparency of the information that was provided. The appointment of core moderators of the new information would be required to ensure that this was captured and fed back into the two domains of knowledge. Technical staff would also be required to ensure that currency of links and information was commensurate with current trends.

8.7.2.2 Technical resources

For the GRIPAAAQ to be developed into a leading virtual community of practice, it would be necessary to adopt contemporary software that would capitalise on the current technology available. A number of 'off the shelf' products exist which could be purchased by UNESCO in order to facilitate this process. Platforms such as LinkedIn (https://www.linkedin.com), Open Business Club (http://www.linkedin.com), Ryze (http://www.soflow.com), Ryze (http://www.soflow.com), DRUPAL (http://www.drupal.com) and Ecademy (http://www.academy.com), which are used primarily for business networking and new business developments, could be modified to suit the requirements of the GRIPAAAQ. A newer initiative called Academici (https://www.academici.com & http://www.academici.net) has received critical acclaim as one of the best practice models for an academic virtual community of practice. This product, along with Tomoye http://www.tomoye.com/index.htm, should be reviewed and assessed as a possible platform for the GRIPAAAQ.

The technological underpinnings would require the development of an expert system to guide an individual through the multitude of choice of information. Other features should include an individual profile of a member each day, so that participants would be introduced to other members. A weekly update email to all members which included the main statistics on the site and the individual who had visited a user's profile page would be useful to encourage networking amongst members.

Other technological aspects would include the use of RSS feeds with the recommendation that individuals should install software, such as http://www.pluck.com, in order to be continually updated with the latest news from each of the discussion forums included within the GRIPAAAQ. The integration of free communication tools such as Skype http://www.skype.com would enable members to communicate, free of charge. Members would also be recommended to install other free software such as Plaxo http://www.plaxo.com in order to manage their contacts and keep contacts updated at all times.

8.7.2.3 Financial resources

As previously mentioned, it is assumed that UNESCO has already allocated significant resources to the development of the acceptability component of the GRIPAAAQ. The capital purchase of a proprietary web based system outlined above and the wage cost allocated to the maintenance and staffing of the GRIPAAAQ could be apportioned amongst all countries listed and participating in the tool. If the costs were spread in this way, minimal financial outlay would be incurred by both UNESCO and each participating jurisdiction.

The underlying rationale for this tool would be to provide a free to air model of information which could be used particularly by those in lower socioeconomic areas and where corruption frequently occurs. Cost recoveries could be made by using a Google type model and using selected advertising on pages to reduce costs in some areas. For countries where no free

online listing of academic authentication existed, for profit companies which would have been screened for appropriateness, could be allowed to advertise and promote their services.

Where possible, the site would host free-to-air information which would be available to all participants.

8.7.3 Role responsibilities for the GRIPAAAQ

For the GRIPAAAQ to be an effective risk treatment tool, roles and responsibilities would need to be allocated to ensure the system functioned at the most optimum level. The ultimate responsibility of implementing and managing the system would rest with UNESCO. This would be necessary so that it could remain independent from the various countries. Whilst the contribution of new information would be purely voluntary, the effectiveness of participation and interaction in the GRIPAAAQ would need to be driven by UNESCO. The author suggests that a pyramid structure of participation could exist in the system. UNESCO would operate as the ultimate driving force behind the model, whilst other groups would naturally form, according to the theory underpinning a community of practice. Wenger (2000, p.12) maintained that all communities of practice consisted of the five following groups of participants:

- Core group—a small group of people whose passion and engagement energized the community;
- Full membership—members who were recognized as practitioners and defined the community (though they might not be of one mind as to what the community was about);
- Peripheral membership—people who belonged to the community but with less engagement and authority, either because they were still newcomers or because they did not have as much personal commitment to the practice;
- Transactional participation—outsiders who interacted with the community occasionally to receive or provide a service without being members themselves;
- Passive access—a wide range of people who had access to artifacts produced by the community, such as its publications, its website, or its tools.

Within these membership levels, individuals would take on leadership roles as defined by their participation rates within the community and their contributions to the two domains of knowledge. These leadership roles would be informal or formal, similar to that of the Wikipedia model, and could form an ecology of leadership as outlined in Table 15 below:

Type of leadership	Definition	Typical activities	
Coordination	Keepers of the community	Organize events, talks to members, keeps the pulse of the community	
Networking	Keepers of relationships	Connect people, weave the community's social fabric	
Facilitation	Keepers of conversations	Set agendas, watch over conversations, keep notes, provide pointers and summaries	
Documentation	Keepers of the repository	Organize information in order to document practices, update and clean up the knowledge base	
Expertise	Keepers of the heritage	Thought leaders and recognized experts uphold and dispense the accumulated wisdom of the community	
Learning	Keepers of insights	Watch for nuggets, collect emerging pieces of knowledge, standards, and lessons learned	
Inquiry	Keepers of questions	Notice emergent questions, keep them alive, outline a learning agenda, and shepherd "out-of- the-box" initiatives	
Boundary	Keepers of connections	Connect the community to other communities or constituencies, act as brokers and translators	
Institution	Keepers of organizational ties	Maintain links with other organizational constituencies, in particular the official hierarchy	

Table 15 - Ecology of leadership in a community of practice.

Source: Wenger (2000, p.14)

The above ecology of leadership would be managed and monitored by UNESCO so as to ensure the community of practice maintained its continuity.

8.7.4 Launch and timing of the GRIPAAAQ

While the UNESCO Info Tool has been a number of years in development, it would be important for the GRIPAAAQ tool to be integrated into the current version of the Info tool as soon as possible. This would enable the virtual community of practice to be launched as a total, all encompassing procedure that is not seen as separate from the Info Tool. Significant resources should be allocated to the launch of the GRIPAAAQ, with a global launch profiled by UNESCO throughout the world. A dedicated marketing and promotion campaign should be developed, targeting Ministries of Education, higher education institutions, student bodies, employer associations, recruitment agencies and professional associations. During this launch and gradual operation of the GRIPAAAQ, UNESCO should be mindful of the various stages of development of virtual community of practice and ensure that activity was maintained as per below.

Active Dispersed Members engage Members no longer in developing a Coalescing engage very practice Members come intensely, but the together and community is still recognize their alive as a force and a **Potential** potential Memorable center of knowledge People face The community is similar no longer central, situations but people still without the remember it as a Typical Activities benefit of a significant part of shared practice their identities Engaging in joint activities, creating Exploring artifacts, adapting connectedness, to changing Telling stories, defining joint circumstances. Staying in touch, Finding each preserving other, enterprise, renewing interest, communicating, artifacts, discovering negotiating commitment, and holding reunions, collecting commonalities community relationships calling for advice memorabilia time

Stages of Development

Figure 35 - Stages of Development of a Community of Practice.

Source: Wenger (1998a, p.3)

It is of vital importance that the GRIPAAAQ be maintained at the 'Active' level, and strategies should be developed to ensure that performance mirrors the above typical activities at the active level.

8.7.5 Performance measures for the GRIPAAAQ

Perhaps one of the most challenging aspects of implementing and using the GRIPAAAQ would be how to measure its effectiveness as a risk minimisation tool. A number of benchmarks and success indicators would need to be developed in order to ascertain the return on investment in the tool and its risk minimisation effectiveness in the areas of academic qualification acceptability and authenticity. Research undertaken by Teigland and Wasko (2004a) found a 50-70% failure rate in knowledge management projects. The main reasons for such a high failure rate was the over reliance on information technologies, coupled with what they called a 'create and they will come' mentality. Given these concerns, the following could be developed as benchmarks for an ongoing review of the system:

- Number of registrations per annum and ratio of participation;
- Number of contributors to discussion boards and length of leadership role maintained for moderation and contribution to discourse;
- Number of new threads of discussion and ratio of conversion into new knowledge for the two domains of acceptability and authenticity;
- Number of newly identified non-official providers per annum;
- Number of newly identified falsified providers of higher education qualifications per annum;
- Survey of members, with feedback being sought on clarity, usefulness and appropriateness of information contained in the GRIPAAAQ;
- Feedback on effectiveness and use of GRIPAAAQ at global conferences.

A review of the GRIPAAAQ's operations and an evaluation of its usefulness across a range of countries would be a key area for future research. At a more fundamental level, it would be important for investigations in the area of verification of the acceptability and authenticity of academic qualifications to be undertaken in other countries and later timeframes in order to ensure that risk levels remained as low as possible.

8.8 Conclusion

This pioneering investigation into the process of verifying academic qualifications in Australia has highlighted examples of the risks that may occur through failure to verify degrees, as well as the societal factors which have led to a world-wide demand for tertiary degrees that outstrips public provision. The result has been the emergence of non-official and fraudulent providers whose operations, since the introduction of the Internet, have reached consumers with computer access around the globe. To understand the level of risk which such providers pose, a comprehensive classification of higher education providers was developed. It clearly distinguished official from non-official qualification providers and indicated the problems surrounding the identification of fraudulent academic qualification providers.

A review of existing tools, used by higher education providers and recruitment agencies to reduce the risks of accepting non-official or fraudulent qualifications, led to a specific investigation into the risk levels being incurred by official providers (both public and private) and recruitment agencies in Australia. The official public providers revealed the lowest level of risk, with the official private providers and recruitment agencies demonstrating higher levels. The results pointed to the need for a comprehensive tool and procedure for verifying both the acceptability and authenticity of a qualification, and for making the information

readily available to all stakeholders including individual enquirers, through the Internet in a free to air format. The way in which such an Internet tool, referred to as GRIPAAAQ, could work was described in detail. Ultimately, it is hoped that the risks of accepting non-official and fraudulent qualifications would be considerably lowered through a reduction in the number of non-official providers and users of falsified academic qualifications.



Academic qualification acceptability and authenticity: a comparative risk assessment of approaches employed by the recruitment and higher education sectors of Australia

Volume 2 of 2

By

George Maxwell Brown B.Bus., Grad. Dip. Ed.(UniSA), M.Ed.(Flin)

Thesis submitted for the requirements of the Degree of Doctor of Philosophy in the School of Education, University of Adelaide

Appendix 1 – Washington International University advertisements in The Australian

vin University

166 332 per annum

to ensure access and equity are available for Rural post secondary educational institutions.

o obtain an application package please visit rww.cdu.edu.au/hrd or phone 08 8946 6284 or mail recruitment@cdu.edu.au

RECEIVE AMERICAN EDUCATION AT HOME

Proven Successful, Distance Education Method for Adults.

Thousands of graduates all over the world Accelerated Bachelor-Master Ph.D. degree programs in Business, Engineering, Computer, English, Education, Diplomacy and more. Use our Internet Ribrary. For a no-cost detailing send request to P.O. Box 61707, King of Prussia, PA 19406 USA: Fax: 610 205 0960 E-mail: admissions@washint.edu



BATCHELOR INSTITUTE OF INDIGENOUS TERTIARY

elor indutine specialism in training drift tarcary aducation. Intil and Turne Brait standar people, from all over Austra Ighelf and Turne Strait Islander people are eccourag

School of Health & Sciences Academic Level B Food & Nutrition

7 - THE WEEKEND AUSTRALIAN JANUARY 17-18, 2004-7

School Appointments

Zayed University

College of Business Sciences Assistant, Associate, Full Professors

The Senethy

To Aunty





feathern lentery Department of Employment, Education and from (NT DEET)

TEACHING IN THE NORTHERN TERRITORY

The Northern Territory offers entiting easter opportunities, looking for people with a same of advantage on track in the Northern Territory, in arban or terroin seriogs.

Applications are sough; for various positions in the following subject arms as nell as for general vacencies. These vacancies in located in various regions within the Northern Tenning.

- Rehoo!

 I Jimmer Prinyalay/Chemistry Koffisetine High Schoo!

 Senior Prinyalay/Chemistry Koffisetine High Schoo!

 Houring Impaired Ar a mumber of the Student Services reum provide quality adactational support arrivers to students who are don'to hearing impaired. Offer appropriate profissional development and support in teaching offerages in respect of inclusion and support arranging offerages in respect of inclusion and support arranging. Only Right School

enhants Teaching qualifications are required, each at:
A degree and/or diplosts in Education from an Australian tertiacy institution, or equiredent.

Salary will range from \$38,889 to \$58,560 depending on qualifications and experience, and will be determined from the verified decommension provided.

- Here to apply:

 Complete the Tracher Application angular form via the workle address http://www.edu.adors.or.gov.or.page/int.application.eduri
- 60 Ring the Free cell number and request an Application package.

 Norman segion: Darwin/Easherine/Nituliaday 1800 646-35

 Southern region: Alian Springs/Tenesse Carek 1800 643-023

An Application package can then be literarded and the ruces process our man.



\$5 (If applicable) for appointed E and is weeking may for of suppleyment.

the windows below. With reflinte and experience, along freekurces, Tim theirerally of to attentionen eets as by the



efront of higher learning its and sub-divisions of res. Current enrolment ites from 48 countries. ersity is committed to esearch.

ology Institute

salyst in the E-Business The appointment will possibility of renewal

pendently funded R&D in is to contribute to the nt in electronic business can be obtained at

suter science/electrical irch and development in product and system chnology transfer or ternational research and nputer technology. The the establishment and ill; provide support in ement of research and

one and experience will ersity contribution to a alary]. At current rates, he appointment carries busing benefits (where

rended) can be obtained atments Unit (Senior), intg Kong, Hong Kong eg.hku.hk). Review of position is filled.

to No limiting Policy

to support students and stu-

Union Even barasament and attacks

representative (general services) Melbourne University Student

Stephen Maddocks Cook, ACT



your

The University of the South Pacific

POSITIONS VACANT USP in a multi-modal distance and flexib learning University offering unique employs ties at various levels www.usp.ac.fj/jobs

Head of Distance and Flexible Learning

This wadership position requires an experienced and quasting distance and flexible aductation (UFE) apacitals to provide attactive leadership as UIEF interfaces acciting changes. Application should have a PND and a locard of twissersh and publications in

lence in arrest selecule and for developing

The position is similarly for a term of these years and may be renewed by instant and questions.

Salary Ranger: F500 K131 to F570 344 per annual inforcacion of 15% Contain.

The University may per an industriant astronomous of up to 20% to socium the extreme of an exceptionarily well qualified candidate.

In extinct to the extreme of an exceptionary well qualified candidate.

In extinct to the extreme per solution and provided and an exception of the extreme period of the extreme and provided and the extreme and exceptional candidates the extreme appropriate and substitutional containing the eighted candidates.

Clouding date for applications 30 January 2004

Enguries Fr, Julia Bereto sei (679) 2012052 fax (679) 7000465 small bonato (40so.ac.) seibata http://www.uso.ac.b/asst

Closing data for applications 30 January 2004

Enquiries Arthony Roy let (879) 3212490; fax (679) 5304089 empt roy, a 0 let; a c 5 explicit; http://www.sep.ac.5/fin



Help put lives back together.

Credit card donations 1 800 818 215



RECEIVE AMERICAN **EDUCATION AT HOME**

Education Method for Adults.

Thousands of graduates all over the world. Accelerated

Bachelor-Master-Ph.D. degree programs in Business, Engineering, Computer, English, Education, Diplomacy and more. Use our Internet library. For a no-cost catalog send request to: P.O. Box 61707, King of Prussia, PA 19406 USA. Fax: 610 205 0960 E-mail: admissions@washint.edu



PhD Scholarship Opportunities

In the Research Centre for Advanced By-Wire Technologies, University of Melbourne

Two PhD scholarships, each valued at \$29,033 p.s. are available to investigate advanced control and estimation strategies for electromechanical braise-by-wire systems. One project will focus on soft computing techniques, the other on robust nonlinear control approaches.

control approaches.

The scholarships are funded under an ARC-Unitage project involving the University of Melbourne and Pacifica Group-Technologies Pty Ltd, and supported by the newly established Research Centre for Advanced By-Wire Technologies (RABIT), which will provide state-of-the-art research infrastructure. These scholarships provide an outstanding opportunity to participate in the "by-wice revolution" (see http://www.rabit.com.au).

Applicants must be Australian citizens and have an Honorurs degree (H1 or high H2A) in mechatronic mechanical or electrical engineering or equivalent qualifications.

for further information contact. Soft tomputing project. Professor Malcolm Good (mcgood@unimelb.edu.au), or Associate Professor Saman Halgamuge (saman@unimelb.edu.au).

Robust nonlinear project: Professor Malcolm Good (migood)(Duslinelb eduau), or Associate Professor Marimuthú Palantawami (palani)(Duslinelb eduau).

Applications should be submitted to Professor 15 C. Good, Department of Mechanical and Manufacturing Engineering. University of Melbourne, Vic. 3010.

Closing date: Friday, 27 February 2004.

THE AUSTRALIAN - Wednesday January 14 2004

Appendix 2 – Recommendations from inquiries into the falsification of academic qualifications in Australia

ICAC investigation into Glen Oakley - use of fraudulent qualifications

Recommendation 1

Where job applicants assert professional and/or academic qualifications as part of their claim to a position, these qualifications should be verified prior to appointment.

- a. The employer's designated representative (which includes any recruitment consultants engaged by the employer) should sight original certificates or certified (by the institution) academic transcripts. The costs of producing this documentation is to be borne by the applicant;
- b. To facilitate verification each applicant should be required to give written permission to the prospective employer's designated representative for the relevant educational institution to be contacted for verification purposes;
- Academic and professional qualifications of successful candidates should in all cases be verified with the issuing institution where they are required for a position or where they are a significant determinant in the decision to appoint an applicant;
- d. In other cases academic and professional qualifications should be verified with the issuing institution on a random basis:
- e. An auditable record of any verification should be kept and where the verification has been conducted by recruitment consultants, the consultants should be obliged under the terms of their engagement to provide the client employer with written evidence that they have undertaken the required checks.

Recommendation 2

All applicants should be informed through applicants' information packages of the requirement for candidates to verify qualifications prior to appointment and that such claims may be verified with the issuing institution. All applicants should also be informed in clear terms that falsely claiming qualifications will lead to their dismissal and/or prosecution for any relevant offence.

Recommendation 3

All applicants should also be required to sign a certificate declaring that the qualifications they assert are genuine and that they acknowledge any falsely claimed qualifications can lead to their dismissal.

Recommendation 4

Letters of appointment or other contractual documentation should include a provision that permits an employer to terminate the employment of an applicant who falsely claims qualifications.

Source: ICAC (2003b)

ICAC investigation into the University of Sydney - fraudulent student applications

- That the University of Sydney revises its *Policy and Guidelines Document: Reporting corruption, misadministration or serious and substantial waste of public money*, to ensure that its definition of "corrupt conduct" is consistent with that set out in the ICAC Act. Consideration should be given to amending Part 1 of the document to highlight the fact that corrupt conduct may apply to non-public officials whose conduct affects or could affect the exercise of public official functions.
- That the University of Sydney ensures that all staff, including admissions staff and staff involved in overseas student programs, are familiar with, understand and adhere to the reporting requirements and processes.
- That the University of Sydney ensures admissions staff have ready access to and training in all relevant policies, procedures and guidelines, particularly in relation to identifying, reporting and managing `problem' enrolments. These staff should also hold a current list of agents contracted to the University.
- That the University of Sydney moves to an electronic transfer system as the sole means of enrolling graduates of Australian foundation studies courses in degree courses. In-person enrolments by such graduates should only be undertaken in exceptional circumstances, and claims regarding foundation studies results from other universities should be tested in all cases through a process of on-line verification.
- That the University of Sydney discontinues the practice of allowing agents to verify students' documentation, and that the University accepts as sufficient evidence of prior qualifications only original documentation or on-line verification.
- -That the University of Sydney ensures that prospective students from overseas are provided with clear written information about proper enrolment procedures and standards of probity required, warnings about sanctions for wrongdoing, and a warning that entry standards may not be overridden.
- That the University of New South Wales revises its policy document *Policy for making a complaint or reporting incidents of criminal, corrupt conduct or misadministration or Protected Disclosure at UNSW* and its Code of Conduct to take into account matters raised in this report.
- -That the University of New South Wales ensures all staff, including admissions staff and staff involved in overseas student programs, are familiar with, understand and adhere to the reporting requirements and processes.
- -That the University of New South Wales develops a model contract for agents that includes clear standards of conduct, performance review requirements, a ban on sub-contracting and an outline of sanctions and penalties for breaches associated with improper or illegal behaviour.

Source: ICAC (2004b)

ICAC investigation into WorkCover NSW - safety and training in the construction

industry

Selected recommendations pertaining to verification and screening:

- That amendments to the accidents data base are made to enable relevant training and certification information to be gathered in relation to licensed operators involved in accidents.
- That WorkCover NSW develops screening options, including probity check, for potential assessors.
- That WorkCover NSW ensures it becomes the issuing authority for the Construction Induction Certificate and that this is issued after the completion of verification checks.
- That WorkCover NSW conducts a comprehensive corruption risk management plan for its accredited training system. This plan should include probity screening for accredited trainers.
- That an offence of issuing a false statement of training be created under the *Occupational Health and Safety Regulation 2001*.

Source: ICAC (2004a)

ICAC investigation into the Department of Fair Trading for building and trade licenses

Selected recommendations pertaining to verification and screening:

- DFT should consider including a statement in the brochure 'Getting a Contractor Licence (DFT 203) which emphasises the applicant's responsibility to ensure the application is a true record of his/her qualifications and experience. Such a statement could be added at the end of the paragraph titled 'How to get a Contractor Licence'. Similarly, the licence application form has a section on the front page titled 'Declaration by Applicant'. This Declaration could also include such a statement.
- DFT should consider implementing a system of spot-checking qualifications cited as part of licence applications. This would also help to ensure that applications were genuine. Given the advances in consumer technology (which make it relatively easy to forge official documents) and recent publicity about the rise in detected plagiarism and forgery of qualifications, it may be timely to consider such a system. This could act as an interim measure until the technological innovations foreshadowed previously are available.

Source: ICAC (2005a)

Government of Western Australia – Inquiry into the City of Joondalup

Recommendation 14: A local government, when recruiting a CEO should verify the professional and academic qualifications of candidates for appointment. (Government of Western Australia 2005, p.vii)

It may not be reasonable for a client of a recruitment consultant to expect that the veracity of documents evidencing academic qualifications be checked with the issuing institutions, but to require a candidate for a position which specifies the desirability of "tertiary qualifications in an appropriate business discipline" to provide documentary proof of such qualifications would appear, as a matter of observation, to be one of the most basic elements of due diligence. Local governments and their officers ought, therefore, in future ensure that relevant certification is attached to any CV, resume or consultant report for consideration.

Source: Government of Western Australia (2005, p.3-54).

Appendix 3 – Examples of individuals holding non-official academic qualifications

Dr Phillip Lobo

In 2002 The Managing Director of Sydney International College was found to have a PhD from Harrington University, profiled in this study as part of the UDP scam. When he was questioned about the qualification listed on his resume on the website, his response was: "You want me to delete it?" Asked why it was there, his response was "Just because I had that piece of paper". "If it gives the wrong signal, it is better that I remove it. I'll do that immediately". Lobo also claimed he had studied at Miami University and obtained a Bachelor degree and a graduate of Cambridge University in the UK. Neither institution could find any record of this graduation details (Lawnham 2002f).

Dr Allen Roberts

Dr Allen Roberts, a Sydney Archaeologist claiming to have found the remains of Noahs Ark claimed a doctorate from Freedom University in Florida, USA (Pockley 1992). During the recess time of one of the lectures, Pockley viewed a copy of this doctorate, which was on display with guards either placed either side (pers. comm. Pockley). Upon finding this, Pockley forwarded this information to Dr Ian Plimer who pursued the bona fides of Allen Roberts. The case was fought in the Federal Court (David Fasold & Anor v Allen Roberts & Anor [1997] 439 FCA (2 June 1997) 1997). The judge found no deceptive conduct undertaken by Dr Roberts as he possessed a doctoral degree that had been awarded in accordance with the laws of Florida. During his research, Pockley (1992, p.11) found no mention of Freedom University in any official publication or literature in Florida. The address for the university was found to be the apartment of the owner in Orlando, and an 80 seat Bible Church, identified as a the correspondence Bible school operating from a mailbox.

Dr Peter Gordon Flude

In 1990, Dr Peter Gordon Flude claimed a Dip Ed from London (which could not be verified) and a MSc and PhD from Somerset University in the United Kingdom. Investigations were made by the Victorian College of Agriculture and Horticulture, whereupon they found Somerset University to be merely a postal address (Lynch 1990). It is interesting to note that Dr Flude was asked to provide expert testimony in a Senate Enquiry in 2001, and was addressed as 'Dr Flude' during the entire enquiry (Mass marketed tax effective schemes and investor protection 2001).

Dr Ashoka Prasad

Dr Ashoka Prasad claimed a PhD from the University de la Romande in Switzerland, a non-official university of debatable academic standing. In 1998 he was found to have fabricated

research results conducted on Aboriginal women, and over an 11 year period had falsified psychiatry research results which ultimately had him disbarred in Victoria (McIntosh 1990; Swan 1998). The Royal Australian and New Zealand College of Psychiatrists determined that his basic medical degree was bona fide from Kampur India, however it was not until 2005 that Canadian authorities had determined that this initial medical degree had been issued to another person (College of Physicians and Surgeons of Saskatchewan 2005). Based upon these findings it was recommended that an international register of people found guilty by committees of inquiry into scientific fraud should be established (McIntosh 1990).

Associate Professor Dr Gary Jackson

Associate Professor Dr Gary Jackson taught at Guilford Grammar School in Western Australia and claimed to have lectured at a range of Australian universities. He obtained his Bachelor, Master and Doctorate degrees from Trinity University in the UK. He also obtained an Associate Professorship from Trinity College and University in the USA. When it was alleged that these entities were 'degree mills', Jackson's teaching position was revoked and his status as a Justice of the Peace brought under scrutiny. A Ministry of Justice report at the time reported that in relation to academic or other qualifications, there was a 'presumption of honesty' (Flint 2000b; f; a; e; Brown 2001b, p.96).

Dr Geoff Gale

In 2000, Dr Geoff Gale was Managing Director of South East Metropolitan College of TAFE and came under scrutiny after obtaining an honorary PhD from Kensington University which was based in Hawaii at the time. The degree was allegedly conferred on Gale at a graduation ceremony in Cairns in 1992. Media reports profiled Kensington University as a degree mill, claiming accreditation from an unrecognised accrediting agency (Flint 2000d). It is understood that Gale suffered significant personal and professional pressure during this time.

Dr Alan Galbraith

Dr Alan Galbraith, a lecturer at Edith Cowan University, was found to have obtained a PhD from Knightsbridge University, which at that time was based in the UK, but is now located in Denmark. When it was found that Knightsbridge was a non-official university, a spokesperson for Edith Cowan University stated that 'Mr Galbraith is not sanctioned to use the title 'Dr' nor able to claim to have a PhD in any ECU-related activities'. The nameplate 'Dr Alan Galbraith' was subsequently removed from his office door whereupon Mr Galbraith resigned from the university (Flint 2000c; b; Brown 2001b, p.96-97).

Dr William Bittell

After 13 years of using the title 'Dr' at the University of Southern Queensland, William Bittel was ordered to stop using the title after it was discovered that he had obtained his PhD from Pacific Western University (Dullroy 2004). The Acting Vice Chancellor at the time,

Professor Malcolm McKay suggested that the use of the title was 'bad judgement' and a 'slight lapse of process'. Reference to Bittel's PhD was removed from all publicity material within the university.

Dr David Crombie

Dr David Crombie was on faculty at the Graduate School of Management and Department of Horticulture, Viticulture and Oenology at the University of Adelaide and held a PhD from Pacific Western University and was kept on faculty. In 2002 The University of Adelaide's Vice Chancellor Professor James McWha defended the recruitment of Crombie. Hired in 2001, Dr Crombie was held in high regard for his work, and the university was fully aware of the source of his doctorate. Professor McWha argued that there was no evidence that he had misrepresented his qualifications, and the university was very happy with his work. After this case came to light, the source of Dr Crombie's doctorate was removed from his homepage at http://www.agwine.adelaide.edu.au/people/wine/dcromb01.html, however he still kept using the title 'Dr'(Lawnham 2002g). It is understood that Dr Crombie left the university some months later.

In a further review of non-official academic qualifications in Australia universities, Lawnham (2002h) undertook a brief review of faculty positions. He found that Deakin University had two staff with Pacific Western University degrees and Charles Sturt University, one staff member on faculty with PhD's from Pacific Western University. Two staff members were found to have PhD's from Kensington University who were on faculty at Australian Catholic University.

Justice Einfeld

The Honourable Justice Einfeld QC was found to have obtained a PhD from Pacific Western University and Century University in the United States (Merritt 2006). The revelations came to light as part of an investigation into speeding fines which made national headline news. Promotional material described Einfeld at the time as "the Hon [Justice] Marcus Einfeld, AO, QC, PhD". The PhD from Pacific Western University in San Diego was argued as being, '...not an accredited university in the accepted sense, and known in the US as a diploma mill' (Ansley 2006; Sheehan 2006).

Dr Mike Meegan

Dr Mike Meegan, a renowned charity organiser for Africa was found to hold a doctorate from Knightsbridge University when he tried to apply for a multi million grant in the United States. Meegan was a former International Man of the Year (2003) for his work as the head of a charity called Icross in Africa. However, events that same year led to an audit being ordered by the development arm of the US government into the financial affairs of Icross Kenya. Former FBI consultant and 'degree mills' expert, Dr John Bear, said: "Knightsbridge most emphatically is not licensed or recognized by the Danish government (or any other government on Earth), and its degrees are as useless in Denmark as they are in Ireland or anywhere else. "It is my belief that if 'Dr' Meegan were to call himself "Doctor" (in person, in

a speech, or a letter) in New Jersey, Illinois, Oregon, Texas, and the various other such states, he would be committing a criminal offence, subject to fine and even, in some places, imprisonment" (Lyons 2006).

Dr Paul McKenna

Dr Paul McKenna is a celebrity hypnotherapist in the UK. An investigation into his background found that he claimed a PhD from La Salle University, seen by some as a degree mill and a fraudulent operation. McKenna sought legal remedy for the allegations and won his court battle in the UK. Amongst the findings, it was determined that:

What the Claimant wanted to have recognised was that he had submitted work, and obtained exemptions, in order to comply in good faith with the university's requirements for granting a doctorate in hypnotherapy. That simple fact the Defendant was never prepared to acknowledge (Paul McKenna - and - MGN Ltd 2006, Para 14, p.6)

...Mr McKenna frankly accepts, that he had no academic background or experience and was not in a position to make any independent judgment about the quality of the university or its academic credentials before he signed up for the course in July 1995. In any event, he maintains that what he produced to the university was of value and worthy of recognition (Paul McKenna - and - MGN Ltd 2006, para 16, p.7).

In the end, however, this case is not about the quality of the work submitted. It is about whether the whole exercise was a charade, and if it was, whether Mr McKenna was aware of this. As Mr Browne submitted in his closing remarks, "... any perceived lack of academic rigour at La Salle ... cannot, without more, be probative of dishonesty on the part of the Claimant". That is the nub of the case (Paul McKenna - and - MGN Ltd 2006, para 34, p.11).

The case points to the fact that McKenna acted in good faith and did not seek to mislead with his claim of a PhD.

Dr Barry McSweeney

In 2005 it was discovered that the Irish Government's Chief Science Adviser, Dr Barry McSweeney, had obtained his PhD from Pacific Western University, a non-official university located in Hawaii and California (Lynch 2005). The Labour Opposition Spokesperson for Education Science was quick to jump on this fact when it came to light. Claiming the degree was 'academically worthless' and 'purchased over the Internet' (O'Sullivan 2005), the unaccredited (albeit, legal) status of Pacific Western came under question. A request was made of Mc Sweeney to produce his dissertation to determine the level of work the scientist undertook, however the university refused to even release the title of the thesis (Oakley 2005a).

A request to Dr Sweeney to release a copy of his dissertation was also refused (Oakley 2005b), and this raised serious questions. The EU Commissioner Janez Potocnik was asked by Labour MEP Proinsias De Rossa whether McSweeney had used the PhD to apply for two senior EU jobs as the director general of the EU's Joint Research Centre and head of the EU

unit responsible for the Marie Curie research fellowships (O'Farrell 2005c). Further investigation pertaining to Pacific Western University found that it was sued by the State of Hawaii and embroiled in an investigation into the use of unaccredited degrees by government employees in the United States (O'Farrell 2005a).

McSweeney was repeatedly asked to produce his research (Adviser's qualifications - McSweeney must provide explanation 2005) however this did not materialise. Efforts by the Irish Independent to obtain a copy of a published article in a leading journal by Mr McSweeney failed. McSweeney had alleged that his work had been published in the medical journal 'The Lancet'. However a spokesperson for the publication said: "I have searched our database for Barry McSweeney and there is no record of this name. "I have also searched Lancet-on-line, all issues, and this name does not appear at all." Asked what the substantive subject matter for his PhD was, a spokesperson for Mr McSweeney's office would not comment. Instead, she referred to an old newspaper interview in which he claimed his doctorate was based on work and publications accomplished earlier in his career and on experience gained during his time as head of BioResearch Ireland, a promotional body for biotechnology research. Further efforts to secure specific references for published peer-reviewed work by Mr McSweeney met with no response.

The controversy caused unrest within the government and scientific community, with the Minister for Enterprise, Trade and Employment making his decision over the future of McSweeney over a two day period (Martin dealing with McSweeney issue: Ahern 2005; Khan 2005). Senior politicians and bureaucrats argued that the issue had caused embarrassment to the Irish scientific community, to which McSweeney contended that his position was not reflective of the Irish scientific community as a whole:

"I am not an icon of science. I am not the chief scientist. I am the chief science adviser who was appointed because I can get things managed. I am a manager and a strategist and yes I have an adequate science background"

McSweeney stood by his qualifications and argued that he had 'no inkling' that it could have been a problem to hold a degree from Pacific Western University (O'Farrell 2005b; O'Farrell 2005a). The final outcome was that McSweeney was moved to another position, on the same pay, but was not to be called 'Dr' (Science chief in doctorate dispute to get new State job 2005; McSweeney move - Doctorate debacle will follow him 2005; O'Farrell 2005b). The use of his claimed Doctorate was claimed to have brought the office into disrepute, however the coalition supported McSweeney's abilities and his background and his move to another position (O'Farrell and Ring 2005).

Timeline for 2005

Sunday, October 9: News first emerges that Government chief scientist Barry McSweeney has a PhD from Pacific Western University (PWU).

Thursday, November 3: Enterprise Minister Micheál Martin tells the Dáil his inquiries have found that PWU is not an accredited institution.

Wednesday, November 9: Mr McSweeney meets Mr Martin for a second time and hands over several publications and documents.

Thursday, November 10: Mr McSweeney, having refused to comment publicly, gives an interview to the Irish Times.

Friday, November 11: Science Council chairman Ed Walsh tells the Irish Examiner that the continuing scandal is harming Ireland's scientific community and reputation.

Saturday, November 12: Mr McSweeney gives an interview to RTÉ and again defends his PhD.

Tuesday, November 15: The Cabinet agrees to accept Mr McSweeney's offer to move (O'Farrell 2005b)

The Green Party leader Trevor Sargent called for an audit of the qualifications of all those appointed to top positions by the government. He said the 'fiasco' over Mr McSweeney's appointment resulted from poor vetting and no competition" (O'Regan and Molony 2005). This then brought to light the case of Dr Con Power, below.

Dr Con Power

Following the McSweeney case, it was subsequently found that Dr Con Power, the chair of the Financial Services Ombudsman Council in Ireland had obtained a PhD from Pacific Western University as well (Second Govt adviser received PhD from US 'degree mill' 2005; Walshe 2005). Dr Power was an influential figure on the Irish landscape for many years and is a former economic adviser in the Taoiseach's department. Dr Power told the Irish Independent that his PhD was never a factor in his work as he obtained his last career employment in open competition in 1979, nine years before he was awarded the doctorate. He said he was on secondment to the Department of the Taoiseach as Special Economic Development Officer from 1 April 1992 to the end of April the following year. His salary was paid for by the Confederation of Irish Industry (now IBEC) and was recouped from the department. "I cannot see how me holding an earned PhD is a matter of public interest," he said. "I have a BComm [Hons - UCD - 1963], MEconSc [Hons - UCD - 1965], together with three earned professional business qualifications - FCIS, FCMA, FCIS" (Walshe 2005).

Further research by The Irish Examiner found that the second most senior member of UCD's School of Physiotherapy, Dr Mary F McAteer, received a Pacific Western University doctorate in 1987. An academic with the Government-sponsored IPA, Dr Cedric Chau, also obtained a PhD from Pacific Western University in 2001 He was employed as a lecturer by the IPA and features prominently in the institute's prospectus (O'Farrell 2005d).

The overall result in the use of unaccredited degrees in Ireland has called for a review of all online degrees by the Labour opposition Deputy Jan O'Sullivan. "These continuing revelations are doing untold damage to the Irish education system and the reputation of those who work within it, which is why the Government must ensure that the public has full information in relation to all institutions that award academic qualifications so that Ireland's excellent reputation in this field can be maintained," she insisted (O'Sullivan seeks an immediate investigation into online degrees 2005).

John Davy

John Davy was a Canadian who, on the 14th March 2002 was appointed to head up the Maori Television Service of New Zealand. Just six weeks into the position, an investigation by The New Zealand Herald found that Davy claimed an MBA degree from the Ashland School of Business at Denver State University, granted in June 1976. A search for this university online

could not be found, however the site http://www.cooldegree.com offered MBA's for Denver State University for US\$159.00. The recruitment agency, Millennium People, was contracted by the Board of Directors to source Mr Davy (Cleave and Middleton 2002). The revelations surround the qualifications held by Davy called for questioning on the background screening process, and the reasons why he was chosen out of six final applicants (three of whom were Maori)(Not enough checks on Davy's background, says Harawira 2002). On the 29th April 2002, the Prime Minster of New Zealand, Helen Clark, confirmed that Davy would lose his position as a result of his false academic qualification, confirmed in an announcement issued by the Marori TV Board of Directors (PM confirms announcement on Maori TV chief expected 2002; Board sacks Maori TV chief executive 2002). Condemnation for the appointment and poor background screening of Davy came from the opposition party and the broadcasting authority of New Zealand (Rich 2002; Webster 2002), whilst news of the sacking reached Australian media circles (Boss of new TV channel sacked for false credentials 2002). As a result of his misconduct, Davy was jailed for 8 months by the Auckland District Court, whilst the Prime Minister mooted legal action would be taken against the recruitment agency that had charged up to \$70,000 to recruit Davy and had failed to undertake adequate background checks (Cleave and NZPA 2002; Oliver 2002). The business folded within a few months after the Davy case (Lies, damned lies and CVs 2005).

Other miscellaneous cases

The senior director of the US Department of Homeland Security, Laura Callahan, obtained qualifications from an American 'degree mill' and sparked a nationwide probe of all major government agencies. It was subsequently found that every main government department had employees with 'questionable' qualifications, with taxpayers money contributing over \$US150,000 in tuition fees (Alsever 2004; Armour 2004; Cramer 2004; Golden 2004; Trotter 2004b; a). The report identified 55% of employees in a sample of students had obtained degrees from alleged diploma mills and were working for the US Department of Defence (Cramer 2004, p.5). Employees of the Department of Homeland Security, the Pentagon, the Transportation Security Administration, the Defence Intelligence Agency, the Department of Treasury and the Department of Education were all found to have obtained qualifications which were not recognised as legitimate credentials ("Illegitimate "degrees" being used by some teachers to obtain higher pay" 2004).

In 2003, the State of Georgia in the United States audited its 130,000 teachers and found that 11 had received salary increases based on degrees from Saint Regis University, an alleged diploma mill based in Liberia ("Illegitimate "degrees" being used by some teachers to obtain higher pay" 2004). A study undertaken by the Evergreen Freedom Foundation in the State of Washington sought to determine the pervasiveness of unaccredited degrees within the states 296 school districts. Of the 22 percent that provided information, six individuals were identified as holding degrees that did not meet the requirements of the state, and had obtained higher salaries as a result of these degrees ("Illegitimate "degrees" being used by some teachers to obtain higher pay" 2004)

Of the most recent, and perhaps most disturbing cases of qualification misrepresentation, was when a reporter for CNN News purchased a Masters of Science degree in Chemistry for Abu Salsabil Hassan Omar from Rochville University http://www.rochvilleuniversity.org. This individual is an explosives and chemical weapons expert for the terrorist group al Qaeda. With a five million dollar bounty on his head, the news channel demonstrated the ease

whereby an 'American degree', could be 'earned', with the US District Attorney in Spokane, Washington asserting that there could be thousands of potential terrorists who had undertaken the same process (Zahn 2005). In steep contrast, The National Council for Higher Education via the Ministry of Education in Kampala, Uganda, recently maintained that degrees from Rochville University were valid for use in that country. Based on an investigation of Prince Ronald Ndawula's qualifications via Interpol, the Ministry ruled that the qualifications were valid for use in election proceedings (Mulindwa 2006).

Appendix 4 – Higher Education institutions claiming accreditation from the Principality of Seborga

Eurasia Community College

Riviera University

The International University, Missourin, USA

Kings University International of Seborga

Trinity College

Keller International University

Pebble Hills University - Hutt River Province, Australia, India

West Coast University - Panama & Australia & Mexico

University of National Union

Berkeley Professional University

Marquis Open University

Miranda International University

Insituto Latinoamericano de Psicobiofisica (ILP)

Saint Alberts College and Graduate School

Saint Bernard University

St. Paul Ottawa College and University

Phoenix International University (Europe)

Universal University

James Monroe University

Hardwood University

Istituto Superiore Antico Principato

Principality National University

Diulus Institute and University

William Tucker University College

Appendix 5 – Documention provided by Instantdegrees.com

Buxton Anibersity

Buxton Anibersity

Bestows upon
Robert L. Cox Ir.

the degree of

Master of Business Administration

Human Resource Management

For having satisfied all requirements as determined by the Esteemed and duly Empowered Board of Regents, this award is so hailed to All and Sundry and granted with all pertaining Rights and Privileges on this, the



16th Day of December 2003

M. Benedict, Dean



Buxton University

Buxton University endorses the verification norms of EN ISO Model Standard 9001 of July 1994. Buxton University's verification policies are fully compliant with the UK Data Protection Act. All verification requests must be made in writing, accompanied by a signed letter of consent by the graduate. No verification request presented in any other way will be acted upon. Buxton University grants its degrees in full compliance with the United Kingdom 1988 Education Reform Act as a foreign institution as defined by that Act.

The Registrar Buxton University Graduate Records Office 145-157 St John Street London EC1V 4PV UK

Please quote the following information when requesting verification:

Name: Robert L. Cox Jr. Degree: Master Diploma Number: BX - MBA - RLCJ - 16 - 12 - 03



Bridgewater University

Bridgewater University maintains verification procedures compliant with those outlined by the International Standards Organization in EN ISO Model Standard 9001 of July 1994. All verification requests must be made in writing, accompanied by a signed letter of consent by the graduate. No verification request presented in any other way will be acceded to. Bridgewater University grants its degrees in full compliance with the United Kingdom 1988 Education Reform Act as a foreign institution as defined by that Act.

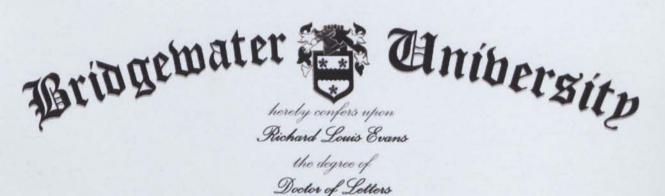
The Registrar
Bridgewater University Graduate Support
London Facility, Suite 210
Coborn House
3 Coborn Road
Docklands
London
E3 2DA

Please quote the following information when requesting verification:

Name: Richard Louis Evans

Degree: Doctorate

Diploma Number: BU - DLTT - RLE - 06 - 06 - 02



Literature

In recognition of having satisfied all requirements as determined by the Board of Regents, this award is granted with all pertaining Rights and Privileges on this.



6th Day of June 2002

D. Lovell Chancellor



Canterbury & Aniversity

hereby confers upon

Alan Contreras

the degree of

Master of Business Administration

Marketing

together with all the honours, privileges, rights and obligations thereunts appertaining in recognition of habing fulfilled all requirements of this degree as determined by the Moard of Regents and given on this Day under our Seal.

22nb Day of Buly 2002



Company of the Band of Seprets

AZEGE BESTELLE

Appendix 6 - Documentation provided by the UDP

Ashford University

Degree Progr

Student Name: Student ID:

Degree Program: JhD - Hospitality Management Graduation Date January 10, 2003 Thesis Title: HACCP, Implications for the Hospitality Industry
Late 197 governments around the world were deciding whether or not to introduce HACCP across the food service industries. This research aims to examine the effect this will have 197 governments around the world were deciding whether or not to introduce HACCP may have have on smaller hospitality operations and their business profils. The findings of the research will in particular address the positive or negative influences HACCP may have.

12.0 12.0 12.0 36.0	11.1 12.0 12.0 35.1 280.8 G.P.	12.0 12.0 12.0 36.0 316.8 G.P.	11.1 12.0 12.0 35.1 35.1 9 G.P	12.0 12.0 36.0 387.9 G.P.	120 120 120 380 4239GP
444	संबद	<<<	444	444	444
0000	0000	0000	3.0	30000	MENT3.0 4GMT3.0 3.0 9.0
ARTER THIRD TIONAL THEO TY INDUSTRY ISSUES IN FO	63.0 A 11 M SECOND QUARTER THIRD YEAR HOM 650 MATHEMATICS OF CASINO GAMES HOM 631 EMPLOYEE DEVELOPMENT HOM 800 RESEARCH 72.0 ATTM 72.0 PSSD	THIRD QUARTER THIRD YEAR HOM 635 HOTELS RESTAURANT REALTY HOM 649 PRACTICUM IN HOTEL EDUCATION HOM 800 RESEARCH 81.0 ATTM 81.0 PSSD	FIRST QUARTER FOURTH YEAR HOM 850 INDEPENDENT STUDY HOM 644 FACILITIES PLANNING AND EQUIPMENT HOM 800 RESEARCH 90.0 ATTM 90.0 ATTM	SECOND QUARTER FOURTH YEAR HOM 672 INTERNATIONAL TOURISM HOM 860 SEMINAR IN FOOD & CULTURE HOM 800 RESEARCH 99.0 ATTM 99.0 PSSD	THIRD QUARTER FOLRTH YEAR HOM 645 ADVANCED TOPICS IN HOTEL MANAGEMENT 3.0 HOM 865 SEM LEGAL ENVIRONMENT OF FOOD MGAT 3.0 HOM 800 RESEARCH 108.0 PSSD
12.0 11.1 34.2 34.2 G.P.	12.0 12.0 12.0 36.0 70.2 G.P.	12.0 11.1 35.1 105.3 G.P.	12.0 11.1 12.0 35.1 140.4 G P	11.1 12.0 11.1 34.2 174.6 G.P.	11.1 12.0 12.0 35.1 209.7 G.P.
વર્ષ સં	444	<< d	444	વં વ વં	444
HOM 520 OPER AND IN HOTEL MANAGEMENT 3.0 ACC 570 FIN ANAL FOR SERVICE INDUSTRIES 3.0 HOM 520 MAXIMIZING PROFIT IN FOODSERVICE 9.0	O QUARTER FIR H IN THE HOSI CH METHODOL NG SYSTEMS	HOM 520 CUST DEVEL STRATEG FOR THE HOTEL IND 3.0 HOM 531 HUMAN DYNAMICS & ORG LEADERSHIP 3.0 HOM 725 TRENDS IN FOODSERVICE DESIGN 9.0 27.0 ATTM 27.0 PSSD	HOM 755 RESEARCH SEM IN HOTEL ADMINISTRATION 3.0 HOM 580 SPECIAL TOPICS IN FOOD MARKETING 3.0 HOM 610 HOTEL & RESTAURANT LAW 36.0 PSSD 36.0 ATTM 36.0 PSSD	SECOND QUARTER SECOND YEAR HOM 530 ADV PROB IN HOSPITALITY OPERATIONS 3.0 ACC 590 MANAGERIAL ACCOUNTING HOM 611 LABOR MANAGEMENT RELATIONS 3.0 45.0 ATTM 45.0 PSSD	THIRD OF ARTER SECOND YEAR HOM 502 STAFF PLAN & OPER ANAL FOR HOSPIT IND 3.0 HOM 508 COMPUTER APPS FOR THE FOOD INDUSTR 3.0 HOM 527 FEASIBILITY ANAL FOR THE HOTEL INDUSTR 3.0 54.0 ATTM 54.0 PSSD

Phillip Samuels, Registrar

3 93 G P A

ASHFORD UNIVERSITY

CORRESPONDENCE ADDRESS: 5-7 SINGER ST LONDON EC2A 4BQ ENGLAND

January 10, 2003

To Whom It May Concern:

Willem van den Broek graduated from eur University with departmental honors.

As an honors student, Willem was responsible for supervising undergraduates through our distance learning tutorial program. Within a short time, he proved to be such a bright, astute, and accomplished student that we utilized his talents in many aspects of our academic program.

While with our University. Willem maintained constant contact with faculty members. His correspondence demonstrated knowledge, sensitivity, and intelligence in dealing with complex issues, earning him the accolades of our entire academic staff.

In sum. I unreservedly recommend Willem van den Broek for any position suitable to his outstanding background, qualifications, academic achievement, and experience. He will be a valuable asset to any organization.

Verattruly vous

Professor Henry Clausdale, PhD

From the Desk of Frederick Bideman

10 June 2002

Dear Sir or Madam:

Willem van den Broek was enrolled in several of my correspondence classes, in fulfillment of the core requirements for his major.

As proven by his work, Willem was diligent, well prepared, and absorbed new material quickly. Needless to say, his high marks in my courses reflect his outstanding performance on tests and written assignments.

I am confident that Willem has a bright future and will succeed in all his future endeavors.

Sincerely.

Dr. Frederick Bideman Professor, Ashford University Correspondence Address: 5-7 Singer St London EC2A 4BQ England

TRANSCRIPT INFORMATION

GRADES AND GRADE POINTS

Grade	Grade points per unit			
		ber 1957	Before	
	To pres	ent	September, 1957	
A+6 A-6,7 B+6,7 B	4.0			
A	4.0		3.0	
A-6,7	3.7		3.0	
B+6,7	3.3			
В	3.0		2.0	
B-0.7	2.7			
C+6.7 C -6.7 D+7 D-7	2.3			
C	2.0		1.0	
C-°.	1.7			
D+	1.3			
0,	1.0		0.0	
5	0.7			
	0.0		0.0	
P (Passing)			ided in units attempted	
NP (not Passed) ⁴ S (Satisfactory) ⁵			ided in units attempted	
U (Unsatisfactory) ⁵ IP (In Progress) DR (Deferred Report)		Not included in units attempted Not included in units attempted		
		Not inclu	ided in units attempted	

- One negative grade point per unit was assigned for E or F prior to July 1, 1941.
- 2. From September 1985 through Winter Quarter 1988, units attempted and grade points are assigned for each repetition of a course in which a grade of D or F is received. The same was true beginning September 1, 1957, for grades D, E, and F, in lower division courses. D's in upper division and graduate courses could not be repeated, and grade points earned on repeated E's or F's in those courses could not exceed those earned for a C-grade. Prior to September 1, 1957, units were charged only for the first attempt and grade points earned upon repetition were assigned in lower division courses only.

Effective Spring Semester 1968, in computing the grade point average of an undergraduate who repeats courses in which he received a D or F, only the most recently earned grades and grade points shall be used for the first 16 units repeated. In the case of further repetitions, the grade point average shall be based on all grades assigned and total units attempted.

The G-series code appearing after a repeated-course entry control credits and grade point earned.

3. A later entry is made upon completion of work. Unit credit is allowed, but grade points may be may not be assigned. The action taken on grade points is explained by the codes J1 (granted) and J2 (not granted) or by a memorandum.

After September 1972 the "I" is not included in units attempted or grade points for the quarter in which it is assigned. Upon completion of the work both units and grade points are allowed, provided the work is completed before the end of the next quarter in residence or approved extension of time. When work is not completed within the prescribed time the grade is lapsed to F, NP, or U as appropriate and units and grade points calculated accordingly.

- Grade P was C or better prior to July 1968, and after July 1968.
 Between July 1965 and July 1968, it D or better. The grade NP was effective July 1968. Before July 1968, F indicated a "not passed" grade.
- 5. Graduate students only
- 6. Effective September 1975 grades A, B and C may be modified by plus (+) or minus (-) suffixes for graduate students.
- Effective September 1976 for undergraduate students grade A may be modified by minus (-) suffix, grades B, C and D may be modified by plus (+) or minus (-) suffixes.

TOTALS AND SUMMARIES

The total units attempted and grade points assigned at the end of each term's posting do not include work taken on a passed/not passed (satisfactory/unsatisfactory) basis and partial courses which extend over more than one term. The former are identified at different times by HiH, PF, or P/NP (SU) in the code column, the latter by J6, T1, T2, T3 or IP.

The grade point summaries at the end of each regular term's posting includes units attempted and grade points assigned for work on any university or college campus. Work undertaken in university extensions prior to July 1, 1959 is also included in the summary for undergraduate students. The "Bal" entry in the summary is the number of grade points earned in excess of a "C" average.

The total units or credits completed entry which appears only on computer generated records includes credits allowed for work taken at other institutions and for work taken on a pass/not pass (satisfactory/unsatisfactory) basis, as well as for credits earned on campus.

GOOD STANDING

Undergraduate -C average (Non-negative balance.) or better on all work attempted at any campus and during the last regular term. Unsatisfactory scholarship standing is posted at the end of each term prior to Fall Quarter 1972, but only at the end of the last term thereafter.

Graduate -B average or better on all work attempted at any campus after the bachelor's degree.

CREDIT FROM OTHER INSTITUTIONS

Undergraduate - Beginning September 1966 only total credit allowed for work taken at other institutions is posted. Prior to September 1966, the work evaluated in terms of the University courses was posted.

Graduate - Grade point summary of work taken in graduate status at another campus is posted to the record and included in following grade point summaries. Credits and grades earned after the bachelor's degree in any university extension course formerly were posted to the record, but were not included in totals and summaries. Limited credit toward master's degree may be allowed for such work. Work taken elsewhere in graduate status is not posted to the record.

CODES

Irregularities are identified by means of codes following course entries. Some of these and their implications are described above. Others indicate change of grade (N1, N2), partial credit (L series), etc. In such cases, credits and grade points are posted and treated normally.

THE REGENTS OF

Ashford University

ON THE NOMINATION OF THE COUNCIL OF THE GRADUATE DIVISION HAVE CONFERRED UPON

Millem Maria van den Arnek

HAVING DEMONSTRATED ABILITY BY ORIGINAL RESEARCH IN

Huspitality Management THE DEGREE

Ductur of Philosophy

WITH ALL THE RIGHTS AND PRIVILEGES THERETO PERTAINING GIVEN THIS TENTH DAY OF JANUARY IN THE YEAR TWO THOUSAND AND THREE



PRESIDENT OF THE REGENTS

PRESIDENT OF THE UNIVERSITY

CHANCELLOR

DEAN OF WIEGRADUATE DIVISION

Appendix 7 – List of names used by the UDP

Alberdeen University	Parkwood University		
Andersen University	Parkhurst University		
Ashbourne University	Ravenhurst University		
Ashford University	Richmonds University		
Bedford University	Rocklands University		
Bellington University	Shaftesbury University		
Brentwick University	Shepperton University		
Brookes University	Shelbourne University		
Cambridge International College	Sherwood University		
Canbourne University	Somerset University		
Carrington University	Stafford University		
Chelsea University	Stamford Hill University		
Cheshire University	Strassford University		
Devon University	Summerset University		
Dorchester University	Suffield University		
Dunham University	Thornewood University		
Edenvale University	Thornehill University		
Faifield University	Thornhill University		
Fairfield University	University of Devonshire		
FD University	University of Dorchester		
Felton University	University of Dover		
Glencullen University	University of Hampshire		
Glendale University	University of San Moritz		
Glenndale University	University of Switzerland		
Greater Manchester University	University of Northfield		
Harrington University	University of Palmers Green		
Hartford University	University of Ravenhurst		
Hartley University	University of Wexford		
Haywood University	Walsh University		
Kingsfield University	Westbourne University		
Kilcullen University	Western Ohio University		
Lafayette University	Westhampton University		
Lamberhurst University	Wiltshire University		
Landford University	William Gilbert College		
Middleham University	Xavier University		
Oaklands University			

Appendix 8 – Example of spam issued by the UDP

UNIVERSITY DIPLOMAS!!!

Obtain a prosperous future, money earning power, and the admiration of all.

Diplomas from prestigious non-accredited universities based on your present knowledge and life experience.

No required tests, classes, books, or interviews. Bachelors, masters, MBA, and doctorate (PhD) diplomas available in the field of your choice.

No one is turned down.

Confidentiality assured.

CALL NOW to receive your diploma within days!!!

1-713-866-XXXXX

Call 24 hours a day, 7 days a week, including Sundays and holidays



A UNIVERSITY DEGREE CAN BE YOURS!

- A prosperous future, increased earning power, more money and the respect of all is in your reach!
- No required tests! No classes! No books!
- Get a Bachelors, Masters, MBA, or Doctorate (PhD).
- All the benefits of a university graduate can be yours!
- No one is turned down!

Call Today 1-206-600-4749

(24 hours a day, 7 days a week, including Sundays and holidays)

Confidentiality assured!

opt-out phone: 1-206-350-3702



UNIVERSITY DIPLOMAS

OBTAIN A PROSPEROUS FUTURE, MONEY-EARNING POWER, AND THE PRESTIGE THAT COMES WITH HAVING THE CAREER POSITION YOU'VE ALWAYS DREAMED OF DIPLOMAS FROM PRESTIGIOUS NON-ACCREDITED UNIVERSITIES BASED ON YOUR PRESENT KNOWLEDGE AND LIFE EXPERIENCE

If you qualify, no required tests, classes, books or examinations.

Bachelors', Masters', MBA's, Doctorate & Ph.D. degrees available in your field.

CONFIDENTIALITY ASSURED

CALL NOW TO RECEIVE YOUR DIPLOMA WITHIN 2 WEEKS

1-206-984-0021

CALL 24HRS, 7 DAYS A WEEK, INCLUDING SUNDAYS & HOLIDAYS

A Genuine College Degree in 2 weeks!

Have you ever thought that the only thing stopping you from a great job and better pay was a few letters behind your name? Well now you can get them!

BA BSc MA MSc MBA PhD



Within 2 weeks! No Study Required! 100% Verifiable!

These are real, genuine degrees that include Bachelors, Masters and Doctorate degrees. They are verifiable and student records and transcripts are also available. This little known secret has been kept quiet for years. The opportunity exists due to a legal loophole allowing some established colleges to award degrees at their discretion. With all of the attention that this news has been generating, I wouldn't be surprised to see this loophole closed very soon.

Order yours today!

Just call the number below.

You'll thank me later...

+1-206-984-0021

----- Original Message

Subject: Todd Parker - University Program

From: "University Program" <admissions@london.com>

Date: Mon, December 19, 2005 20:50 To: per@salos.no

Rocklands University

 ${\sf Email}$ ${\sf Transmission}$ - ${\sf This}$ information is personal and confidential.

To: Per Hagen

From: Todd Parker

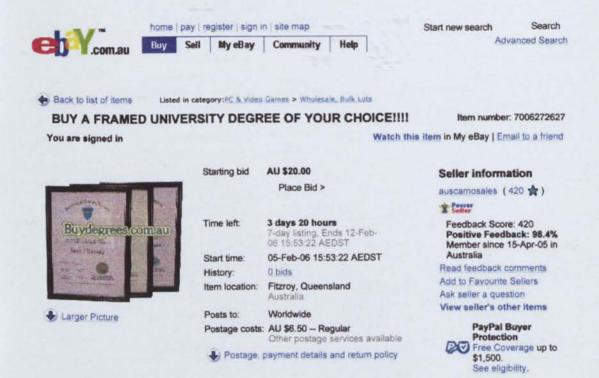
 $\overset{\text{Telephone:}}{-} 1 - 310 - 281 - 8855 \text{ / } 44 - 800 - 404 - 9648$

Fax: 1-801-992-1502 Date: December 19, 2005 Email: admissions@london.com

URL: www.rocklandsuniversity.net

Appendix 9 – Screenshots of the Ebay/ University of Northern Australia scam

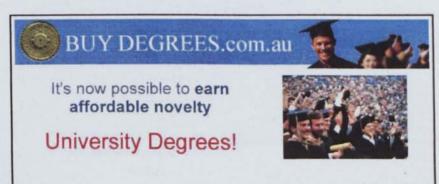
eBay.au: BUY A FRAMED UNIVERSITY DEGREE OF YOUR CHOICE!!!! (item 700... Page 1 of 6



Description (revised)

Item Specifics - Item Condition Condition: New Seller assumes all responsibility for listing this item.





file://C:\Documents and Settings\George Brown\Desktop\PhD Thesis - The University of ... 15/04/2007

- No Studies
- No Attendance
- No Waiting

- No Examinations
- No Hefty Fee



Get A Novelty Degree based on what you already know!!

On the basis of what you already know, you can now qualify for a novelty university degree from the University of Northern Australia - a private online university.

What is on Offer?

We specialize in a variety of novelty Bachelor, Master, PhD, specialty and customised degrees, BUT, at a fraction of the cost of what other businesses charge. In this auction we are offering a degree of your choosing based on your own life experience. This includes the addition of your name to the degree and the modification of the award to your requirements; in other words the degree you want!!!!

How Are We Different?

We offer novelty degrees with a diverse range of majors to choose from under each of our degree programs. Furthermore our novelty degrees include a black A4 size photo frame with gold trim. The item is ready to hang on your wall or behind your bar as soon as it arrives unlike some sellers who merely supply a piece of cheap 80gsm paper! All of our degrees are produced on high-quality parchment papers - exactly the same as those used by other leading universities and are professionally

file://C:\Documents and Settings\George Brown\Desktop\PhD Thesis - The University of ... 15/04/2007

Appendix 10 – Copies of University of Northern Australia Doctor of Medicine and PhD degrees



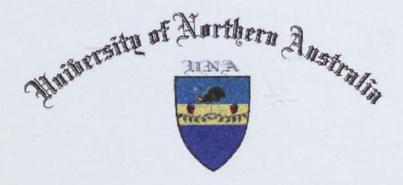
George Maxwell Brown

having fulfilled the conditions prescribed by the University has this day been admitted to the degree of,

Doctor of Medicine

Chancellor	
Vice Chancellor and President	
Vice-President and Registrar	Given under the common seal of University of Northern Australia on the sixteenth day of December 2005

The qualification certified herein is recognised within the Qualification Framework



George Maxwell Brown

having fulfilled the conditions prescribed by the University has this day been admitted to the degree of,

Doctor of Philosophy

Chancellor	A STATE OF THE PARTY OF THE PAR
Vice Chancellor and President	
Vice-President and Registrar	Given under the common seal of University of Northern Australia on the sixteenth day of December 2005

The qualification certified herein is recognised within the Qualification Framework

Appendix 11 – Resolution by the World Association of Online Education, disavowing accreditation function

RESOLUTION by the World Association for Online Education (WAOE)

Whereas WAOE's Bylaws, membership and affiliation policies are in public view at the http://waoe.org Website,

Whereas WAOE is a membership organization consisting only of individual members,

Whereas WAOE has no organizational or legal relationship with any group entities other than those specified at the above Website, which are the few and sole exceptions to the provisions herein,

Whereas WAOE does not accredit, recognize, affiliate with, evaluate the legitimacy or quality of any organization including those having to do with online learning,

Whereas the role of WAOE in international society as an academic organization where members express informed opinions may be misunderstood as legally or in any way binding either as encouragement or censure of particular practices in the online education field, therefore the purely scholarly nature of WAOE may need to be reconfirmed,

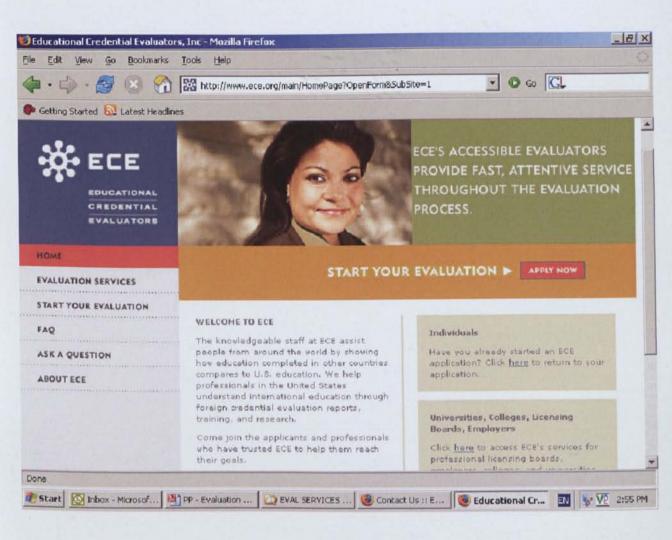
Whereas its Articles of Incorporation state that WAOE "is not organized for the private gain of any person. It is organized under the Nonprofit Public Benefit Corporation Law" of the State of California,

Whereas, whether due to misunderstanding or for private gain, there have been cases where the logo and/or name of WAOE have been misused to imply accreditation or recognition by WAOE of entities purporting to provide online learning or degrees, and membership privileges of individuals joining WAOE do not extend to groups or organizations they belong to outside of WAOE, while WAOE is able neither to know and therefore pass judgement on the nature of other entities nor in some cases to stop online learning or degree providing entities from displaying WAOE's name and/or logo to imply a relationship or any form of approval where in fact there is none,

And whereas, WAOE officers are often contacted by underprivileged individuals particularly in developing countries hoping to improve their educational credentials, but who have evidently been deceived by the juxtaposition of WAOE's name and/or logo by other entities without the permission of WAOE, and given the limitations of WAOE in enforcing and publicizing the policies outlined above.

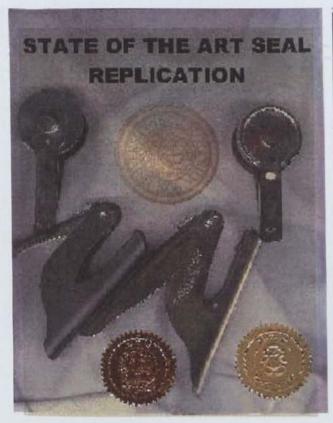
Be it resolved that WAOE Directors shall at least summarize the nature of WAOE in the above respects by way of announcements on related professional networks and as prominently as possible on WAOE Websites.

Appendix 12 - Examples of Credential Evaluation websites





Appendix 13 – Examples of falsified transcript paper, seals and other documentation





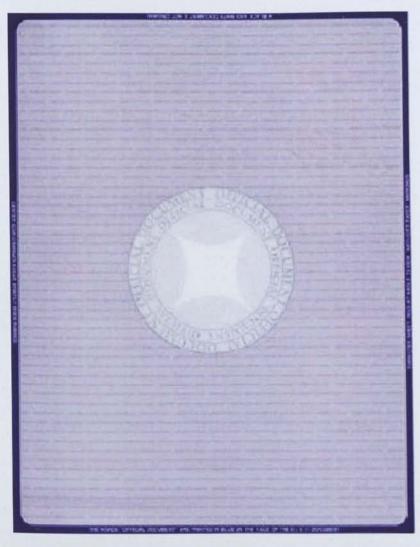




Sample Seal From BuyDiplomaOnline

A SMALL COLLECTION OF SEALS THAT WE CARRY











Appendix 14 – List of Russian websites selling original Russian qualifications

http://diplomy.com

http://www.diplom-ru.ru

http://www.a-diplom.ru

http://www.vip-diplom.ru

http://www.prodam-diplom.ru

http://www.diplo.ru

http://www.kupit-diplom.ru

http://www.diplomy.ru

http://pero.pp.ru

http://www.e-diplom.biz

http://www.mosdiplom.ru

http://www.diploms-maker.ru

http://www.diplomov.net

http://www.diplomist.net

http://diplom.su

http://www.dissertation.ru

http://www.diplomshop.ru

http://www.yandiplom.ru

http://www.bestdiplom.ru

http://www.diplomic.ru

http://www.yandiplom.com

http://www.attestat.net

http://www.diplomov.ru

http://www.vuzdiplom.ru

http://www.docka.ru

http://www.pomozhem.ru

http://www.needdiplom.ru

http://www.vipdisser.ru

http://www.diplomas.ru

www.diploma.ru

www.newdiplom.ru

www.happy-student.ru

http://attestat-diplom.ru

www.x-diplom.ru

www.diplom1.ru

http://diplom.org.ru

www.diplom-attestat.boom.ru

http://diplom.mba.org.ru

www.doconline.ru

www.dekanat.ru

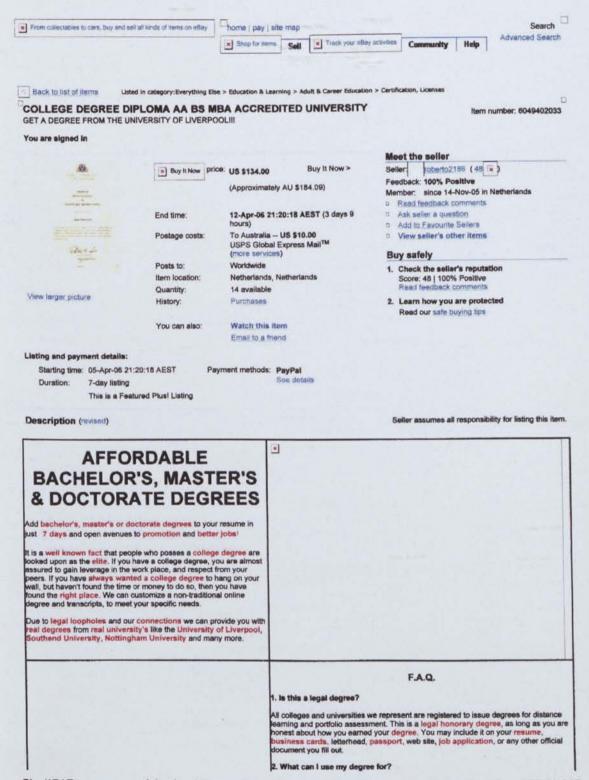
www.diplomania.ru

www.diplomchik.ru & www.yesdiplom.ru

www.diplom-extern.ru & www.okdiplom.com & www.vuzdiplom.ru & www.obuchen.com

Appendix 15 – Ebay listing of falsified qualification provider for the University of Liverpool

eBay.au: COLLEGE DEGREE DIPLOMA AA BS MBA ACCREDITED UNIVERSITY ... Page 1 of 4



file://C:\Documents and Settings\George Brown\Desktop\PhD Thesis - The University of ... 15/04/2007

eBay.au: COLLEGE DEGREE DIPLOMA AA BS MBA ACCREDITED UNIVERSITY ... Page 3 of 4

Women's Spirituality Mass Communicat Kin Discound Secret In 5) manie counter 1 Free Counters powered by Andale! Questions from other members Question & Answ Answered On Q: What GPA will be given in the transcripts. 05-Apr-06 A: The GPA will be on a 2.33 - 4.00 scale. Q: what will the name of the university be? 08-Apr-06 A: Our service ensures that the confidentiality of the institutions and the security of YOU the client. Only those who graduate learn the name of the ...more Ask seller a question Postage, payment details and return policy Postage Cost Each Additional Item Services Available Service Transit Time* +\$10.00 US Postal Service Express Mail® US \$10.00 United States only Approx. 1 business day US \$10.00 + \$10.00 USPS Global Express MailTM Approx. 3 to 5 business days Worldwide *Sellers are not responsible for service transit time. Transit times are provided by the carrier, exclude weekends and holidays, and may vary with package origin and destination, particularly during peak periods. Will post to Worldwide. Postage insurance Not offered Payment methods accepted Credit or debit card through PayPat Use PayPal to easily pay with credit cards and more. Learn more eBay prohibits the use of instant cash transfer services such as Western Union or Moneygram. Ready to buy? help COLLEGE DEGREE DIPLOMA AA BS MBA ACCREDITED UNIVERSITY Buy It Now price: US \$134.00 (Approximately AU \$184.09) Your Quantity: x 1 Buy It Now > You will confirm in the next step. Purchase this item now without bidding Learn about Buy It Now

file://C:\Documents and Settings\George Brown\Desktop\PhD Thesis - The University of ... 15/04/2007

Appendix 16 – List of inoperable URLs for falsified academic testamur providers

http://www.blackmarket-press.com

http://www.blackmarket-press.net

http://www.blacksprofessional.com

http://www.closedcollege.com

http://www.cooldegree.com

http://www.counterfeitcafe.com

http://www.counterfeitlibrary.com

http://www.degreee3.741.com

http://www.degreee3.741.com/table2PLQ.html

http://www.degree-mill.com

http://www.degreebank.com

http://www.degreeprofessionals.net

http://www.digitalproducts.cwc.net/diplomaindex.htm

http://www.documentsandsuch.com

http://www.diplomaone.com

http://www.diplomasanddegrees.com

http://www.diplomacollection.com

http://www.diplomarating.com

http://www.diplomareplacement.com

http://www.diplomasforless.com

http://www.diplomamasters.com

http://www.diplomaexpress.com

http://www.diplomas2go.com

http://www.fakedegree.net

http://www.fakedegree.com

http://www.fakediplomascenter.com

http://www.fakeid.cwc.net

http://www.fakeresumes.com

http://www.fake.to/cl/forums

http://www.fantasydiplomas.com

http://www.flyservers.com/members4/undergroundiplomas.com

http://www.flyservers.com/members4/diplomascams.com

http://www.geocities.com/BlackMarketDiploma

http://www.geocities.com/CollegeDiploma

http://www.geocities.com/davephilipau

http://www.geocities.com/hakers1000/fakedegree.HTM

http://www.idhookupz.com

http://www.kaiserince.com/replacementservice.htm

http://www.myfakediploma.com

http://www.nashco.com/nashco/honorarydegree.html

http://newwritersguild.com/diplomas.html

http://www.ntxstar.com

http://paperbrain.tripod.com

http://www.prestigiousimages.com

http://www.professionaldegrees.com & http://www.worldprintinginc.org

http://www.qualitydegree.com & http://www.webspawner.com/users/degree2

http://www.qualitydegrees.com/accessok.html & http://www.virtualdegreesonline.com

http://www.replicadegree.com & http://www.virtualdegree.com

Appendix 17 – Ashwood University website and the sale of falsified Australian qualifications

Australian University Fake Diploma Degree!

Page 1 of 2



Fake Diploma Home D

Diploma Programs

Fee Structure

Majors

Accredition

Why Ashwood?

Orde

Get Yourself Evaluated for Free

CONT

Australian University Fake Diploma Degree!

Looking For Australian University Fake Diploma Degree? Let Us Providente A Diploma That Is Fully Verifiable, Traditional And Accept Worldwide!

Through Our Help You Can Get Reliable And Internationally Accepted I
With A Sure Shot Approval Guarantee In Comparison To Australian Un
Fake Diploma Degree!

If you have been looking for Australian university fake diploma degree, then you should ask yourself if it is worth sacrificing your academic career! Australian university fake diploma degree indeed run a high risk of being detected by your employer, for which you can get penalized and fired easily. So don't rely on Australian university fake diploma degree when your career is a concern. Through our help, you can choose a suitable diploma for yourself for as low as \$199 with a 100% guarantee of approval. An Australian university fake diploma degree cannot provide you this much assurance.

We have taken the guess work out of the worries of finding a reliable and credible source of diplomas to accelerate your career. As there are various diploma mills churning out Australian university fake diploma degree. We are providing you diplomas in affiliation with a distinguished and reputable institute such as Ashwood University. This means that now you don't have to spend thousands of dollars in terms of admission or tuition fees, nor you have to attend classes. This means saving both time and money through our diplomas. Our provided diplomas are purely life experience based and are granted on the basis of your respective work, life or military experience, or classroom education. We are providing applicants like you diplomas irrespective of age, sex, marital status, or physical location. Your acquired genuine diplomas have a high approval rate i.e. 99.95% in comparison to Australian university fake diploma degree, which hinder your career growth.



Are You Are Eligible For Experience Degree In Desired Major?

Through just a 2 minutes proceed out if you are eligible to get the Experience Degree in your prefermajor. Absolutely FREE Evaluation...No credit card re

Your Desired Degree: Select Degree

> Type Your Major: Your major here

> > Submit

Don't look for Australian university fake diploma degree. Click here to learn more details about ho legitimate and accredited diploma from Ashwood University for yourself)

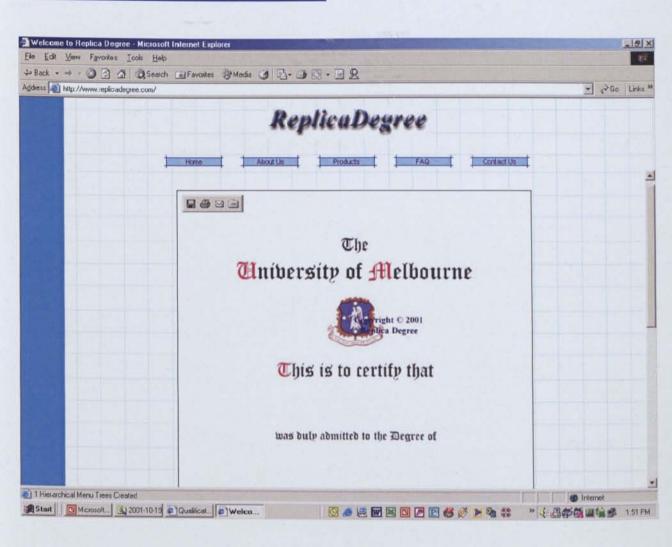
Click Here

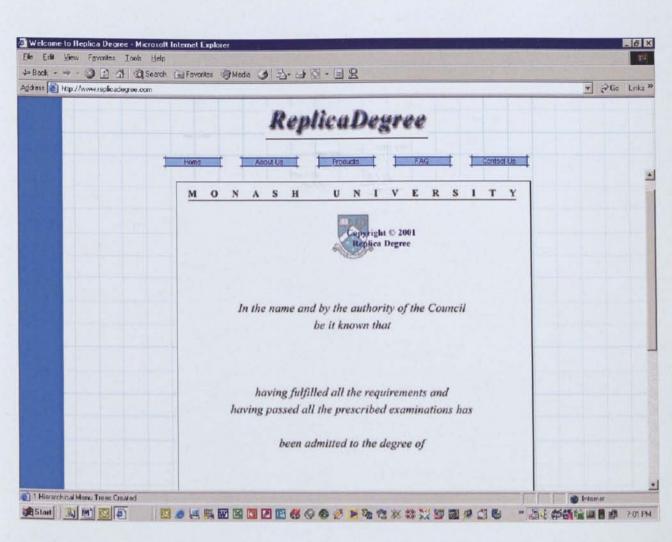
Also Read:

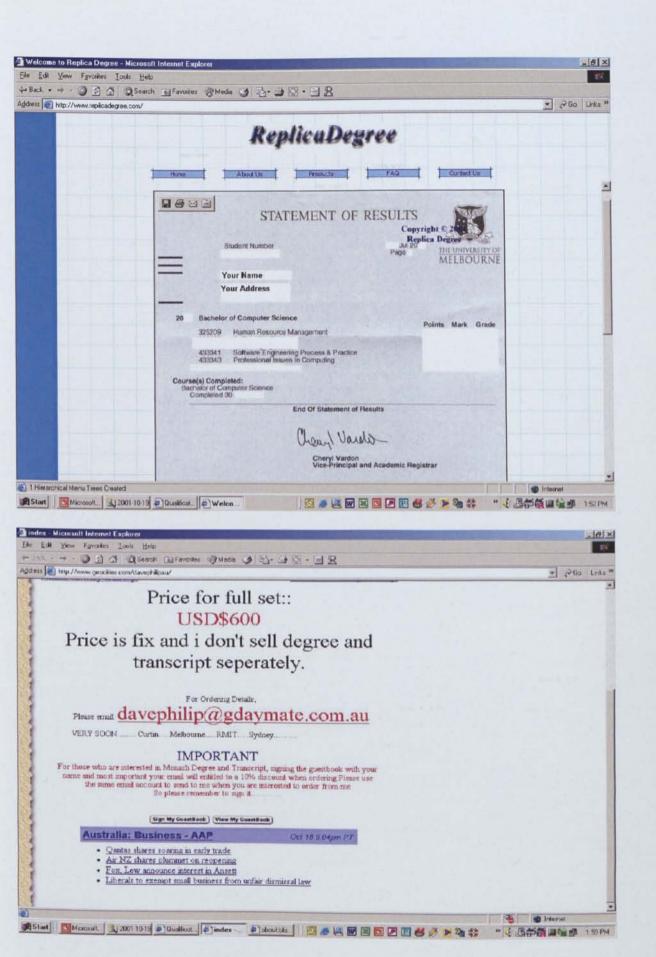
http://www.fake-diploma.net/australian-university-fake-diploma-degree.htm

16/07/2005

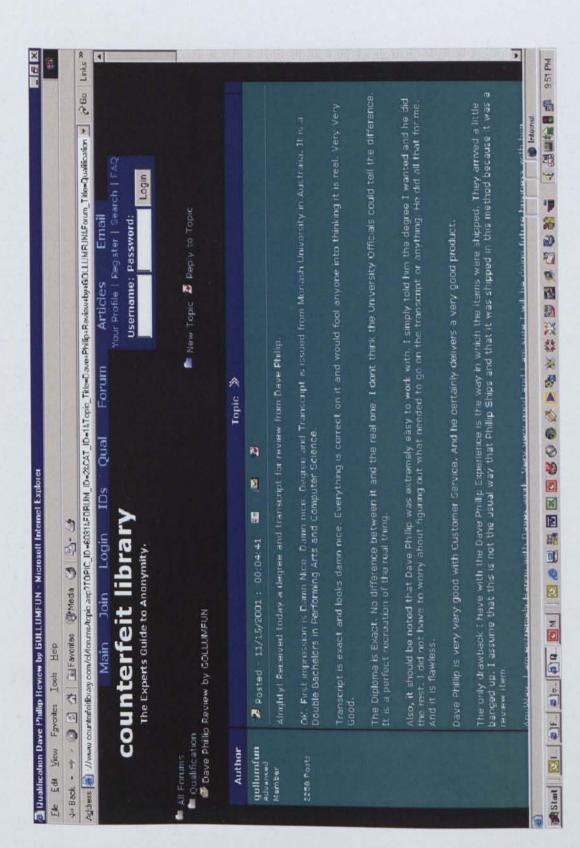
Appendix 18 – Examples of Monash University & University of Melbourne qualifications available for sale at http://www.replicadegree.com







Appendix 19 - Fake degree review from http://www.counterfeitlibrary.com



Appendix 20 – Examples of individuals holding falsified academic qualifications

Glenn Oakley

Glenn Norman McKinnon Oakley, a resident of Sydney Australia, was charged with falsifying a Bachelor, Graduate Diploma, Master and PhD qualification from three separate universities (ICAC 2003b). Oakley rose from being a morgue assistant to holding a range of senior management positions for over 15 years. This was all due, arguably, to the academic qualifications that he purported to hold.

He started training to be a nurse in the mid 1970's and went on to be a senior pathologists assistant (Devine and O'Shea 2003). In 1986 whilst a platoon commander in the Army Reserve, Oakley used his position to remove copies of university degrees from the army records. He photocopied them at the morgue and coloured them in for authenticity. In 1990 he fooled two Justices of the Peace to certify the forged copies as originals – he showed them the framed copies and then destroyed these afterwards (Rintoul 2004, p.24).

Oakley claimed to hold the following qualifications, none of which could be verified by the universities (Devine and O'Shea 2003; ICAC 2003b):

Bachelor of Science (Hons), Diploma of Education (University of Newcastle) - 1981 Graduate Diploma of Education (University of Newcastle) - 1982 Master of Business Administration (University of New South Wales) -1984 Doctor of Philosophy (University of New England) - 1988

Oakley held a Conjoint Professorial appointment at the University of Newcastle's Graduate School of Business and as Chair of the University Foundation Board (ICAC 2003b). In 1996 he was appointed in a \$250,000 year position as Chief of the Newcastle Ports Corporation and was arguably an excellent candidate for the position (Devine and O'Shea 2003). In September 2001 he was headhunted for a \$400,000 position for the Sydney office of Transurban, a private road builder. His resume listed the Transport Minister and the Sydney Olympic Games Chief Executive as referees, and also claimed to be a registered nurse and a CPA (Kirkwood, Smith and Holland 2003). His PhD and MBA came highly recommended.

In application for senior position with the company Transurban, the Director who sat on the panel, Jeremy Davis, was the past Dean of the UNSW Graduate School of Management in 1984 when Oakley claimed to graduate. Davis did not recall Oakley being there or in any of his classes, and it is from here that his history began to unfold.

Glenn Oakley was labeled a liar and a fraud; yet he was seen as one of the best public servants chief executive some people had ever worked with. When he invented the degrees that opened the door to a new and wealthier life, he made a mistake that he has regretted, almost daily, ever since (Rintoul 2004). It is difficult to believe that Mr Oakley's work experience...would have facilitated this advancement without the accompanying false qualifications (ICAC 2003b, p.10).

Frank Abagnale

Perhaps the most famous of all individuals to use falsified academic qualifications was Frank Abagnale, whose life was chronicled in both book and film. His story entitled 'Catch me if you can', outlined a life of deviant behaviour, demonstrating the skills he acquired as a master of fabrication and deceit, in a career where he became a pilot, doctor, lawyer and university professor.

At one particular stage in his career, Abagnale (2000, p.100) claimed to possess a Harvard law degree. This was in response to a question posed to him by a lawyer at a social function. Feeding his desire for a challenge, Abagnale accepted a position at his law firm, so long as he qualified to practice in California by passing the bar. Required to produce his transcript of results from Harvard, he set about creating a replica set of documents. Abagnale contacted the registrar of Harvard and had the catalogues sent to his post office box. All the required background reading, including logos and letterheads were included. Unsure on how to create a set of transcripts, he memorized a sample set of a friend's Ohio University transcripts, and set about creating a set.

His autobiography outlines in detail how he purchased graphic supplies and gold seals for a notary's press in order to create his replica work. Once he had completed the papers, he presented them to the State Bar's Examiner's office, unsure whether they resembled an actual Harvard transcript or not. The paperwork was accepted, and after his third attempt at the examination, he was admitted to the state bar and licensed to practice law.

In a separate and later case, Abagnale (2000, p.112) claimed to hold a PhD in Sociology from Columbia University in New York. He used this claimed credential in order to obtain a faculty position at a university in Utah. Following the same steps as he did to fabricate his Harvard law degree, Abagnale provided the university with the required paperwork, including two letters of recommendation. The university apparently barely looked at the documents, instead accepting Abagnale's vivacious charm and intellect as evidence that he would be an adequate candidate for the position. He was very successful in his position with an offer of more work at the end of his tenure, and glowing reports from his students. Abagnale (2000) saw his lack of qualifications as a mere technicality, and for the high school drop out who never stepped foot on a college campus, he is perhaps one of the more entertaining of cases.

David Edmondson

David Edmondson was Chief Executive Officer of the US based Radio Shack when in 2006, revelations of his unearned qualifications came to light. "The contents of my resumé and the company's Web site were clearly incorrect," Edmondson said in a statement. "It is my belief that I received a ThG diploma, not a BS degree as I asserted. I clearly misstated my academic record, and the responsibility for these misstatements is mine alone."(RadioShack board to investigate CEO 2006). Edmondson added, "I love my work at RadioShack and am eager to increase shareholder value moving forward." (RadioShack board to investigate CEO 2006)

In an hour long interview with the *Star-Telegram*, Edmondson stated that he only minored in psychology and had been unaware of the error in his corporate biography. He said he earned what was designated as a "Thg" degree, completing a three-year program in theology through

correspondence courses while working at a church in Colorado. He suggested that the institution, Heartland Baptist, must have lost some paperwork (Landy 2006; Noon 2006).

"Although these things are never for sure, I think the most likely outcome here is the board will ask for his resignation," Stephen Fink, a partner at the law firm Thompson & Knight in Dallas commented on the issue at the time (Dorfman 2006). After the official announcement from RadioShack, shares fell 51 cents or 2.4 percent to \$20.76 in the afternoon trade on the New York Stock Exchange.

Michael Hoffman, executive director of the Center for Business Ethics at Bentley College in Waltham, Massachusetts commented at the time "It goes to the heart of whether the man has integrity," Hoffman said, "and whether he's honest and forthright in who he says he is and what he says he might do."(Landy 2006)

Five days after the announcement was made by Radio Shack regarding his qualifications, Edmondson resigned (Associated Press 2006c; CBC News. 2006; Rocha 2006), and all the executive biographies were removed from the Radio Shack website, stating "We are currently updating and validating all of the biographical information for each of our senior executives" (Associated Press 2006c).

Bryan Mitchell

In 2002 it was discovered that the Chief Executive of MCG Capital Corp, Bryan Mitchell, had not graduated from Syracuse University. The day of this announcement the company's stock plummeted (Weber 2002). Mitchell was asked to stay on as the company's top executive, but was asked to resign from the chairman's position, repay his 2001 bonus and forfeit his bonus for the following year for misrepresenting his educational achievements.

Mitchell claimed he graduated from Syracuse University, when he in fact he attended Syracuse for only three years and attended Washington College for two additional years. He did not receive a degree from either institution (Clabaugh 2002). After these revelations came to light, investors sought to sue MCG as the share price dipped significantly. In a Court of Appeal, the case was not found in favour of the Plaintiffs and the judges found no misrepresentation had taken place to cause the loss in stock earnings (CHARLES GREENHOUSE, individually and on behalf of all others similarly situated; EVELYN ROSEN; WILLIAM B. MOUK v. MCG CAPITAL CORPORATION; BRYAN MITCHELL; JANET C. PERLOWSKI; STEVEN F. TUNNEY, 2004)

Kenneth Lonchar

In June 2002 Veritas Software Corporation fired its Chief Officer, Kenneth Lonchar after it was discovered he did not possess the MBA he claimed to hold from Stanford Business School. Vertias shares fell 19% on the day of the announcement (Weber 2002; Callahan 2004a).

Ronald Zarrella

Ronald Zarella, according to Jacobs (2004, p.158), had an unsuccessful career at General Motors but was later recruited by Baush & Lomb Inc to be their Chief Executive in 2004. It was subsequently discovered that Zarrella did not possess his previously claimed MBA from New York University. The company's stock tumbled by 3%. He remained with the company, and his competence was affirmed by the corporations board (Jacobs 2004, p.158), however he lost a \$1.1 million bonus (Callahan 2004a; Mason-Draffen 2004). In a statement to the press, he confessed, 'At some point I felt insecure and it perpetuated itself. I'm embarrassed that some of this incorrect information appeared in some of our published materials on my background. Clearly, it's my obligation to proofread such things carefully and ensure their accuracy'(Jacobs 2004, p.158).

Scott Peterson

The highly publicized case of Scott Peterson who was convicted of murdering his wife, Laci Peterson and their unborn child revealed that Peterson purchased replica degree parchments from bona fide institutions (Crier and Thompson 2005, p.109). When confronted with the allegations that the testamurs were fraudulent, Peterson laughed the purchase off as a 'joke', stating that his wife had bought them in jest as he had studied for so long. Law enforcement officials were not convinced and believed that this was part of a plan for him to create a new persona and appear more desirable (Crier and Thompson 2005, p.241).

Upon further investigation it was found that Peterson had purchased four degree qualifications which were '...beautifully matted, framed, and displayed in the Peterson home (living room wall) as if they were legitimate' (Crier and Thompson 2005, p.109 & 318). Three of the parchments were fraudulent replicas consisting of a Bachelor of Arts in Religious Studies from Arizona State University (dated 1 June, 1992) and two from the University of San Diego: a Bachelor of Science in Psychology (dated 21st June 1994) and a Bachelor of Science in Business (dated June 12th 1996).

Further investigations found that his murdered wife had not purchased the parchments; the \$269.85 charge appeared on Scott's credit card dated December 16th, 2002. His email and shipping address was found to be on the order, which was made from the site http://www.phonydiplomas.com, a website profiled in this study. It was later found that the purchase of the religious degree may have been in part to impress his girlfriend (Crier and Thompson 2005, p.109).

Professor Tony Tarr

Professor Tony Tarr was questioned in 1999 over his qualifications and the wording used to represent them when applying for the position of Head of the University of Queensland's Law School. An article cited a range of terminologies, which he used in his resume and application for the \$150,000 position, which differed significantly from their actual titles. The issues were seen as signification to make to page 1 of the paper (Whittaker 1999). It is unclear if Professor Tarr remained on faculty at the University.

Bruce McKenzie

In September 1991, Bruce McKenzie an academic at Deakin University, resigned his position after his claims of a Diploma and Masters degree could not be authenticated (Leech 1991; Maslen 1991a; b; Poprzeczny 1993). He had enrolled in a PhD program at the University of New England and had completed two years of the program, but was expelled once the truth about this past qualifications came to light (Maslen 1991a; Jones 1992; Maslen 1992). McKenzie had been a lecturer for 20 years, sat on Prime Ministerial committees and served for three years as President of the Australian Council of Social Service. He had, according to Terry Baker, Assistant Director of South West College of TAFE in Warrnambool, done 'a great job' and had all the right qualifications for the role (Jones 1992).

Dr Phillip Lahey

Dr Phillip Lahey from Edith Cowan University resigned his position in June 1993 after revelations about the falsification of his qualifications emerged (Poprzeczny 1993).

Christopher Lyndon Gee

In 1989 Christopher Lyndon Gee, an academic at the then Canberra School of Music was demoted after his claims an Oxford B. Litt degree were found to be false. He was relegated from Senior Lecturer to Lecturer, with many staff feeling that he was treated leniently (Hobson 1989).

Dr Peter Gordon Flude

In 1990, Dr Peter Gordon Flude was found to have claimed a Dip Ed from London (which could not be verified (Mass marketed tax effective schemes and investor protection 2001).

Dr David E. Jones

Dr David E. Jones resigned from Griffith University as Head of Health Sciences in June 1994 after his PhD was found to be forged from an American University (Whittaker 1996; Whittaker and Horan 1996). He claimed the degree from Ohio's Bowling Green State University, however there was no record of him graduating.

Dr Horace Sogar

Dr Horace Sogar was appointed to the faculty at Griffiths University Gold Coast campus in January 1994. On April 25th 1996, he resigned due to the fact that none of his undergraduate or postgraduate qualifications could be authenticated. The University of Arizona, Arizona State University and Northern Arizona University had no record of his qualifications, whilst his PhD from "Gold Coast University of Florida" was found to be non-existent. He moved to Griffith University from Edith Cowan University where he was a lecturer on faculty for some

years (Whittaker 1996; Whittaker and Horan 1996). Despite these problems, Sogar had published in some of leading journals of the world

Dr Adrian Bull

Dr Adrian Bull taught Business Studies at the Gatton Agricultural College and came from Griffith University's Gold Coast Campus. He claimed a PhD from England, which could not be authenticated. He resigned in 1990, whilst under investigation during the merger with the University of Queensland. As of 1996 he kept teaching at Southern Cross University in Lismore but did not claim his PhD. Associate Professor Stephen Craig-Smith who published papers with Bull cited the excellence of the texts and argued that, "He was stupid to falsely claim a PhD, but he was no fool. His books are well respected and some of the best academics are not PhDs" (Whittaker and Horan 1996).

Mr Alan Hales

In 1997, Mr Alan Hales, a Senior Lecturer of Advertising in the School of Communication since 1991 at Queensland University of Technology resigned after a qualifications audit found that it could not verify the authenticity of his claimed BA (Hons) from The University of Sydney (Illing 1997; Ryan 1997). The Vice Chancellor, Professor Dennis Gibson stated that he was well regarded by students and staff, and held over 30 years experience in the industry. In response, Mr Hales stated that he would have liked to have obtained a degrees if he had more time, but when he tried to get credit for his 30 years of experience, the university "just laughed" (Illing 1997).

John Friedrich

The Head of the former National Safety Council of Australia (NSCA), John Friedrich, used a variety of falsified documents, including academic qualifications, to obtain employment and admittance to Australia. In 1988 he was awarded the Medal of the Order of Australia (OAM) for services to the community, industrial safety, search and rescue services. It should be noted that only Australians are eligible for this award, and Friedrich was not Australian (Thomas 1991, p.34).

During Friedrich's employment, over \$293 million dollars was misappropriated, whereupon Friedrich disappeared in 1989. He committed suicide in 1991. During the hearing of the review, the Chairman of the NSCA Max Eise told, 'how he and the board believed Friedrich had been doing 'a fantastic job' for the safety council, stating that 'We gave this man credit for being honest,' he said. 'Friedrich was doing a fantastic job as far as the directors were concerned, and as far as the Government and people of Australia were concerned.' Eise told how the board had given careful consideration to Friedrich's appointment, but the deciding factor had been his supposed qualifications — which the board did not ever see. 'He gave us to understand that he had a master of engineering and very high qualifications. We didn't know we were being hoodwinked' (Thomas 1991, p.220). Over 450 people lost their positions when the NSCA was wound up.

Bruno Sorrentino

In September 1993 Sorrentino was head of IT and research arm for Telecom, having moved over as former ANZ Bank Chief Information officer. Lasting for only 5 weeks in the position, laboratory staff raised questions about his academic qualification when they asked to read his PhD thesis. It was later discovered that Sorrentino had not attended London's Imperial College and did not hold his claimed PhD Physics

Peter Lewis

On June 3rd, 2003 it was revealed that Peter Lewis, the Speaker of the South Australian Parliament, claimed an MBA from the University of Adelaide (Hockley 2003). Following the allegations, Lewis argued that his studies had lapsed, he did not hold the qualification, and was 'incomplete'. The parliamentary website was subsequently altered to state: "University of Adelaide MBA (Dissertation not submitted)". Coursework masters do not have dissertation components. This statement remained from July 27th 2003 (Lewis 2003) until the last archived version on Internet http://www.archive.org as at March 25th 2005 (Lewis 2005). As at the writing of this study, the profile reverted back to its original statement of 'University of Adelaide MBA' (Lewis 2006). Assuming that Mr Lewis had moved on to complete all requirements for the award, the author sought verification through the Graduations Office at the university. It was determined that there was no actual Peter Lewis ever enrolled in an MBA program at the University of Adelaide.

Denis Smith

Denis Smith, the CEO of Perth Council Joondalup, was sacked in 2004 after an independent inquiry found he had falsified key details on his CV. A former general manager of Sydney's Warringah Council, Smith claimed a range of qualifications but was unable to authenticate these during the inquiry to provide documents to prove he had passed a business degree. The enquiry into his claimed qualifications found that Mr Smith's post-graduate Diploma in Environmental and Pollution Studies from the University of Technology Sydney and a Diploma in Town and Country Planning from the Royal Melbourne Institute of Technology were false. The final report found that:

- A. Mr Smith's evidence to this Inquiry that he holds a post-graduate Diploma in Environmental and Pollution Studies from the University of Technology Sydney and a Diploma in Town and Country Planning from the Royal Melbourne Institute of Technology was knowingly false.
- B. Mr Smith intentionally deceived the Coffs Harbour City Council and Warringah City Council by representing to them that he had University diplomas and a Bachelor degree in business management.
- C. Mr Smith lied on oath to Judge Gibson in the District Court of NSW on 12 November 2002 when he said he held a "Diploma of Business in Management", a "Diploma in Land and Engineering, Surveying, Drafting" and a "Diploma in Environmental Studies" (or "Science"). D. Local governments and their officers ought in future ensure that relevant certification is attached to any CV, resume or consultant report for consideration when engaging employees
- (Government of Western Australia 2005, p.3-97).

Victor Vincent Berg

As part of the 'Dr Death" enquiries surrounding Jayant Patel in Queensland, a number of other doctors were questioned on their background and bona fides of qualifications. One particular doctor, Victor Vincent Berg was questioned over his qualifications. In his Curriculum Vitae, Berg stated that under his previous name of Tchekaline Victor Vladimirovich, he had completed a combined medical degree and postgraduate qualification in psychiatry of the Voronezh State University in the former USSR, now the Russian Federation. Berg claimed to have enrolled in this degree in September of 1969 and been awarded the degree of Doctor of Medicine in Psychiatry in May 1977. He then claimed to have continued his post-graduate study in psychiatry between May 1977 and December 1978.

The College of Psychiatrists had concerns because Berg's qualifications were in a different name: Tchekaline Victor Vladimirovich. Berg explained that he had changed his name on arriving in Australia. The College of Psychiatrists contacted the Voronezh State University in an effort to confirm his claimed qualifications. An officer of the College of Psychiatrists contacted Sergey Zapryagaev, a professor and provost of the Voronezh State University. Professor Zaprygaev advised that the Voronezh University had no record of a degree being awarded to Tchekaline Victor Vladimirovich, and no one by that name had ever worked as a staff member of the University. He also advised that the Voronezh State University had no such educational program in 1977 as the one that Berg claimed to have completed. The email from Professor Zapryagaev to the College of Psychiarists read:

Voronezh State University did not produce the diploma 'Medical Degree in Psychiatry' number 723438. Moreover, [the] University had no such educational program in 1977.

In that e-mail Voronezh University also asked the College of Psychiatrists to provide a copy of Berg's certificates so that it might determine their authenticity. The College of Psychiatrists then sent a copy of Berg's certificates directly to the Voronezh State University. In a further email from Mr Zapryagaev to the College of Psychiatrists, having examined the certificates he advised that both Berg's degrees were very rough forgeries. The College of Psychiatrists requested that the Voronezh University confirm by letter that the documents were forgeries and that the Voronezh University did not produce the degrees. The Voronezh University provided that written confirmation (Davies 2005, p.284-287). Berg claimed that his university degree was taken by the KGB and never returned (Campion 2005) hence he created the forgeries. Notwithstanding the above, it appears that the Medical Board did to verify the genuineness of the certificates which he produced and took them at their face value.

Andrew Levy

Andrew Levy (also known as Ahmed Ali Rida) posed as 'Dr Levy' during 2002. Over a nine month period he crossed Australia committing more than 260 offences. His last role was acting as a lawyer in Perth, Western Australia. In June 2001 he rented an office in the Law Chambers building, and placed on his desk a framed, fake degree from Cambridge University. Once he was caught he was sentenced to jail for six years.

Refaat el-Sayed

In 1986 the founder of Fermenta in Sweden, Refaat el-Sayed admitted that he had lied about his academic qualifications. The Swedish car maker Volvo had planned a US\$500 million linkup with the biotechnology group that would have transformed Sweden's drug industry (Reuters 1986). A year later, el-Sayed filed for bankruptcy with debts of over \$US60 million (Reuters 1987).

George O'Leary

George O'Leary was Head Football Coach at Notre Dame University in the USA. In 2001 revelations came to light regarding his unearned Masters degrees. In a prepared statement upon his resignation from the University, O'Leary provided the following explanation on the university's website:

Today, I regret to report that last night I tendered my resignation as head football coach of the University of Notre Dame. My resignation has been accepted. This action has been taken by me for the following reasons. Many years ago, as a young married father. I sought to pursue my dream as a football coach. In seeking employment, I prepared a resume that contained inaccuracies regarding my completion of course work for a Master's Degree and also my level of participation in football at my alma mater. These misstatements were never stricken from my resume or biographical sketch in later years. During my coaching career, I believe I have been hired because of the success of my players on the field and the evaluation of my peers. However. these misstatements have resurfaced and become a distraction and embarrassment to the University of Notre Dame, an institution I dearly love. I regret that I did not call these facts to the attention of the University during their search. It now seems, therefore, that in keeping with my philosophy of personal accountability for these errors, I resign my position and deeply apologize for any disappointment I have caused the University, my family and many friends. I pray that my experiences will simply be yet another coaching lesson to the youth of this country that we are all accountable for our actions and there can be no double standard. I appreciate the courtesy and consideration extended to me by the University of Notre Dame (O'Leary 2001).

Other miscellaneous cases

An individual presented a Diploma of Occupational Health and Safety for employment at BHP Billiton Mitsibushi Alliance in Queensland, Australia's largest coal producer. The incumbent was required to attend to the entire Occupational Health and Safety aspects of the plant, but her capacity was questioned when her communication skills were questioned whilst performing the job. A subsequent background check found that the Diploma presented from the Australian Institute of Public Safety was completely fabricated, including the transcript of results (King 2005).

A woman posed as a registered nurse in the State of South Australia. She worked at a nursing home and a nursing agency using a falsified registration papers. Ironically, the verification of

the registration can be undertaken by checking the Nursing Boards registration register online, however none of these background checks were undertaken (Investigation over bogus nurse 2005; Allison 2005b; a). This case fell concurrently during another case of fake nurse working on Great Keppel Island Resort in Queensland. The woman falsified her registration, curriculum vitae and military work references. It was found that the woman suffered some 'cognitive dysfunction' and had the potential to place many individuals in harms way (Mancuso and Donaghy 2005).

A young presidential appointee to NASA recently resigned as his claimed journalism degree could not be confirmed from Texas A&M University (Goldenberg 2006; Kruger 2006; Revkin 2006)

Tracy Hogg, who wrote the best selling Baby Whisperer claimed a masters degree from the University of California-Irvine – no evidence could be found of her enrolment. (Keyes 2004, p.63)

A construction worker presented a falsified qualification so that they could work on the Pentagons re-construction (Ahn 2004),

US Olympic Committee president Sandra Baldwin changed her undergraduate degree from Arizona State to University of Colorado and claimed a PhD from Arizona State (Keyes 2004, p.63). None of these claims were true.

Claimed degrees that never existed (Keyes 2004, p.64):

Jeffrey Papows, President of Lotus Development Corporation

Charles Harris, Director of Dartmouth University's Athletics division

Shirley DeLibero, President of Houston's Metropolitan Transit Authority

Barbara Burke-Tatum, Director, Milwaukee's Social Development Commission

Henry G. Reid, Director UCLA's body donor program

Quincy Troupe, Califorma's poet Laureate

Mary Panzer Wisonsins State Senate

Elaine Musselman, Congressional aspirant in Kentucky

Ramon Antonio Serbia, Republican candidate for state comptroller

Ronnie Few, fire chief of Washington DC

Fred Lau, San Francisco's Chief of Police

Barbara Kopple claimed to have graduated from Northeastern University – she hadn't Larry Ellison, founder of Oracle, claimed he had a BS and MS in physics from the University of Chicago – he had neither

Dennis Kozlowski of Tyco claimed to have earned an MBA from Rivier College in a questionnaire submitted for the 1988–1989 edition of *Who's Who in America*. Mr. Kozlowski completed only three classes at the school (Healey 2003).

Appendix 21 – Overview of US States which have legislated on the use of non-official academic qualifications

AACRAO presentation by State of Oregon - April, 2006

Leaders of the Pack WA MT MD MN WI MI PA MA OR ID WY NE IA III NOH PA RI OK MO KY WYVA NJ OK AR TN SC DE MD MS AL GA DC

States where the use of unaccredited or degree mill degrees is restricted or not allowed are shown in red. Those where legislation is known to be under discussion are shown with a red hatch.

The Seven Sorry Sisters



States where the special of degree mills and low-end unaccredited degree suppliers is easy because of state laws that are poor, poorly enforced, or obscure shown in value. Those with improvements possible in 2006 are shown with a red hatch. States with enforcement problems shown with a yellow question mark: ? Other states vary from excellent to so-so.

Note: when new laws in Wyoming and Idaho go into effect, entities based there are likely to relocate to Mississippi or possibly to Montana.

Oregon Office of Degree Authorization 1500 Valley River Dr. Suite 100, Eugene OR 97401 * 541-687-7452 * http://www.osac.state.or.us/oda/ Oregon allows use of certain unaccredited degrees with a disclaimer.

Indiana law restricts only certain unaccredited doctorates.

Illinois law allows use of unaccredited degrees only if issued by schools operating legally in state of origin.

Washington law is brand-new in 2006 and is similar to North Dakota and Oregon law

Michigan accidentally made use of foreign degrees illegal. Presumably that will be or has been fixed.

Federal rules theoretically allow only accredited degrees in federal jobs, but they grandfathered a lot of carp-holders.

The Really Awful States

Mississippl: the worst law in the U.S. State law apparently allows garbage haulers to issue PhDs. The stench increases daily.

Hawaii: very weak law, partly offset by excellent enforcement.

Idaho: loophole allows degree mills to operate if they don't issue degrees to Idaho residents, FIX expected in 2006 legislature.

Wyoming: weak law and poor enforcement allowed state to fill with carp. Political interference. FIX expected in 2006 legislature. Wyoming finally woke up and didn't like the smell.

The Confused and Inattentive States

Montana: weak, obscure law on private degree-granters. Enforcement?

Missouri: moderately weak law, especially for schools claiming religious affiliation. Also political interference.

Alabama: badly split state authority over degree-granters allows some carp to slip between the cracks.

The Enforcement Problem States

California: decent law, limited enforcement.

New Mexico: Loophole grandfathered carp.

Florida: decent law, limited enforcement.

Vermont: good law, political interference.

Connecticut: limited enforcement.

Appendix 22 – Recommended process for the verification of academic qualifications

1. Documentation Request and Review

1.1. Assembling a complete file of acceptable documentation

- Determine the documentation requirements for admission or transfer credit at your institution.
- Establish policies on the documentation required for admission and transfer credit based on the documentation practices in the country in question.
- Establish a policy on the use of English translations in the evaluation process.
- Build a reference collection to help you keep up to date in this area print and Internet resources on country and documentation information, file copies of authentic documents, network of trusted colleagues.
- Be proactive. Communicate documentation requirements to prospects and applicants effectively.
- Be precise and clear about the documentation required; how and when documentation is to be received by the institution; whether any documentation will be returned to the student; what to do if the student has documentation that will never be re-issued as an original document. Use indigenous terminology for documentation that is not issued officially in English. Give applicants clear guidance as to how to obtain official documentation and have it sent to you.
- Make it your goal to receive a complete file of appropriate documentation from every applicant without having to do a follow-up request for additional/different documents and establish your communication and processing systems to support this goal.
- Establish a consistent procedure for follow-up on incomplete application files and communicate it to applicants clearly.
- Establish guidelines on how to handle cases in which documentation appears to be unavailable.
- It is very rare that no documentation exists, and those cases should be handled on a case-by-case basis within your institution's established guidelines.
- Establish guidelines for the consequences of submitting falsified, altered, forged, fraudulent documentation or information, and communicate those consequences to applicants clearly.

1.2. Reviewing documents for authenticity

- Establish a methodical approach to document review that is followed consistently.
- Review all documents submitted by applicants with care.
- Reconstruct the applicant's "life story" using bio data, the educational history and the academic documents. Arrange the documents in chronological order and compare to the person's life story.
- Using reliable resources, confirm the information presented on the documents:
- Name, location and recognition status of the institution * Dates of attendance * Level and type of program enrolled in, and curriculum * Grades, marks, or other performance assessments * Course credits or weighting * Award of a credential
- If you find discrepancies or inconsistencies, investigate, using your resources.

• If the problems or discrepancies cannot be resolved using available resources and help from colleagues, go right to the source...... REQUEST VERIFICATION.

2. The Process of Requesting Verification

2.1. Preparing a Request for Verification – Step-by-Step

Preliminary Steps:

- Using reliable resources, identify the office or person to whom the verification request should be sent.
- Locate the appropriate contact information for this office or person.
- Consider the most effective way to send the verification request (postal service, courier service, fax, e-mail, telephone, etc.)
- Determine whether the request should be written in English or another language, or both, to facilitate a timely response.

Formulating the Request:

- Consider creating a standardized form or letter to use for every verification request, then customize it as necessary for each case. (See attached sample case.)
- Clearly state "Request for Verification" in the opening of the letter or form, and give the student's name and identifying information at that institution.
- Introduce yourself, your institution and the reason that you are requesting verification (student has applied for admission / transfer credit, at your institution).
- Outline your questions about the document. Enclose a copy of it, with problem areas highlighted.
- Be clear and specific about what information you need to receive from the verifier. For example, if the document is not authentic, what further information would you want to know?
- Give specifics regarding a response:
 - o a date by which you wish to have a response, if you have a specific time frame.
 - o format or mode in which a response would be acceptable (return the form letter or send a separate letter?, email, fax, letter acceptable?)
 - o language in which you need to receive the response. Is a language other than English acceptable?
- Include a reference code (identifying information for you) and ask the verifier to include it in the response.
- Ask for the verifier's name, title, and contact information, for follow-up in this case or future reference for another case.
- Include your contact information for the response.
- Request confidentiality.
- Thank the reader and offer to assist in the future or send a catalogue or other informational material from your institution.

2.2. Communicating with Applicants about Requests for Verification

- This calls for professional judgment, on a case-by-case basis. Spectrum of possible actions:
 - o say nothing at all to the applicant until verification is received.

- o inform the applicant that there are problems with the document and ask for an explanation or for assistance in getting verification or "better documents".
- o inform the applicant that verification has been requested and that nothing further will be done until verification has been received.
- Work with trusted, experienced colleagues to develop good professional judgment.

2.3. Tracking the Verification Process:

- Create a "Verification Process" file where you can track each verification case. Save originals of all correspondence including envelopes, courier receipts, etc. Cross-reference each case in the verification file to the applicant/student file. Use the "Verification Process" file to track responses and as a resource for future reference.
- 3. Receipt of Response and Follow-Up Action
- 3.1 Assessing the response
 - What is the source of the response? Where/whom did it come from?
 - Is the information provided complete? Conclusive?
 - If not, what further action needs to be taken?
 - Will another round of correspondence be fruitful? To whom should it be addressed? What other avenues can be pursued if it seems that further contact with the verifying authority would not be productive?
 - What if the verifying authority requests further information or documentation from the evaluator? What if a verification fee is requested?
- 3.2. Acting on conclusive confirmation of fraudulent documentation
 - Follow up according to the guidelines your institution has established for such cases.
 - Policies and procedures should already be in place, so that a standard protocol is followed.
 - Each case involving fraudulent documents has different circumstances, and as new twists and perspectives come to light, strategies for dealing with them can be incorporated into the institutional response to this scenario.
- 3.3 Tracking the verification process using your "Verification File"
 - Save copies of all correspondence in the verification process in the "Verification File", and note where you found accurate contact information, turnaround time for request and response, name and title of respondent, contact information, etc. Track this information for future use.
- 3.4 Sharing verification success and Information with the international education community
 - Help protect the integrity not only of your institution, but the whole higher education community, by letting your colleagues know the details of your verification success stories.
 - Solidarity in being proactive and "getting the word out" to colleagues is a powerful tool to help fight fraud.

Source: Bear et al. (2004)

Appendix 23 – List of institutions of 'doubtful standing' issued by the University of Wales (as at October 2004)

AUSTRALIA

Independent University of Australia (Morwell, Victoria)

BELGIUM

Académie Commerciales (Liège)

Académie des Sciences Commerciales et Industrielles de Liège (Liège)

Central International d'Etudes par Correspondance (Liège)(see also: France)

Institut des Hautes Etudes Commerciales (Brussels)

Institut Electrotechnique (Brussels)

Institut Normal de Culture Générale (Liège)

Institut Normal des Sciences Commerciales (Liège)

Institut Philotechnique (Brussels)

Institut Supérieur Technique et Colonial de Liège (Liège)

Institute of the International Thyrological Academy (Brussels)

Institute Moderne Polytechnique (Liège)

Université Philotechnique (Brussels)

BRAZIL

Universidade Brasileira (Rio de Janeiro)

RURMA

American Medical College (Rangoon)

CANADA

Canadian School of Management

Canadian Temple College of Life (Burnaby, British Colombia)

Earl James' National University College (Toronto, Ontario)

Empire College of Ophthalmology (Toronto, Ontario)

Empire Optical Company (Toronto, Ontario)

Huberman University College, Vancouver, British Columbia

Institute Academcy (Burnaby, British Columbia)

International Academy (Burnaby and Vancouver, British Columbia)

Morston-Colwyn University (London, Ontario) (see also: Great Britain)

National University of Canada (Toronto, Ontario)

Oxford College of Arts and Science (Ontario)

(sub-division of the Brantridge Forest School in Great Britain)

Philathea College (London, Ontario)(Legally entitled to give correspondence tuition in Theology and under letters patent to award a diploma. Debarred from awarding doctorates or other degrees in other fields of study)

Royal College of Science (Toronto, Ontario)

Universal Life Foundation (Burnaby, British Columbia)

University of King's College

CUBA

Universidad Latino-Americana de la Habana (Havana)

Universidad Tecnológica Nacional (Havana)

CZECH REPUBLIC

Nansen-Akademie (Prague)

DENMARK

Knightsbridge University (Copenhagen)

EL SALVADOR

Universidad Sintética Latina y Americana (San Salvador)

FRANCE

Académie Berichonne

Académie (or Université) des Sciences de l'Homme (Bordeaux)

(see also: Great Britain)

Académie Europa-Americana (Toulouse)

Académie Internationale (Paris and Toulouse)(branch in Belgium)

Académie Latine des Sciences, Arts et Lettres de Parris (Paris)

Académie Victor Hugo (Paris) (HQ: New York, USA)

Centre International d'Etudes par Correspondence (Paris)(see also: Belgium)

École Dentaire Supérieure de Radiologie et Physiotherapie (Paris)

Ecole Professionnelle Superieure (Paris)

École Supérieure Technique et Commerciale de Paris (Paris)

Faculté Libre de France (Bordeaux and Paris)

Institut International des Hautes Etudes Biologiques (Paris)

Institut International des Recherches Scientifiques et Psychologiques (Paris)

Societés Savantes (Paris)

Université Nouvelle de Paris (Paris)

Université Philotechnique (Paris)

Université Voltaire de France (Marseilles)

GERMANY

Franklin-Institut (Lindau)

Free Anglican Church (World Evangelical Mission)(Berlin and Frankfurt)

International Institute of Arts and Letters (Lindau)

GREAT BRITAIN

Academic College of Holy Studies (Sheffield)

Academy of Asia

Academy of Technical Sciences

All Nations London University

Anglo-American Institute of Drugless Therapy (Bournemouth)

Avatar Episcopal University (London)

Avatar International University (London)

Brantridge Forest School (Balcombe)

British College of Soma-Therapy

British College of Somnotherapy and Psychology (London)

Capital Radio Engineering Institute (Knightsbridge)

Central School of Religion (branches in USA and Australia)

Century University (based in USA)

Chartered Society of Psychiatric Practitioners, England (London)

City Medical Correspondence College (London)

College of Spiritual Sciences

Collegium Technologicum Sessexensis Britannia (see: Sussex College of Technology)

Cranmer Hall Theological College (London)

Creative University of South-East London

Edinburgh Theological Hall (Glasgow and Edinburgh)

English Association of Accountants and Auditors

English Association of Estate Agents and Valuers

English Association of Secretaries

Episcopal University of London

Episcopal University of St Peter Port (probably based in Frankfurt, Germany)

European College of the Science of Man (Sheffield)

Fairfax University (based in USA)

Faraday College

Fides College of Applied Science (High Holborn)

Free Protestant Episcopal Ecumenical Church Foundation (Sheffield)

Gordon Arlen College

The Harley Private College (see also St Giles University College)

Institute Galiennique du Rouergue (London)

Institute of Life Science (London)

Institute of Management Specialists

Intelligent Services

International Academic Passport

International Academy (London)

International Association of Hypnotists

International College of Metaphysical Sciences

International Export Association

International Federation of Scientific Research Societies

International Free Episcopal University (London)

International Institute of Information Officers

International Protestant Birkbeck College, London

Inter-University Service

Kensington University (suspect)(Hartlepool)(see also: USA)

La Roche International College, Scarborough

Lincoln University, USA (London and Hounslow)

London College of Applied Science (London)

London College of Physiology (London)

London College of Science and Technology Ltd (trading under the name of the American College in

London)

London College of Theology (London)

London Institute of Applied Research (London and Yarmouth, Isle of Wight)

London Tottenham International Christian University (London)

Lyne College

Manning University of Nottingham (Nottingham)

Metropolitan Collegiate (London)

Ministerial Training College (Doncaster and Sheffield)

Morston-Colwyn University (London)(see also: Canada)

National Ecclesiastical University (Sheffield)

National University of Sheffield

Nazarene Fellowship (London)

North West London University

Oxford College of Applied Science (also known as "Facultatis Colegii Oxoni Universitalis")

Oxford House College

Oxford Institute of Applied Research (London)

Philosophical Society of England

Professional Institute of Great Britain

Psychological Foundation of Great Britain (London)

Psychological Research Clinic for Nervous Disorders

St Andrew's Correspondence College (London)

St Andrew's Ecumenical Foundation University (London)

St Giles University College (Chalfont St Giles, Bucks)

St John Chrysostom College (London)

St Mary's Medicine University

St Olav's Cathedral Academy of Religious Science (London)(branches in Norway, Denmark, Lebanon and USA)

Sacrorum Studiorum Collegium Academicum (Sheffield)

School of Applied Sciences (London)

Schoolf of Psychology and Psychotherapy

Society of Physiatricians Ltd

Somerset University (now administered from New Orleans, USA)

Sussex College of Technology (Haywards Heath)

Thames Open University (London)

The La Roche International College, Scarborough

The Free University

The Graduate Schoo! of Management (London)

Trinity Collegiate Institute of London (see also: Switzerland)

United Free University of England

Universal Correspondence School

Universal Life Church (Walsoken)

Universitas Iltiensis (London)(see also: Switzerland)

University de la Romande, Sudbury, Suffolk

University in London - Obura University

University of Coventry (Coventry). Not to be confused with Coventry University, formerly Coventry

(Lanchester) Polytechnic

University of England at Oxford, London

University of Sealand

University of Sulgrave

University of the Eastern United States of America

University of the Old Catholic Church of the North of England (Sheffield)

University (or Academy) of the Science of Man (Haywards Heath)(see also: France)

University of Winchester (London)

West London University, Gloucester Place, London and Dublin

Western Orthodox University (Glastonbury)

Wordsworth Memorial University (London) (see also: india)

GREECE

College of Southeastern Europe

HONG KONG

Heavenly People Theological Seminary (suspect)

Sir Edward Heyzer's Free Technical College (associated with National University of Canada)

South China University (previously in Macao)

INDIA

Amritsar University (Amritsar)

Arya University (Srinagar)

Bible University (Ambuhr)

Central Board of Higher Education Commercial University (Delhi)

Eastern Orthodox University (Ambuhr)

Indian Sanitary Institute (Delhi)

Institute of Social Order (Poona)

Janta Engineering College (Karnal)

National Homoeopathic Medical College (Simla)

National University (Nagpur)

St John's University (Ambuhr)

Self-Culture University (Kizhanattam)

Society of Incorporated Accountants and Auditors of India (Delhi)

The World Jnana Sadhak Society (Jalpaigur)(associated with National University of Canada)

United Nations University (Delhi)

Vocational University (Amritsar and Delhi)

Western Memorial University (Delhi) (see also: Great Britain)

ITALY

Accademia di Studi Superiori "Minerva" or Accademia Studiorum "Minerva" (Bari and Trieste)

(associated with Aurea Publications, USA)

Accademia Internazionale di Alta Cultura (Rome)

Accademia Latinitatis Excalendae Artium et Litterarum (Rome)

Accademia Mondiale degli Artistie e Professionisti (Rome)

Accademia Romana di Scienze e Arti John F Kennedy (Rome)

Accademia Universale di Governo Cosmo-Astrosofico (Trieste)

Accademia Universitaria Internazionale (Rome)

Centro Italiano Richerche Ellecttroniche Nucleari (Rome)

Columbus Association (Trieste)(also in San Marino)

Inter-American University (Rome)

International American University (Rome)

Lateinische Akademie (Rome)

Libera Accademia di Alta Cultura Avignone-Parigi (Rome)

Libera Universita di Psico Biofisica (Trieste)

Phoenix University (Bari)(associated with Aurea Publications, USA)

JAPAN

Japan Christian College (Tokyo)

NETHERLANDS

Faculty of Neoreligion (Amsterdam and Haarlem)

International Spiritual High School (Amsterdam)

SINGAPORE

National University (branch of National University of Canada)

SPAIN

Imperial Philo-Byzantine University and Academy (Madrid)

London University Business School (Madrid)

Schola Popularia Botanicae (Barcelona)

Universidad Indigenista Montezuma (Andorra)

SWITZERLAND

Charleston Linguarum, Rerum Politicarum et Journalisticarum Collegium (Lausanne)(HQ:USA)

Etudes Universitaires Internationales (branches in Australia, Belgium, Great Britain, Hong Kong,

India, Japan, Liechtenstein, Luxembourg, Mexico, Morocco, Netherlands, Sudan and Sweden)

First Academy of African Sciences (Zurich)

Institut Technique Supérieur (Fribourg)

Trinity Fellowship (Zurich)(uses London address for Trinity Collegiate Institute)

Universitas Iltiensis (Kusnacht)(see also: Great Britain)

TURKS AND CAICOS

Mellen University

USA

American Bible School (Chicago and Florida)

American Divinity School (Pineland, Florida)

American Extension School of Law (Chicago, Illinois)(active abroad)

American Institute of Life Science (Indianapolis, Indiana)

American International Academy (New York)(branches in Argentina, Belgium, Bolivia, Brazil, Chile,

Colombia, Costa Rica, Cuba, Dominica, El Salvador, Ecuador, Denmark, France, Great Britain,

Guatemala, Germany, Greece, Guyana, Haiti, Honduras, India, Ireland, Italy, Japan, Mexico,

Monaco, Netherlands, Nicaragua, Norway, Panama, Peru, Portugal, Puerto Rico, Spain, Turkey.

Uruguay, Venezuela, Canada, Sweden, Switzerland, Indonesia)

American International University

American Legion University

American National University (Phoenix, Arizona)

American School of Metaphysics

Aquinas University of Scholastic Philosophy

Aurea Publications (New York)

Berlin Memorial University (Manasses, Virginia)

Blackstone School of Law (Chicago, Illinois)

Bradford University (Pasadena, California)

Bretton Woods University (Indianapolis, Indiana)

Burton College and Seminary (Manitou Springs, Colorado)

California Coast University

Calvary Grace Christian Church of Faith (Fort Lauderdale, Florida)

Carolina Institute of Human Relations (Sumter, South Carolina)

Central School of Religion (Indianapolis - see also Great Britain)

Century University, Beverley Hills, California (or Alberquerque, New Mexico)

Charitable University of Delaware (Delaware)(active abroad)

Chartered University of Huron (active abroad)

Chillicothe Business College

Chirological College of California (California)

College of Applied Psychology (Los Angeles, California)

College of Divine Metaphysics (Indianapolis and New York)

College of Homeopathy (Missouri)

College of Journalism, Political Science and Languages (West Virginia)(active abroad)

College of Naturatrics (Missouri)

College of Universal Truth (Chicago, Illinois)

Columbia School

Columbia Pacific University (California)

Commonwealth School of Law (Washington, DC)

Commonwealth University (Los Angeles, California)

Cramwell Institute and Cramwell Research Institute (Adams, Massachusetts)

Delaware Law School

Divine Science Church and College (Denver, Colorado)

East Coast University (Dade City, Florida)

Emerson University (Los Angeles, California)

Fairfax University, New Orleans, Louisiana (see also: Solihull, West Midlands)

Faith Bible College and Faith Bible Seminary (Fort Lauderdale, Florida)

Felix Adler Memorial University (Charlotte, North Carolina)

Florida State Christian College (Fort Lauderdale, Florida)

Forest Park University (Chicago, Illinois)

Four States Cooperative University (Jefferson, Texas)

Franklin University (Philadelphia)

Geneva Theological College of Wisconsin (suspect)

German American Dental College (Chicago, Illinois)

Golden State University (Denver and Hollywood)

Great Seal of the State of California

Hamilton State University (Chicago)(same address for International Knights of Good-will and

Harmony College)

Harmony College of Applied Science (Los Altos, California - also Chicago)

Hollywood College (Chiropractory)(suspect)

Independence University (Missouri)

Institute of Hypnotherapy

Institute of Metaphysics (Birmingham, Alabama)

International Corporation of Engineers (Delaware)(active abroad)

International Knights of Goodwill (Education Services, Chicago)

International University of Delaware (active abroad)

Iona College (Michigan)(suspect)

Kensington University (suspect)(California) (see also: Great Britain)

Kondora Theosophical Seminary (Chicago, Illinois)

La Salle University (Chicago, Illinois)

Lincoln Jefferson University

McKinley-Roosevelt College of Arts and Sciences or College of Engineering or Foundation or

Graduate College or Graduate School of Arts and Sciences or Incorporated or University

(Chicago, Illinois)

Metropolitan University (Glendale and Los Angeles, California)

Mid-Western Graduate Bible School (suspect)

Mid-Western University, Inc (Arcadia, Missouri)

Miller University (Philadelphia)

Milton University (Maryland)(active abroad)

Mount Sinai University and Theological Seminary

National Bible College (Wichita, Kansas)(active abroad)

National Christian University

National College of Audiometry (Chicago, Illinois)

National Eclectic Institute (New York)(branches in Denmark, Germany and Spain)

National Stevens University (California)(active abroad)

National University and National Research Institute (Denver, Colorado)(active abroad)

National University of Colorado (active abroad)

National University of Dakota (branches in London and Berlin)

Neotarian College of Philosophy of the Neotarian Fellowship (Kansas City, Kansas and New York)

Ohio Christian College (Colombus, Ohio)

Oriental University (Washington DC)

Pacific Southern University, (Los Angeles)

Pacific Western University, (Honolulu and California)

People's National University

Pioneer Theological Seminary (Rockford, Illinois)

Rhode Island School of Law, Inc (Wyoming)

School of Applied Sciences of Great Britain (New York)

Somerset University, (New Orleans, Louisiana)

St Matthew University (Colombus, Ohio)

St John's University (Louisiana)

Sunshine University School of Fine Arts, Crafts and Related Symposiums of Pinellas County (Florida)

Temple Bar College (Missoula, Mountana)(active abroad)

Texas Theological University (Fort Worth, Texas)

The Church of Light (Los Angeles, California)

Trinity College (Delaware)

United States University of America (Washington DC)

Universal Life Church, Inc (Modessto, California and Phoenix, Arizona)(branches in Belgium and Germany)

University Extension Conservatory (Chicago, Illinois)

University of California (Western)

University of Eastern Florida

University of San António (Texas)

University of the New World (Phoenix, Arizona - also branches in Austria, California, Florida,

Germany, Hawaii, Italy, New Mexico, Norway, Switzerland)

University of Western California

Washington International Academy (New York)

Washington National University (Chicago, Illinois)

Webster University (Atlanta, Georgia)

Western University (Delaware)(suspect)

Western University (San Diego, California)(active abroad)

Western University of Colorado (suspect)

Williams College (New Mexico)

World Open University (California)(suspect)

World University Development Programme (California)(suspect)

Appendix 24 – Promotional email issued by DiplomaSEE

----Original Message----

From: DiplomaSEE [mailto:rhoffman@diplomasee.com]

Sent: Sunday, December 18, 2005 8:10 AM

To: xxxx@xxxxxxxxxx

Subject: A database to identify fraudulent colleges/universities and guard against terrorism

I am the president of a company called DiplomaSEE(tm) (www.diplomasee.com). We have developed a database that identifies fraudulent colleges/universities. This database would greatly enhance your current systems.

Fake colleges (a.k.a. Diploma Mills) are a \$500 Million/year fraud that is costing companies large amounts of time, money, and resources. Experts say that 10-30% of résumés received have outright lies with Education ranking as number 1*.

Terrorists also use these fake degrees to gain entry into the US and Canada (2 of the 9/11 terrorists used them to obtain US student visas while 5 of 20 terrorists apprehended in 2003 used them to extend their stay in Canada).

There are literally thousands of phony universities (commonly known as 'Diploma Mills') throughout the world selling fake Bachelors, Masters, and even Doctorate degrees with no educational requirements or prerequisites. They produce genuine looking diplomas, transcripts and recommendation letters. They also offer fraudulent verification services and accreditation claims geared toward fooling potential employers.

I have developed a database that is superior to anything else currently being offered. It contains legitimate and illegitimate institutions from the around the world, integrated into a standalone database of flat files.

In addition, all of the US addresses have been 'scrubbed' to postal standards to optimize the match rate.

DiplomaSEE is the only company that offers an automated way to verify the institutions that issue the degrees. We also offer it at an extremely affordable price.

The DiplomaSEE database is unique:

Comprised of flat files, it is designed to be installed and hosted at your site for added security, cost effectiveness, and adaptability. It allows fully customizable screening, messages, alerts, and reports. The database technical guide contains suggested match logic, scoring methodology, and sample implementations. Best of all, since it's an automated process, the cost is minimal. The following is an overview of the database contents:

- Dubious Institutions A list of known global diploma mills and other institutions that are deemed 'of suspect'. Currently, the list contains over 1,000 entries
- Valid accredited US institutions Educational institutions that have legitimate (CHEA and/or DoED recognized) accreditation
- Valid Non-accredited US institutions While few in number, these are legitimate institutions that are mostly in the process of obtaining accreditation
- Valid Global Institutions** Valid institutions around the world
 - 1. Over 4000 in India
 - 2. Over 1000 in Great Britain
 - 3. Over 800 in Canada
 - Currently working on Russia and Japan (can rearrange schedule to suit your needs)
- Closed Colleges Once valid Institutions that have closed, merged, or changed their name. They are prime targets for so called 'replacement diploma' schemes
- Conversion tables for sate, country, and Accreditation codes keeps the database size to a minimum and allows for easier customization

**Note: international coverage is a key in using the database to help identify terrorists using fake degrees to obtain student visas (two of the 9/11 hijackers had them, as well as seven of the twenty eight terrorists rounded up in Canada in 2003). No other US database contains as many valid global institutions as DiplomaSEE

The database is designed to be used in large scale sites, as well as company HR and 3rd party vendor websites.

It can be used to check new applicants, existing employees, and tuition reimbursement programs. It can also be used to help identify terrorists using fake degrees to enter the country.

It will save companies, the time, resources, and expense of interviewing (much less hiring and training) unqualified candidates. It will provide a selection of applicants that more accurately reflects companies job requirements. It will also save the embarrassment, bad press, and liability associated with having employees with fake degrees publicly exposed. It will also address certain terrorism concerns.

Please contact me so we may set up a time to discuss this further.

You may visit www.diplomasee.com to learn more about the company and the database.

Thank You.

Robert Hoffman

Robert Hoffman President, DiplomaSEE Tel: (732) 319-1246

E-mail:rhoffman@diplomasee.com

Web: www.diplomasee.com

NOTICE:

The information contained in this electronic mail transmission is intended by Diploma-SEE, LLC, or one of its subsidiaries or affiliated companies for the use of the named individual or entity to which it is addressed and may contain information that is privileged or otherwise confidential. It is not intended for transmission to, or receipt by, any individual or entity other than the named addressee (or a person authorized to deliver it to the named addressee) except as otherwise expressly permitted in this electronic mail transmission. If you have received this electronic transmission in error, please delete it without copying or forwarding it, and notify the sender of the error by reply email.

^{*}Source - Workplace Resource Learning Center

Appendix 25 – CHEA advice for combating degree mills – recommended effective practice

COUNCIL FOR HIGHER EDUCATION ACCREDITATION COMBATING SITE-BASED AND DISTANCE-BASED DEGREE MILLS SUGGESTIONS FOR EFFECTIVE PRACTICE

February 2007

The following steps can be effective in combating site-based and distance-based degree mills or questionable providers of higher education. Various actors - government, higher education, accreditation, employers, advertisers all have a stake in avoiding degree mills and their deleterious impact on students and society.

Step 1. Know What Degree Mills Are: Create Tools for Identification

- Identify key characteristics and common practices of mills
- 2. Develop and apply definitions of degree mills

Step 2. Stop the Funding for Degree Mills: Deny Government or Private Sector Financial Support

- 1. Assure that degree mills do not receive public (taxpayer) funds
- Assure that students attending mills do not receive publicly-funded student aid
- 3. Assure that students attending mills do not receive employer-funded tuition assistance

Step 3. Inform the Public about Degree Mills: Educate for Awareness

- 1. Routinely inform the public about how degree mills harm students and society
- Assure that advertising of higher education is confined to legitimate providers and not degree mills
- Identify and publicize questionable marketing and recruitment practices associated with degree mills
- Educate the public about the role of the Internet in making distance-based degree mills readily available

Step 4. Pursue Legal Action Against Degree Mills

- 1. Encourage and assist with the development of federal, state or local law that make establishing, licensing and operating degree mills illegal
- Work to make the use of fraudulent degrees (e.g., for obtaining or upgrading employment) illegal
- 3. Encourage prosecution of degree mill providers and knowing users of fraudulent credentials where appropriate

Step 5. Use Evidence of Quality Provided by Recognized Accreditation and Quality Assurance Bodies

- 1. Confirm that higher education providers are in good standing with recognized accreditation and quality
- 2. Use accreditation and quality assurance lists to identify reliable higher education institutions and programs

Step 6. Address Degree Mills Internationally: Contain the Expansion

- 1. Establish cross-border agreements among countries that discourage the import and export of site-based and distance-based degree mills
- 2. Work with multinational and regional organizations to enhance awareness of degree mills and provide tools to identify and discourage their use
- Develop reliable country-based lists of legitimate higher education providers
 Develop an international list of degree mill characteristics, practices and providers





Appendix 26 – Oregon Employer's Guide to College Degrees

Employer's Guide to College Degrees

2006

Page 1

NOTE:

This appendix is included on pages 452-458 of the print copy of the thesis held in the University of Adelaide Library.

Appendix 27 – List of 'Wannabe Universities' and 'CV Time bombs' published by The Australian Newspaper

Listing current as at 16th September 2002

Universities to watch out for: The A-Z lists

An extensive guide to active, emerging and recent degree mills and officially unaccredited universities, compiled from original research by the Higher Education Supplement.

Degree Mills

These "universities" offer to "confer" degrees based on life experience, with prices ranging from \$300 to about \$10,000.

Adam Smith

Addison State

Albert

Alexandria (US)

Almeda

Al Qasim

All Saints American

Americana

American Capital

American Columbus

American College of Metaphysical Theology

American Coastline

American International Independent

American International University of Management and Technology

American National

American Open

American State

American World

Anglo American

Aquinas University of Scholastic Philosophy Ashington

Athens Clarke

Atlantic International

Atlantic Northeastern

Atlanta Southern

Barrington

Benson

Bernadean

Bienville

Bircham International

Bradford University

Brantridge

Blackstone

Bretton Woods

Brentwick

Breyer State

Brighton (US)

Buktronix

Cambridge State

Capital American

Capitol

Chadwick

Chancery International

Columbia Pacific

Columbia State

Columbus

Concordia College & University

Cranston

Crown Church College & University

Darton

Devonshire University

Dorcas

Earlscroft

East Point

Edison University

European University of Ireland

Florida Atlantic Southeastern

Friends International Christian

Glencullen

Global Virtual

Golden State

Hamilton

Hampton Bay

Harrington

Hartland

Hawaii American

Hawthorne

Horizons

International Bible

International University of Fundamental Studies

InTech

IOND University

Kennedy-Western

Kensington

Knightsbridge

Lasalle

Laureate

Lexington

London University Colleges

Louisiana Capital

Madison

Marlborough

Meridian

Monticello

Nasson

Nation State

National Graduate

New Horizons

New Manhattan

Nobel

Nonprofit Management

North United

Northern New England

Northern Washington

Northwest Florida

Northwestern Californian

Northwestern International

Orienta

Orion

Oxford International

Pacific Southern

Palmers Green

Pickering

Port Rhode

Ravenhurst

St Lourdes

Saint Regis

Saint Renoir

San Moritz

Shelbourne

South Atlantic

South Pacific

Southern Californian Polytechnic

Southwest International

Stanley State

Stanton

Stefan International

Summit

Tecana International

Templeton

Thornewood

Trident University of Technology

Trinity College and University

Trinity International University College

University of America

University of NorthWest

United Pacific

Universal Life

University of Devonshire

University of Ecoforum for Peace

University of Global Research Studies

University of Health Science (Hawaii)

University of Honololu USA

University of Metaphysics

University of Newlands

University for Professional Studies

University of Santa Barbara

University of Sussex at Brantridge

University of the United States

Vancouver University Worldwide

Van Ives

Vernell

Wakefield International

Washington International

William Bradford

Wilson State

Wittfield

West American

Western Washington State

Wexford

Zenith

The following "non-traditional" degree institutions may offer instruction and mentoring, but lack official courses. course recognition. Some credit may be given for work experience. It is not implied possession of a non-traditional degree will necessarily lack advantages.

Abraham Lincoln University

American Global University

American University of Hawaii

American University of London

American Pacific University

Asia Pacific International University

Branden University

Calamus International University

California Coast University

California Pacific University

Central School of Religion (London and Indiana)

Central Pacific University

Century University

Chadwick University

Christian Leadership University

City University Los Angeles

College of Technology London

Colorado University of Naturopathic Medicine

Columbia Commonwealth University

Commonwealth Open University

Cornerstone University

Evangel Christian University of America

Fairfax University

Frederick Taylor University

Greenleaf University

Greenwich University (Norfolk Island)

Hampton College

Heed University

Holos University

Honolulu University

Illawarra College

Intercultural Open University

International University of Professional Studies

Irish International University

Lacrosse University

Lincoln International University

Newport University

Pacific International University

Pacific Western University

Preston University

Robert Kennedy University

Rushmore University

St Clements University

St George University International

St John's University College of Medicine

St Mary's College of Medicine

Senior University International

Southern California University for Professional Studies

Southern Pacific University

Southwest University

Stratford College London

Transworld University Tyndale College

University of Advanced Research

University of Santa Monica

Warnborough University*

Westbrook University

Wisconsin International University

YUIN University

Zion University

Some names in both lists may be similar to those of fully accredited universities. Names do not necessarily indicate locations. The lists are not exhaustive.

^{*}Some courses include onsite instruction.

Appendix 28 – Fake degrees brochure published by the **New South Wales Department of Education**



DEGREE

NSW UNIVERSITIES

Contact the Registrar or Student Records Officer:

Australian Catholic University 61 2 9701 4022

Macquarie University

Southern Cross University 61 2 6620 3213 University of New England 61 2 6773 2394

University of New South Wales 61 2 9385 3103

University of Newcastle

University of Technology, Sydney 61 2 9514 1222

University of Western Sydney 61 2 4570 1476

universities to cover the cost of verifying There may be a modest charge by academic transcripts.

outlined in this pamphlet will help stamp

out the use of fake degrees

by applicants for professional, business ensuring that the qualifications claimed

and public service roles are genuine.

Following the simple procedures

Our community has a clear interest in

ABOUTUS/HIGHEREDU/

Charles Sturt University

University of Sydney 61 2 9351 4109 University of Wollongong 61 2 4221 3927

statement giving you permission to To verify academic transcripts, ask contact the relevant university, to the person concerned to sign a completed the courses listed. confirm that he or she has m

information about written verification Contact the relevant university for of academic transcripts.



UNIVERSITIES, INCLUDING DEGREES PURPORTEDLY UNIVERSITIES IN NEW ACADEMIC TRANSCRIPTS COMPLETED, AUSTRALIA SOUTH WALES, WERE ONLINE FROM MORE THAN 40 DIFFERENT READILY AVAILABLE THERE IS A GROWING A STUDY LAST YEAR FOUND THAT FAKE UNIVERSITY DEGREE SHOWING COURSES TRADE WORLDWIDE IS NOT IMMUNE -FROM REPUTABLE CERTIFICATES AND IN COUNTERFEIT SOURCES.

sophisticated desktop publishing becoming all too easy to make indistinguishable from the real and market authentic looking The growth of the worldwide dentification number and documents. These can be thing - right down to the techniques mean that it is university crest, student web and increasingly signatures.

documents are obvious. In some position of trust or responsibility, For employers and professional or professional accreditation. qualifications gains a job. a situations, it could mean that bodies, the dangers of false someone without proper

and international reputations. For people caught manufacturing or using fake degrees, the penalty damage to their strong national universities, the cost is potential could be a prison senience if prosecuted under the NSW For New South Wales Crimes Act 1900.



WHAT YOU CAN DO

lime and effort spent checking at protect your investment in your If you are an employer, a little an early stage will help to business.

have a responsibility to verify the

registration or licensing body, or a person who selects staff, you

If you are a professional

authenticity of any qualifications

presented to you. You can protect yourself and your

organisation from unnecessary

risk or damage by following

concerned - most universities will confirm over the phone and some list graduates on graduate of their institution whether an individual is a website of the university Telephone or check the their website.

Appendix 29 – Additional information on the Kroll MIE degree verification system (South Africa)





THE NORTH IN CONTEXT

The NQR™ Philosophy

The National Qualifications Register (NQR**) is an electronic register, resident on a computerized database. It has been branded as a product by Kroll MIE, which derives its income from commercial trade in personal credential verification information. The NQR** consists of simple register entries linking individuals to their qualifications, and indicating the institution and year of graduation.

The NQR™ was created as a direct result of a highly competitive job market, spiraling unemployment, and a booming market in fraudulent qualifications coupled with a determined drive by business, industry and government to counter corruption in favor of high business ethics. Traditional verification methods are struggling to cope with market demand. Kroll MIE currently performs qualification verifications for its clients via several institutions, including yours, either telephonically or by fax request. This is a time consuming exercise, often resulting in a competing candidate being placed first, purely because qualifications were verified faster. Typically Kroll MIE verifies the qualifications of more than one candidate for a particular position at the same time, and turnaround time to the applying client is dependant entirely on the speed of reply of the institution queried.

The implication of the NQR™ is purely that verification can take place immediately by Kroll MIE. The NQR™ does not compete with either legislated organizations and their products (e.g. SAQA and the NQF), or educational institutions themselves, who are free to provide their own verification service, if they so wish.

NQR™ and the Government

Kroll MIE is an active consultant for the current drive to verify the qualifications of the Government and its Civil Service.

In this regard, Kroll MIE has already performed several qualifications verification projects for the Government.

To date, Kroll MIE has completed, or is busy with, qualification verification projects for the following Government Departments:

- The Office of the Public Service Commission
- The Department of Social Services and Population Development
- The Department of Education and Culture: KwaZulu/Natal
- The Department of Agriculture
- The SANDF: Chief Military Legal Services
- Office of the Auditor General
- The Department of the National Treasury
- The Department of Correctional Services
- South African Revenue Services

As the NQRTM grows in stature, so do its credentials to perform this demanding task, and wider interaction with the government is a foregone conclusion.

The NQR™ and Business & Industry

Kroll MIE has provided this very service, albeit not on a proactive basis, to its more than 600 dients since 1988. It has developed an enviable reputation as a qualification verification agent to the business community, and is rapidly expanding its client base.

Page 3 of 9 Copyright © 2005 Kroll MIE (Pty) Limited





How the NOR™ Works

In brief, subscribing educational institutions provide the NQR™ with all qualifications obtained by students of the institution in an electronic format. By definition, records that are not electronically bound will not reside on the NQR™. All qualification records are supplied on an ongoing basis, typically after graduation ceremonies.

This provision process is easily implemented with the minimum IT intervention. In many cases, the procedural requirements of the NQR'^m are already defined, for example institutions making use of standard systems such as those provided by Integrated Tertiary Systems. It is easy to subscribe to the NQR'^m.

Whenever Kroll MIE verifies the qualification of an individual for a client, the supplying institution is paid a transaction fee. Transaction fees are negotiated contractually, and are payable at the end of a month. The difference between the NQR[™] and the current method of work is that in the case of the NQR[™], the institution and Kroll MIE has pro-actively verified the qualification, and client feedback is immediate.

What the NQR™ costs

The NQRTM was always intended to be a commercially viable product, not only for its owners, but also for its suppliers.

At the outset it should be noted that by subscribing to and regularly supporting the NQRTM strategy, and except for the cost of generating formatted output files for Kroll MIE, the supplier never incurs any costs whatsoever. Kroll MIE agrees to pay the supplier for the ongoing supply of educational qualifications. Note that this payment is based purely on transactional output as described in this section.

The NQRTM will generate income for your institution in the short to medium term via its transaction based payment method.

Who the NQR™ belongs to

The NQR™ as a product is owned and operated by Kroll MIE. However, the content of the NQR™, i.e. individual qualification records, is owned by supplying institutions. Kroll MIE derives its income by supplying verification information (not qualification information) in a structured format, while NQR™ suppliers derive their income by supplying the information to be verified.

The Content of the NQR™

Another contentious issue, the invasion of the privacy of students must be absolutely avoided at all costs, both for ethical as well as legal propriety.

The NQRTM is purely there for the verification of individual qualifications. Kroll MIE is not a soliciting agent of any kind, and has no need to track personal and contact information of individuals for any purpose. An individual qualification entry consists only of the following information:

- Institution where the qualification was obtained
- The qualification obtained
- The year in which the qualification was obtained
- The Student Number of the student
- The names, surnames and Maiden Names of the student
- The ID numbers and Date of Birth of the student

This information resides on a highly controlled, central database server, and is used by Kroll MIE as a verification engine on behalf of both its clients and its suppliers. Access to the information is strictly controlled via several security and audit mechanisms.

Page 4 of 9 Copyright © 2005 Kroll MIE (Pty) Limited





BENEFITS OF THE NQR™

Register Managers (Kroll MIE)

One of the biggest drawbacks of the current process flow is the time taken to verify a qualification and the accuracy of verification. The consequences of time delays and errors are far-reaching, affecting the employment logistics chain and sometimes resulting in costly redundancy and re-employment.

This reflects poorly on Kroll MIE, the employment agent, employee and employer and in the final analysis on the qualifying institution.

Register Suppliers

The advantages to the users of the register (both client and supplier allike) are obvious. Access to a national register of verified and audited qualifications cuts costs, increases accuracy, speeds up the employment process and generally improves the marketability of qualified individuals.

There is absolutely no doubt that the NQR™ will be of tremendous benefit to the suppliers of qualification information in particular, including your institution. These benefits cover the entire spectrum of your processes and services, at no cost to your institution and without disrupting institutional operations in any way.

- A greatly reduced workload on both academic and administrative staff.
- The opportunity to derive income from a transaction based resource. The opportunities here are endless.
- Fast access to your institution's qualification statistics.
- Fast access to a national register for your own verification purposes.
- A reduced occurrence of fraudulent misrepresentation of your institution in the national market place.
- The NQRTM can be loosely equated with a qualification verification bureau, serving a selected subscriber base, and becoming the de facto verification engine for all employers and institutions.
- Business, industry, government and para-statal organizations have access to an accurate, reliable and instantaneous information and verification service regarding supplier graduates and applicants. Besides becoming known as an institution that can protect its image and professionalism, this service level ensures a vastly increased verification transaction volume, which has a direct affect on the financial relationship between the supplier and Kroll MIE.
- On this note, the supplier has access to immediately available, recurring funds, which can be diverted to deserving projects, due to transaction based income.

Individuals

The NQR™ ensures that each qualification obtained by an individual is formally recorded at a national level, and the information made available only when it is to the benefit of the individual.

As mentioned, the honest applicant who is registered on the NQR $^{\rm m}$ has a distinct advantage in the market place.

By far the most important consideration is that of the student concerned. Bear in mind that the entire thrust of this initiative is toward providing potential employers with as much accurate information about their candidates as fast as possible. The current job market is a tenuous place, with shortened placement cycles and harder rules. The first qualifying candidate generally gets the job. Candidates fall out of contention on a daily basis simply because their credentials could not be verified fast enough. Obviously, candidates who can have their credentials verified quickly, stand a

Page 5 of 9 Copyright © 2005 Kroll MIE (Pty) Limited



8



better chance of choice employment, and the institution involved has that much more credibility.

The flipside of this argument unfortunately occurs fairly frequently. Employers who are pressed for the skills presented by a candidate, and who cannot wait for any extended length of time for verification results, do employ fraudsters. Roughly 19% of all qualification claims by candidates are fraudulent. There is not much the institution can do about this fraud, except act after the fact. Subscription to the NQR** provides institutions with the details of individuals who fraudulently misrepresented their institutions. It also goes a long way to preventing fraudsters from entering the job market with false representations.

Page 6 of 9 Copyright © 2005 Kroll MIE (Pty) Limited

Appendix 30 – Policy documents pertaining to the verification of academic qualifications issued by Macquarie University and the University of Wollongong

MACQUARIE INTERNATIONAL FRAUDULENT DOCUMENTS POLICY (extract)

1. PURPOSE

This Policy covers the office of Macquarie International (MI), an organisation operating under the Vice-Chancellor's Office at Macquarie University. This documents outlines the policy and procedures to be followed by staff within MI to identify and verify the authenticity of documents, including any actions that should be taken in the event that a fraudulent document is detected.

The Policy and Procedures cover all areas of Macquarie International which deal with application and admissions management, with document control and with students, viz. Marketing and Recruitment (including interstate and off-shore offices), Macquarie Abroad, Transnational Programs, International Student Services and the Business Services Unit.

This Policy is concerned with fraudulent activity perpetrated against the university by persons external to the university, in relation to the admission, enrolment and tuition of international students. The types of fraud covered by this policy include fraud relating to academic performance and the payment of fees and identity fraud The obligations of staff in relation to the conduct of business in an ethical manner are covered elsewhere in university policy. The definition of fraud used by the university is contained in

the following statement from the Australian Standard on Fraud and Corruption Control which defines fraud as: "Dishonest activity causing actual or potential loss to any person or entity including theft of moneys or other property by employees or persons external to the entity and whether or not deception is used at the time, immediately before or immediately following the activity. This also includes the deliberate falsification, concealment, destruction or use of falsified documentation used or intended for use for a normal business purpose or the improper use of information or position."²

2. POLICY STATEMENT

Macquarie International bases its policy on NSW Crimes Act 1900. In accordance with provisions of the legislation, it is a criminal offence to knowingly produce or present false or misleading documents, to knowingly certify false or misleading documents as genuine or to omit information where the omission materially affects the outcome. Macquarie International has put procedures in place to prevent and detect fraud and to minimise the harm fraudulent activity does to the university. These procedures include:

- 1. advising agents, applicants and enrolled students of the requirements of the legislation
- 2. properly training staff in identifying false and misleading documents
- 3. managing and training representative agents in proper procedures
- 4. identifying false or misleading documentation
- 5. reporting any discoveries of false and misleading documentation to the relevant authorities and industry bodies

In addition, the university treats such matters as cases of serious misconduct and deals with cases involving applicants or enrolled students under its misconduct provisions.

Explanation of Terms used

DEST Department of Education, Science and Training

DIMIA Department of Immigration, Multicultural and Indigenous Affairs

ESOS Education services for Overseas Students

FOI Freedom of Information

ICAC Independent Commission Against Corruption

ISS International Student Services

M&R Marketing and Recruitment

MI Macquarie International

TNE Transnational Education

TTP The Talking Parrot Fraudulent Documents Database

3. PROCEDURES

The procedures deal with important issues with regard to application processing, procedures for spot checking of specific cohorts, agent relationship management, agent agreements, and reporting fraudulent documents once detected.

3.1. APPLICATION PROCESSING

The core business of MI is the recruitment of qualified international students in an efficient and effective manner. This business is conducted in an environment that must maintain full confidence in the documents being assessed and verified for admissions purposes. The following procedures are implemented in all admissions to the university.

3.1.1 Procedures For Verification Of Documents Presented In Support Of Applications For Admission To The University.

1. Applications In Hard Copy

a) Applications submitted by authorised representatives (agents) of the university.

- a) As part of their agency agreement with Macquarie International, representatives have an obligation to check the authenticity of all documents submitted.
- b) Admissions staff must only accept documents in support of an application for admission that are either originals or copies properly certified, either by the issuing institution or by a principal agent of the university authorised to do so.
- c) Faxed, photocopied or electronically transmitted documents are only acceptable from agents who have been authorised to submit documents in this format and where the original document has been verified by the agent or a person authorised to do so.
- d) If an agent is not authorised to submit copies by electronic means, they must ensure they submit the original or a copy that has been certified by the issuing institution in the case of an academic transcript or by an independent person authorised to certify documents. (see Appendix A)

b) Applications submitted to the university directly by an applicant

- a) Admissions staff must only accept original documents or copies properly certified as originals by the issuing institution.
- b) Faxed, photocopied or electronically transmitted documents are not acceptable.
- c) Admissions staff are required to check the authenticity of documents either through on-line sources, or by contacting the institution involved.
- d) Applications from high risk countries (Level 3 and 4 visa levels) must be verified either through online resources or at source.

2. Electronic Applications

Applications submitted through the on-line admissions management system, eMU, will be accepted at face value up to the point of an offer being issued with the condition that original documents will be supplied prior to or at the point of acceptance. A full offer will not be issued until hard copy documents are provided and authenticated in line with the procedures detailed above.

3.1.2. Verification of English Language Results

1. IELTS score verification

- a) Original documents are the preferred option. The IELTS documents contain internal verification items which staff have been trained to recognise.
- b) An additional check should be made through access to an on-line verification system provided by the IELTS administration.
- c) All photocopied, faxed, or electronically transmitted result sheets must be routinely checked through the IELTS on-line verification system.

2. TOEFL score verification

TOEFL test results must be originals or forwarded directly from the Princeton University TOEFL administration centre. There is no on-line checking service for TOEFL.

3.2 ENROLMENT CHECKING

All new students of Macquarie University are required to enrol in person on campus, and/or be present on campus to receive a Student Identity Card. An identity check of international students is taken just prior to the students receiving their official enrolment form. Students are required to present their passport together with copies of the personal details and visa pages in order to collect the enrolment form. These are checked against the admission record and the copies collected. Copies of the photo, visa and personal details from the passport are held in the hard file for each student and on an electronic database as a result of this process.

3.3. PROCEDURE FOR SPOT CHECKING OF SPECIFIC COHORTS

In addition to the routine checking required at admission and enrolment, Macquarie International has implemented a procedure to conduct spot checking of specific cohorts of international students based on identified risk profiles, such as Country, Study Level and Course (e.g. Hong Kong, UG, BBA) or Citizenship and Pathway Provider (e.g students from PRC applying to transfer from Diploma to Degree).

These checks are based on trends or significant increases in fraud detected from particular sources or from high risk categories. Data on trends is collected by MI's Fraudulent Documents Database.

3.4. PROCEDURE FOR REPORTING FRAUDULENT DOCUMENTS ONCE DETECTED

There is an agreed procedure to be followed by MI staff in the event that a fraudulent document is detected and verified. This is outlined below:

MACQUARIE INTERNATIONAL FRAUDULENT DOCUMENTS POLICY

- a) The fraudulent document is identified by MI staff involved in international admissions (eg, Marketing & Recruitment, Macquarie Abroad, Transnational Education or Service Centre)
- b) The fraudulent document is confirmed with Manager Admissions Systems
- c) The fraudulent document is verified as such against the source institution
- d) The fraudulent document, including type and specific details of fraud, are entered into MI's Fraudulent Documents Database (also known as The Talking Parrot)
- e) The fraudulent document is notified to Deputy Director at MI
- f) Action to be taken in regard to the applicant and agent (if applicable) is decided by the Executive Director and Deputy Director. Applicants and/or students and agents are routinely notified if a fraudulent document relating to their admission or enrolment is detected
- g) A memo and copy of the fraudulent document is notified in writing to the Director Financial Services, the designated Fraud Officer at Macquarie University
- h) The fraudulent document is notified in writing to The Commissioner at ICAC, the Manager, Integrity Unit at DIMIA Compliance and to the NSW Police
- i) Feedback is received from the University's designated Fraud Officer
- j) Details of feedback, and action points, are entered into The Talking Parrot (TTP)
- k) Deputy Director will notify the industry sector through the relevant forums.

3.5. ACTIONS TO BE TAKEN IN REGARD TO THE APPLICANT AND/OR AGENT

- a) The applicant and agent (if applicable) will be notified that a fraud has been detected and that the relevant authorities have been notified
- b) Any offer made will be withdrawn
- c) The agent will not be paid any commission
- d) The question of refund of fees to the student will be decided on a case by case basis.

4. STAFF TRAINING AND PROFESSIONAL DEVELOPMENT

MI has a responsibility and is committed to providing access to ongoing training programs to educate staff regarding identification of fraudulent documents.

As part of their induction and on-going professional development, all MI staff dealing with student documentation are made aware of the requirements for checking the authenticity of the information they handle. These staff are given the necessary information and training to equip them for this task.

All staff involved in any case of fraudulent documentation will be provided with feedback on the outcome of the case and appropriate follow-up training.

5. QUALITY ASSURANCE

Quality assurance of the admissions and enrolment process is assured through the audit process. Macquarie International has identified fraud as a business threat and, as such, all procedures detailed in this policy may be the subject of regular audit.

Audits may be conducted by AUQA, ISO or IQRP as part of their regular cycles.

In addition, internal audits are undertaken within MI on an annual basis and these procedures will be subject to that process as determined.

MACQUARIE INTERNATIONAL FRAUDULENT DOCUMENTS POLICY

6. POLICY DEVELOPMENT

Feedback from case studies, staff information, from agencies such as DIMIA and ICAC and from the audit process informs policy development. This policy will be regularly reviewed and updated by the Compliance Committee of Macquarie International.

All staff in Macquarie International and other relevant parties will be notified if the policy changes.

7. AGENT MANAGEMENT

7.1. Agent Agreement

All education agents who work with Macquarie International sign an agent agreement which outlines the obligations and responsibilities of those agents in their dealings with students and the university.

7.2. Agent Relationship Management

Macquarie International routinely informs its agents of the procedures to be followed in relation to the acceptance and submission of documentation, the provisions of the relevant legislation and their responsibilities in this matter. The agent agreement includes a clause specifying their obligations under the law and in their relationships with the university. In addition, the following will apply to the submission of documents by agents:

- 6. Creating or knowingly submitting fraudulent or misleading documentation is a criminal offence and any such actions will be reported to the police, to DIMIA and to ICAC.
- 7. Under the terms of their agency agreement, agents have a requirement to check the bona fides of documents with the issuing institution prior to the application being submitted
- 8. If documents submitted under these conditions are subsequently found by MI or the university to be fraudulent, the agency will be reviewed. Depending on the outcome of this review more stringent requirements may be applied to that agency or the agency agreement may be terminated.
- 9. Only agents with written authorisation from Macquarie International will be permitted to certify copies of documents or to submit certified documents

electronically.

- 10. If an application is found to contain fraudulent or misleading documentation, an offer of admission will not be made or any made offer will be withdrawn. The case will be referred to the relevant authorities.
- 11. Students who have enrolled on the basis of fraudulent or misleading documentation will be treated under the university's misconduct procedures and are liable to have their enrolment cancelled if the matter is proven.
- 12. Agents may be subject to performance reviews and audits of their processes.

8. PARTNER RELATIONSHIP MANAGEMENT

This policy acknowledges that under the ESOS Act, the primary responsibility for the actions of partners rests with Macquarie University when a Macquarie University award is involved. The procedures apply to those areas of operations where a partner organisation is involved in a formal contractual relationship with Macquarie University to offer a Macquarie University MACQUARIE INTERNATIONAL FRAUDULENT DOCUMENTS POLICY degree, either in part or in full, whether on or off shore. Where the partner also acts as a recruitment agent, the provisions applying to agents must also be followed.

The policy does not apply to other types of formal arrangements such as student and staff exchange programs or double degree arrangements where each partner is responsible for their own programs.

The following conditions apply:

- 1. Partners should implement procedures for the checking and authentication of documents and for reporting any fraud detected following the procedures laid down in this policy, with the additional provision that any partner detecting an instance of fraud should notify the relevant section of MI.
- 2. Partners may be asked to demonstrate that they have fully implemented these procedures.
- 3. Partners may be the subject of audit procedures
- 4. The conditions above should be incorporated into any formal agreement or contract.

9. CONFIDENTIALITY AND PRIVACY

Documentation provided by international applicants is considered by staff of Macquarie International (MI) during performance of admissions duties. When MI needs to collect or disclose information about international applicants, the following conditions apply:

- MI has specific obligations under the Privacy Act (1988), Freedom of Information Act (1982), and ESOS Act (2000)
- MI only collects information about international applicants in the routine assessment of admissions documents
- MI keeps personal information in a secure format
- MI gives international applicants access to their information, unless prohibited by law
- MI only discloses information about international applicants to others when permitted by law, or if permission is granted by the international applicant

10. DECLARATION ON THE APPLICATION FORM.

In accord with the provisions of this policy, a declaration is included on the application form. By signing the application form, applicants agree to the provisions therein. A copy of the Declaration is attached at Appendix C.

11. MACQUARIE INTERNATIONAL FRAUD MANAGEMENT GROUP

Responsibility for ensuring that appropriate fraud control policy and procedures are developed and implemented rests with the Executive Director, International Programs. The Director will be assisted by a committee consisting of representatives from the relevant units in MI.

All matters relating to the identification, prevention and management of risk will be directed to this committee, known as the Compliance Committee of Macquarie International. The Committee works closely with the University's Fraud Prevention and Identification Officer.

APPENDIX A

Persons authorised to certify copies of documents

1. Off-shore

Officers of IDP, consular officials, officials of the issuing institutions, Macquarie International off-shore office staff, Macquarie International staff.

2. On-shore

Officers of IDP, authorised agents, officials of Australian universities.

APPENDIX B – ONLINE VERIFICATION SOURCES

Organisation Web address Uses

IELTS https://ielts.ucles.org.uk Check students IELTS results CHEA http://www.chea.org Check whether an institution is a

registered institution in the USA

CDGDC - China

Academic Degrees and

Graduate Education

Centre

http://www.cdgdc.edu.cn Provides a credentials report

service, including legality of

degrees issuers, information about

major's and subjects, degrees

conferred and authentication of

course scores on the transcript.

NARIC http://naric.org.uk Provides lists of registered

institutions per country. Provides

details of grading systems.

http://www.ban-pt.net/ Indonesian government website for

public institutions. In Indonesian

only and not always up to date.

Google http://google.com Useful for checking details about

institutions

APPENDIX C

DECLARATION ON THE APPLICATION FORM

I wish to be considered for enrolment as an international student in a course at Macquarie University and declare that the information submitted is correct and complete. I understand the University may obtain official records from any school, university or other tertiary institution previously attended by me for the purpose of verification of my supporting documents. I understand that the University reserves the right to vary or reverse any decision made on the basis of incorrect or incomplete information or fraudulent documentation.

I recognise that it is an offence to submit fraudulent or misleading documentation in support of an application for the purpose of gaining admission to the University. Where fraudulent documents are detected, I understand that my application will be rejected. If an offer has been made, it will be withdrawn. If a visa has been issued, it will be cancelled. All matters concerning fraudulent documentation will be reported to the relevant Government and statutory authorities (including NSW Police, DIMIA and ICAC).

I authorise the University to release any personal information held about me to any other educational institution or authority to verify my student conduct, academic record or supporting documentation for the purpose of determining my eligibility for admission to the University. I herewith give the University permission to provide my address and details of enrolment to the Department of Immigration, Multicultural and

Indigenous Affairs (DIMIA) and the Department of Education, Science & Training (DEST), should I enrol at Macquarie University.

I am able to make appropriate arrangements to fund my studies. I have read and understood the University's tuition fee refund policy and conditions.

Signature Date

APPENDIX D – RELATED LEGISLATION AND POLICIES ESOS ACT

Macquarie International is required by law through the Education Services for Overseas Students (ESOS) Act to provide quality education services for all international students undertaking academic courses at Macquarie University. Further information can also be obtained by viewing the following website:

ESOS Website: http://www.detya.gov.au/csos/default.htm

CRICOS

The ESOS Act requires providers of courses to international students to register their institution and the courses they offer with the Department of Education, Science and Training (DEST). All education providers and their agents/representatives must not promote a course to overseas students unless it is registered on CRICOS. Macquarie International has developed a register to record the CRICOS codes for all Macquarie University courses. An audit of Macquarie University courses on CRICOS is undertaken on a regular basis to ensure accuracy is maintained.

CRICOS Website: http://ericos.detya.gov.au/

ICAC ACT

The ICAC Act may be found on the ICAC website. Forgery and fraud are treated as corrupt conduct under the provisions of the Act. The site provides explanations of the purpose of then legislation and definitions of corrupt conduct.

ICAC Website: http://www.icac.nsw.gov.au

NSW CRIMES ACT

Pt 5, Division 3, Section 300

Under the provisions of the NSW Crimes Act 1900, it is an offence to knowingly produce or present false or misleading statements or documents.

Crimes Act Website:

http://www.austlii.edu.au/au/legis/nsw/consol_act/ca190082/

DIMIA

Refer to Migration Act at:

http://www.immi.gov.au/legislation/gazettals/gazettals03/031205_passport.pdf MACQUARIE INTERNATIONAL FRAUDULENT DOCUMENTS POLICY

APPENDIX E – OTHER SERVICES AND AGENCIES

AUQA

The Australian Universities Quality Agency (AUQA) identifies that Macquarie International is a quality organisation.

AUQA Website: http://www.auqa.edu.au/

AOF

The Australian Higher Education Quality Assurance Framework describes the role of the Commonwealth, Australian States and Territories, the AQF and AUQA in ensuring quality assurance in Australian Higher Education.

AQF Website: http://www.dest.gov.au/highered/quality/default.htm

QUALITY MANAGEMENT SYSTEM

In December 2003, Macquaric International was certified with AS/NZ ISO9001:2000 standards confirming that it is an organisation with an internationally recognised quality management system.

ISO9001:2000 website: http://www.iso.ch/iso/en/ISOOnline.frontpage

Include professional development and related staff training programs in Appendix. (NOOSR document training sessions held biennially)

SCHEDULE 1

SCHEDULE FOR SPOT CHECKING SPECIFIC COHORTS

The spot checking schedules detailed below will be undertaken in addition to the normal checking and vigilance performed throughout the admissions process.

1. FULL DEGREE

Schedule for spot checking cohorts to reflect appropriate risk areas. For example, Chinese applicants from Pathway Programs (i.e., Diploma-to-Degree) or Korean applicants from onshore English Language colleges.

STAGE Application: 10% (or no more than 20 applications) of selected cohort with risk area/s defined above.

Enrolment: 25% (or no more than 50 enrolments) of selected cohort with risk area/s defined above.

Post-enrolment: Progression monitoring for students identified as having failed more than 75% of their course during one period of enrolment. This process will include a check on the documentation of an identified group within this failing cohort.

2. STUDY ABROAD/INBOUND EXCHANGE

Schedule for spot checking cohorts to reflect appropriate risk areas. For example, applicants for *Double Degree courses* and applicants for *Study Abroad Direct courses*

STAGE Application and Offer: 50% each of selected cohorts with risk areas as identified above

Post-enrolment: Not applicable

3. TRANSNATIONAL EDUCATION

Schedule for spot checking cohorts to reflect appropriate risk areas. For example, applicants for *Bachelor Degrees offshore*..

STAGE Application and Offer: 10% (or no more than 20 applications) of selected cohort with identified risk profile.

Application to transfer onshore: 100% of selected cohort

Enrolment: 100% identify checks by MQ staff to confirm that students enrolling have

been made valid offers for admission

Post-enrolment: Progression monitoring for students identified as having failed more than 75% of their course during one period of enrolment (to be confirmed with TNE).

1 The Code of Conduct in the University Enterprise Agreement

2 AS8001-2003 Fraud and Corruption Control Section 1.5.6

DOCUMENT VERIFICATION

PROCEDURE FOR VERIFICATION OF DOCUMENTS PRESENTED IN SUPPORT OF APPLICATION FOR ADMISSION TO WUC & UOW BY INTERNATIONAL STUDENTS

1. Purpose

This policy sets out the procedures that should be followed by admissions staff to check the authenticity of documents and any actions that they should take in the event that a fraudulent document is detected.

2. Definitions

"Applicant" means a student who is seeking admission to a course at the University of Wollongong and/or Wollongong University College

"Agent" means an agent of the University and/or College who holds a valid contract to represent the University and/or College at the time an application is submitted by a prospective student, and whom the student has authorized to represent him/her in facilitating that application.

3. Background

When applying for admission to study at WUC or UOW international students are required to provide documentary evidence of any qualifications on which they wish to rely to support of their application for admission. These include academic qualifications and English language proficiency qualifications.

Supporting documentation may be in the form of either original documents or copies certified by the authorities stipulated on the application form as true copies of original documents.

4. Obligations of Admissions Staff

Admissions staff are required to check the authenticity of all supporting documentation to ensure that only eligible students are admitted to UOW or WUC courses. Where an institution or examination results can be verified online, staff are required to confirm the authenticity of these documents using this facility, presently these include:-

IELTS test results University of NSW Foundation Studies program

4.1 Applications from Main Agents

Main Agents may certify copies of original documents as true copies of the original. As part of their agency agreement with the University and the College the Agent is required to ensure that all documents submitted in support of an application are authentic.

Prior to authorization of an ECoE the documents supplied by the main agent must be rechecked by UniAdvice staff.

4.2 Applications from Agents Other Than Main Agents

For all applications from Agents representing applicants with "high risk citizenships" original documents are required, or copies of original documents if certified by true by an officer of the institution that originally issued the document.

TOEFL test results must be forwarded directly from Princeton University to the University directly.

IELTS test results must be verified on line by admission staff.

Specific guidelines for agents authorized to recruit students who are nationals of the Peoples Republic of China form part of the Agency Agreement as listed at http://www.uow.edu/prospective/international/agent/sched3.html

4.3 Applications Direct from International Students

For all applications from applicants with "high risk citizenships" original documents are required, or copies of original documents if certified by true by an officer of the institution that originally issued the document.

TOEFL test results must be forwarded directly from Princeton University to the University directly;

IELTS test results must be verified on line by admission staff.

4.4 Applications from Citizens of the Peoples Republic of China

Procedures as outlined in 4.1, 4.2 or 4.3 above (as relevant) apply to applicants from People's Republic of China.

After entry into the admissions system, Chinese speaking/reading admissions assistants are employed by UniAdvice to cross check the authenticity of documents. Where work experience statements are submitted in support of an application, the employer is contacted by telephone to verify the authenticity of the work experience statement.

5. Fraudulent Documents

If a document supporting a student's application is suspected as being fraudulent, staff must do the following:

- i. in the first instance confirm that the applicant has properly executed the privacy and release sections of the application (by signing the application form).
- ii. contact the institution from which the document is purported to have been issued. Contact should be in writing (fax, post or email). The institution must be provided with a copy of the privacy consent and release form which has been signed by the applicant and a copy of the suspect document together with a request to verify the authenticity of the same.
- iii. Should the institution advise that the document is not authentic then staff member should immediately notify their supervisor.
- iv. The supervisor should:
 - review the file and confirm the findings;
 - in the event an offer has already been made to the application a letter should be sent to the applicant (and if relevant, the Agent) advising that the offer has been withdrawn;
 - notify the Manager International Student Recruitment who will determine what if any actions will be taken in regard to any relevant Agent, which may include termination of the agency agreement; and
 - the matter must be reported to the Vice Principal Administration.

6. Reporting Obligations

In instances where there is a reasonable belief that an application has provided a fraudulent document the matter should be reported to following authorities:

DIMIA Compliance
 Catherine Schmitz
 Manager Integrity Unit
 Adelaide Skilled Processing Centre
 DIMIA
 GPO Box 1638
 Adelaide SA 5001

Phone 08-8237-6739

and

The Commissioner
 Independent Commission Against Corruption
 GPO Box 500
 Sydney NSW 2001
 Attention: Assessment Section

7. Other Documents/Legislation/Policies

ICAC Act (Section 110
Service Centre Procedure (refer items 3.7 and 3.15)
Crimes Act (Pt 5 Div 2 Section 300)
Code of Conduct
DIMIA legislation (refer Migration Act at
http://www.immi.gov.au/legislation/gazettals/gazettals03/031205 passport.pdf)

Appendix 31 – Official transcript policy issued by the Michigan Association of Collegiate Registrars and **Admissions Officers**

dents to mark the transcript "issued to student," and inform

Place an "Issued to student" stamp over term information or

other entries on the transcript.

transcript as official.

Stamp outside envelope to read "Official Transcript—Do Not

Open in Mailroom."

Use only "Official Transcripts" from other colleges for official

Identify unofficial "Internal Use Only" copies as such.

Secure college seal, blank transcript paper, and microfilm

records when not in use.

internal purposes.

Limit access to Records area by student employees. If student employees are used in the Records area, they must be trained

Promote adoption of a uniform policy between colleges on Encourage institutions that issue transcripts directly to stuthe student that the receiving institution may not accept the

issuing transcripts directly to students.

Review all institutional technology for adequate security.

SUGGESTED PRACTICES AND POLICIES FOR THE PREVENTION OF FRAUDULENT TRANSCRIPTS

on the

Include the phone number of the Records Office on the

transcript for verification of information contained

Use uniform print elements (typeface or font) for entire record

When possible, include the name and address of the recipient of the transcript. 'This transcript has been issued to (receiving

Internal Practices (People, machines, procedures, security and

training, storage, copies)

office name and address) by (issuing office)."

Prepared by

The Michigan (MACRAO) Ad Hoc Committee on Fraudulent Transcripts

PREVENTION OF FRAUDULENT TRANSCRIPTS

could reduce the opportunities for individuals to alter and submit fraudulent transcripts. The committee's suggestions for practices and policies that can be MACRAO and charged with suggesting ways and means by which institutions adopted to limit opportunities for transcript alteration are listed below. Some In 1984, an ad hoc committee on fraudulent transcripts was appointed by recommendations may fall into more than one category.

Use different format and paper stock for "official" transcripts

Copyright college or university logo and seal.

to distinguish them from grade reports and unofficial

transcripts.

Definition of an Official Transcript K

from the issuing institution. It must bear the college seal, date, and an appropriate signature. Transcripts received that do not meet these requirements should not be considered official An official transcript is one that has been received directly and should be routinely rejected for any permanent use.

- (Ink, safety, seals, the paper itself) The Physical Document
- Use a seal that penetrates paper or is a raised seal. Use safety paper.
- Print a statement on the transcript which defines an official transcript as bearing a signature, seal and date. In addition, the transcript must be mailed directly from the issuing institution to be considered an official transcript.
- If a copier is used for reproduction, reduce (or expand) the copy size so that version can be distinguished from the characteristics of the transcript.

Print a statement on the transcript describing the physical

Control access to and security of electronic data bases Store all records in secured files at the end of the day. concerning confidentiality and security

480

Destroy transcripts from other institutions after usefulness at institution has ended.	Train professional/support staff to identify fraudulent transcripts.	Devote special sessions in the annual meeting to training support staff.	Maintain ownership and control of print plates and negatives.	Copy and include the AACRAO "Guidelines for Fighting Academic Records Fraud" handout with each transcript sent off-campus.	External Practices (Definition, education of public, communication)	Intake offices (Admissions, Records, Financial Aid) should stamp those transcripts received from students as "Unofficial."	Charge AACRAO with educating the business community to the need for reference checks and maintaining a constant awareness of the possibility of fraudulent credentials, par- ticularly transcripts.	Encourage employers to check with individual Records Of- fices on the academic records of applicants and cooperate with them when they do.	Initiate state laws for prosecution of persons caught tampering with transcripts other than through mail fraud.	Through statewide organizations, urge institutions to set up internal procedures for filing charges and permanently excluding individuals from the institution in cases of transcript alteration.
					E E					
					D.					

Official Transcript

Definition

An official transcript is one that has been received directly from the issuing stutiouslon. If must beat the college such disc, and an appropriate signature. Transcripts received that most reter these requirements should not be considered official and should be routinely rejected for any permanent use.

The definition of an Official Transcript was endorsed by the Michigan Ausociation of Collegiate Registrars and Admissions Officers on November 5, 1987.

Issuing institutions consider the following to be significant criteria that authenticate a transcript:

Requirements

. Was it sent directly from the institution's transcript office?

. Does it bear an institutional seal and an authorized signature?

. Is it recently dated?

The Burden of The definition also recognizes that the burden of acceptance ites with the recipient; it is Acceptance the recipient who ultimately determines whether the docustent is "official,"

A transcript comains all essential academic data such as dates of artendance, courses talent, graines and credit as searched, the searched in may also comain information related to the student's current status at the institution. Information contained on an Official Transcript

What are Unefficial Records that may have been in the hands of the student such as student copy transcripts Boruments or letters, grade reports, diplomas or graduation lists are not official.

What you, the recipient Was the document mailed directly from the Registrar's Office in a scaled institutional should look for envelope using an institutional postage meter (rather than a postage stamp)? Is there a registrar's signature and institutional seal?

Does the document have a recent date of issue?

Are the records submitted consistent with the person's academic/employment background and with your own personal knowledge of the candidate?

Is the format of the ranneript consistent with others received from the same in

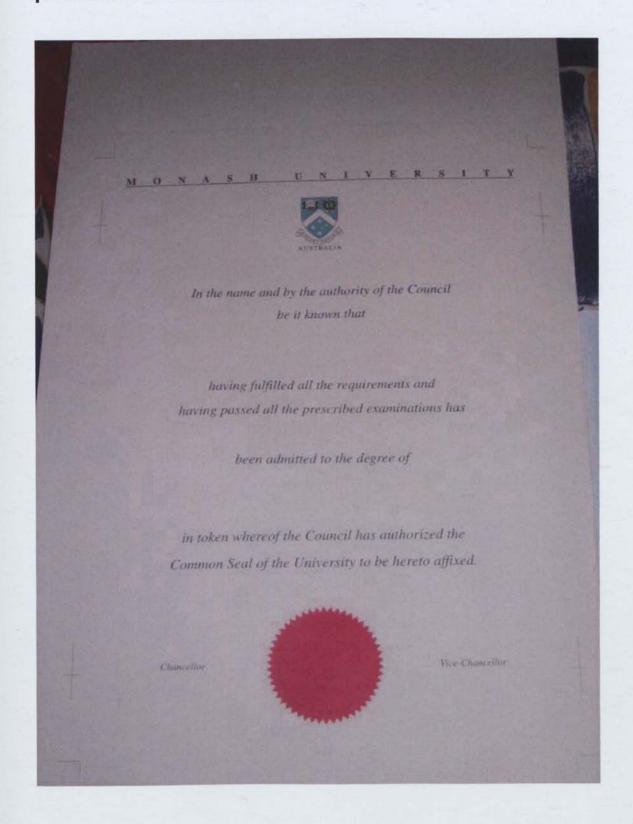
If you have Telephone the Registran's Office of the souing institution to verify dates of attendance, questions degrees granted and bonom received.

Write for more details or return the actual document (or a copy) to the insuing institution for verification. You may wish to interview the individual regarding the

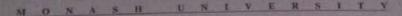
If you have received a document other than an official transcript, ask the person to request that an official transcript be sent directly to you.

Michigan Actoristion of Collectate Bed

Appendix 32 – Photographs/ scans of Monash University, Edith Cowan University and the University of Melbourne parchments available from Michael deMartini









In the name and by the authority of the Council be it known that

having fulfilled all the requirements and having passed all the prescribed examinations has

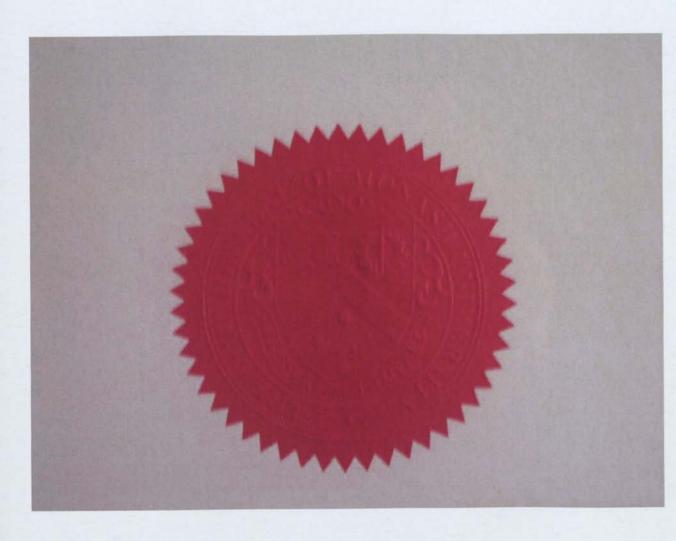
been admitted to the degree of

in token whereof the Council has authorized the Common Seal of the University to be hereto affixed.

Changeller



Vice-Chancellor





EDITH COWAN UNIVERSITY

PERTH WESTERN AUSTRALIA.

Sample copy of MICHAEL DE MARTINI (C) 2006. If this sample was send to you from another source please send us an email; degreeuniversity@hotmail.com

HAVING FULFILLED ALL REQUIREMENTS PRESCRIBED BY THE UNIVERSITY HAS THIS DAY BEEN ADMITTED TO THE AWARD OF



THE GRADIESTON SEAL OF EATH COMAIN DISPUSSION NOR EXECUTION OF THE CONTROL

The University of Melbourne



This is to certify that

was duly admitted to the Degree of

This sample belongs to Michael De Martini (c) 2006. If you got it from other source please verify by sending an email to: degreeuniversity@hotmail.com

in The University of Alelbourne on



STATEMENT OF RESULTS



This sample belongs to Michael De Martini (c) 2006. If you get this from other sources please verify by sending an email to: degreeuniversity@hotmail.com



Every in and consistent from this contention may borrectled by the University of any time prior to the commencement of the excellent year following the data fearly and the observation recorded shall be described to be the original statement.

Appendix 33 – Risk Perception Scale

くことのこと		
Ordinal scale	Risk/ Reliability/ Confidence criterion	Description of criterion
4	NO RISK	No risk of making an error
	COMPLETELY RELIABLE	 Decision using this resource and/ or process will not be wrong
	ABSOLUTE CONFIDENCE	 All inferences drawn will be true
		 The opposite to this is EXTREME RISK/ NO RELIABILITY/ NO
		CONFIDENCE
3	MODERATE RISK	 Some risk of being wrong
	SOME RELIABILITY	 Willingness to make a decision based upon this but recognising some
	SOME CONFIDENCE	chance of error
		Some incorrect inferences can be drawn
		 The opposite to this is SUBSTANTIAL RISK/ LOW RELIABILITY/
		LOW CONFIDENCE
2	SUBSTANTIAL RISK	Substantial risk of being wrong
	LOW RELIABILITY	 Not willing to make a decision based upon this alone
	LOW CONFIDENCE	Many incorrect inferences can be drawn
		 The opposite to this is MODERATE RISK/ SOME RELIABILITY/
		SOME CONFIDENCE
1	EXTREME RISK	Great risk of making an error
	NO RELIABILITY	 Worthless and of no use as a decision making resource/ process
	NO CONFIDENCE	 The opposite to this is NO RISK/ COMPLETELY RELIABLE/
		ABSOLUTE CONFIDENCE
Missing value	NO JUDGEMENT	I do not have sufficient knowledge to judge this item

This survey relates to the assessment of a Bachelor degree qualification as a prerequisite credential for entry either into an employment position or entry into further higher education study. All cases relate to the assessment of a generalist degree and not a degree for a professional position.

Section 1

Each of the below cases contains a set of resources and/ or methods used by an evaluator to determine the acceptability of a higher education qualification. If you were to only use those resources/ methods, please indicate what level of risk you might be placing yourself in by possibly accepting an individual who may present a qualification from a 'non-official' higher education institution?

Section 2

Each of the below cases contains a set of resources and/ or methods used by an evaluator to determine the authenticity of a higher education qualification. If you were to only use those resources/ methods, please indicate what level of risk you might be placing yourself in by possibly accepting an individual who may present a falsified or non existent qualification from an 'official' higher education institution

Appendix 34 – Tests of equivalence for Research Question 2A

* = Continuity correction applied to difference between proportions

			Populati	on Type				95% Co		
	Pr	ivate	Pu	blic	RO	SA		Inte	rval	
Acceptability Resource	Total N	% Yes	Total N	% Yes	Total N	% Yes	Difference in Proportions	Lower	Upper	Equivalence
Check Commonwealth Universities Yearbook	29	27.9%	22	50.0%	46	8.7%				
Comparisons:		x		X			.181*	087	.449	Supported
Sample Control		x				x	.164*	007	.335	Supported
				X		x	.379*	.169	.59	Rejected
Check Bears Guide Comparisons:	29	0% X	22	9.1% X	46	4.3%	.051*	057	.159	Supported
		X				X	.015*	06	.089	Supported
				X		X	.014*	105	.134	Supported
Check with MOE or equivalent Comparisons:	29	20.7% X X	22	50% X		23.9% X X	.253* .004* .227*	008 191 01	.514 .198	Supported Supported Supported
Check NOOSR Guides	29	27.6%	22	95.5%	46	23.9%	1545.1			
Comparisons:	2.5	X		×		x x	.639* .009* .716	.365 193 .462	.913 .211 .97	Rejected Supported Rejected
Check AQF Register (Australian degrees only) Comparisons:	29	37.9% X	22	77.3% X	46	43.5%	.354*	.078	.63	Rejected
		X				X	.056	173	.285	Supported
	^		X			X	.338	.085	.591	Rejected
Check website to ensure it is accredited	29	62.1%	22	81.8%	46	50%				
Comparisons:		X		X			.157*	095	.41	Supported
		X				X	.121	11	.352	Supported
				X		X	.284*	.036	.533	Supported
Check International Handbook of Universities	29	10.3%	22	40.9%	46	15.2%				
Comparisons:	100	X		X			.266*	.031	.501	Supported
		X				X	.021	137	.179	Supported
				X		X	.223	.008	.439	Supported

Appendix 35 - Tests of equivalence for Research Question 2B

			Populati	on Type				95% Cor		
	Pr	ivate	Pu	blic	R	CSA		Inte	rval	
Authentication Resource	Total	% Yes	Total N	% Yes	Total	% Yes	Difference in Proportions	Lower	Upper	Equivalence
Notarised (ie authentication by a Justice of the Peace or equivalent authority) photocopies of degree	23	65.2%	19	73.7%	46	54.3%				
certificate and/or academic transcript Comparisons:		× ×		x x		×	.037* .076*	244 171 105	.318 .323 .419	Supported Supported Supported
Photocopy of degree certificate and/or academic transcript provided by the candidate	23	17.4%	19	5.3%	46	56.5%				
Comparisons:		X X		×		×	.073* .358* .475*	124 .11 .211	.27 .607 .738	Supported Rejected Rejected
Verbal confirmation of degree certificate and/or academic transcript provided by the higher education institution Comparisons:	23	0% X	19	0% X	46	17.4%	0	0	0	Supported
		x		X		×	.141*	019 039	.302	Supported
Original copies of degree certificate and/or academic transcript provided by the higher education institution	23	30.4%	19	68.4%	46	50%				
Comparisons:		×		x		x x	.332* .163* .147*	.028 085 119	.635 .412 .413	Supported Supported Supported
Original copies of degree certificate and/or academic transcript provided by the candidate	23	56.5%	19	84.2%	46	71.7%				
Comparisons:		X		X			.229*	052	.51	Supported
		X				X	.119*	117	.355	Supported
				X		X	*880.	143	.318	Supported
E-mail confirmation of degree certificate and/or academic transcript provided by the higher education institution	23	8.7%	19	31.6%	46	28.3%			145	
Comparisons:		X		X			.181*	058	.42	Supported
		X				X	.163*	043	.37	Supported
				X		X	.00*	243	.243	Supported

			Populat	ion Type			34		nfidence rval	
	Priv	vate	Pu	blic	R	CSA	Difference			
Authentication Resource	Total N	% Yes	Total N	% Yes	Total N	% Yes	in Proportions	Lower	Upper	Equivalence
Resume or CV provided by the candidate	23	30.4%	19	5.3%	46	47.8%				
Comparisons:	1	X		X			.203*	036	.442	Supported
	7	X			3	X	.141*	106	.388	Supported
				X		X	.388*	.132	.643	Rejected
Faxed confirmation of degree certificate and/or academic transcript provided by the higher education institution	23	13.0%	19	36.8%	46	39.1%				
Comparisons:		X		X			.19*	069	.449	Supported
	X				×		.228*	002	.459	Supported
				X		X	.00*	26	.26	Supported
Copies of qualifications verified by IDP or equivalent (Private & Public Providers Only)	23	13.0%	19	63.2%	NA	NA				
Comparisons:	3	X		X			.454*	.163	.745	Rejected
Copies of qualifications verified by an authorised Agent (Private & Public Providers Only)	23	13.0%	19	57.9%	NA	NA				
Comparisons:		X		X			.401*	.115	.687	Rejected

^{* =} Continuity correction applied to difference between proportions

Appendix 36 - Tests of equivalence for Research Question 3A

Results for Research Question 3A

Tukey HSD

	(I) Population	(J) Population	Mean			95% Confidence Interval	ence Interval	
Dependent Variable	type	type	Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound	Equivalence
Face of use	Private	Public	-,12	.175	.772	-,53	.29	Supported
200 00 000		RCSA	13	.130	.603	43	.18	Supported
	Public	RCSA	00	.149	666	36	.35	Supported
Cost of use	Private	Public	.16	175	.637	26	75.	Supported
		RCSA	.08	.130	.811	23	.39	Supported
	Public	RCSA	80-	149	.859	43	.27	Supported
Accuracy of verification	Private	Public	18	.134	.370	50	41.	Supported
		RCSA	.05	660	.889	19	.28	Supported
	Public	RCSA	23	114	.118	+0	99'	Supported
Speed of verification	Private	Public	29	.161	.178	79'-	60.	Supported
obeen of verification		RCSA	35(*)	.120	110.	63	07	Rejected
	Public	RCSA	90-	.137	.889	39	.26	Supported
Security of verification	Private	Public	-22	.241	.625	62	.35	Supported
		RCSA	.14	.180	.723	29	95.	Supported
	Public	RCSA	.36	205	.188	-,13	.85	Supported
Ability to verify overseas	Private	Public	30	250	454	89	.29	Supported
qualifications		RCSA	10.	.186	666	-,43	.45	Supported
	Public	RCSA	.31	.213	.319	20	.81	Supported
Ability to verify Australian	Private	Public	16	.230	.775	0.70	.39	Supported
qualifications		RCSA	45(*)	.172	.027	-,85	40	Supported
	Public	RCSA	29	.196	.303	75	.17	Supported

Based on observed means.

* The mean difference is significant at the .05 level.

^{* =} Continuity correction applied to difference between proportions

Appendix 37 - Tests of equivalence for Research Question 3B

Results for Research Question 3B

	(I) Population	(J) Population	Mean			95% Confidence Interval	nce Interval	
Dependent Variable	type	type	(7-)	Std. Error	Sig.	Lower Bound	Upper Bound	Equivalence
Candidates providing notarised copies of qualifications	Private	Public	.41	.300	.354	30	1.13	Supported
		RCSA	.50	.222	990.	03	1.03	Supported
	Public	RCSA	90.	.254	.941	52	69	Supported
Candidates providing original copies of qualifications	Private	Public	10.	279	666	79'-	.65	Supported
		RCSA	.21	.206	.579	28	.70	Supported
Checking with the	Public Private	RCSA Public	.22	236	.619	4.34	.78	Supported
institution that conferred the degree via phone fax or email			.25	.287	.659	43	.93	Supported
		RCSA	02	.213	984	53	.48	Supported
	Public	RCSA	27	243	.501	85	.30	Supported
Putting microchips into	Private	Public						
the degree qualification so there is a permanent record			71.	.282	.816	50	48.	Supported
		RCSA	.08	209	.917	14.	.58	Supported
	Public	RCSA	60'-	.239	.927	-,65	.48	Supported
Use of polymer paper to minimise falsification and alteration of the academic procede.	Private	Public	60	273	.947	73	56	Supported
2000		RCSA	.20	203	.577	28	.68	Supported
Online web based	Public Private	RCSA Public	.29	231	.427	26	.84	Supported
verification system that links to institution's			-22	239	.625	62'-	.35	Supported
naidudaca		RCSA	33	171.	.150	75	60.	Supported
	Public	RCSA	-11	203	847	- 59	37	Cumparted

Based on observed means. * = Continuity correction applied to difference between proportions

Appendix 38 - Tests of equivalence for Research Question 3C

Results for Research Question 3C

			Populati	Population Type					95% Confidence	nfidence	
	Pri	Private	Pu	Public	RC	RCSA	Difference	S.E.	Interval	rval	
Method of Communication	Total	% Yes	Total	% Yes	Total	% Yes	in Proportions	Diff.	Lower	Upper	Equivalence
Telephone	30	10%	22	4.5%	95	24.2%					
Comparisons:		×		×			.055	070.	083	.193	Supported
		×			^	×	.142	.072	.001	.283	Supported
				×		×	.197	.064	.071	.323	Rejected
Email	30	%94	22	59.1%	98	86.3%					
Comparisons:		×		×			.169	.131	088	.426	Supported
		×				×	.103	980.	660	305	Supported
				×		×	.272	.111	.054	.490	Rejected
FAX	30	26%	22	4.5%	98	17.9%					
Comparisons:		×		×			.215	.111	003	.433	Supported
		×				×	.081	.094	103	.265	Supported
				×		×	.134	.059	.018	.250	Supported
Letter	30	46%	22	22.7%	92	14.7%					
Comparisons:		×		×			.233	.127	016	.482	Supported
		×			-	×	.313	860.	.121	.505	Rejected
				×		×	080	960	108	.268	Supported
Web	30	%94	22	81.8%	95	73.7%					
Comparisons:		×		×			.058	.113	163	.279	Supported
		×				×	.023	060	153	.199	Supported
				×		×	.081	.094	-,103	265	Supported

* = Continuity correction applied to difference between proportions

Appendix 39 – Delphi Participants Guidelines, Glossary of Terms and Risk Rating Table

higher education study. You are requested to rate your perceived levels of risk in determining the acceptability and authenticity of a qualification within two This survey relates to the assessment of a Bachelor degree qualification as a prerequisite credential for entry either into an employment position or further sections. The survey should not take longer than 10 minutes to complete.

Guidelines for the survey

Please login to the survey as per the directions provided in the automated email from the survey system. Directions within the survey are the same as those outlined below:

Section 1

Within this section, each line consists of a resource and/ or method used by an individual to determine the acceptability of a higher education qualification. you were to only use this resource/ method, please indicate what level of risk you might be placing yourself in by possibly accepting an individual who may present a qualification from a 'non-official' higher education institution. Please refer to the Risk Rating Table (below) for choices

Section 2

this resource/ method, please indicate what level of risk you might be placing yourself in by possibly accepting an individual who may present a falsified/ non-Each line contains a resource and/ or method used by an individual to determine the authenticity of a higher education qualification. If you were to only use authentic qualification. Please refer to the Risk Rating Table (below) for choices.

- Acceptability of a qualification Process of determining if a qualification has been earned from an institution that has been approved by a competent
- Authenticity of a qualification Process of determining if a qualification has been earned legitimately and has not been falsified. Justice of the Peace - The functions of a Justice of the Peace may be seen as comparable to that of a Notary Public
- Non-official higher education institution/ qualification Institution and/ or qualification that does not belong to a formal higher education system.

Risk Rating Table

Risk/ Reliability/ Confidence criterion	Description of criterion
NO RISK	No risk of making an error
COMPLETELY RELIABLE	 Decisions using this resource and/ or process will not be wrong
ABSOLUTE CONFIDENCE	All inferences drawn will be true
	 The opposite to this is EXTREME RISK/ NO RELIABILITY/ NO CONFIDENCE
MODERATE RISK	Some risk of being wrong
SOME RELIABILITY	 Willingness to make a decision based upon this but recognising some chance of error
SOME CONFIDENCE	Some incorrect inferences can be drawn
	 The opposite to this is SUBSTANTIAL RISK/ LOW RELIABILITY/ LOW CONFIDENCE
SUBSTANTIAL RISK	Substantial risk of being wrong
LOW RELIABILITY	 Not willing to make a decision based upon this alone
LOW CONFIDENCE	Many incorrect inferences can be drawn
	 The opposite to this is MODERATE RISK/ SOME RELIABILITY/ SOME CONFIDENCE
EXTREME RISK	Great risk of making an error
NO RELIABILITY	 Worthless and of no use as a decision making resource/ process
NO CONFIDENCE	 The opposite to this is NO RISK/ COMPLETELY RELIABLE/ ABSOLUTE CONFIDENCE
NO JUDGEMENT	I do not have sufficient knowledge to judge this item

Appendix 40 – Survey instrument for the Recruitment Consulting Services Association of Australia and New Zealand

RCSA#DegreeSurvey2005-1

Page 1 of 11



RCSA On-line Business Manager Survey Degree Verification Survey

Confidentiality

The survey is being conducted by an independent market research company and data will be collected on an independent, secure site operated by the Values Bank Research Centre (www.valuesbank.com.au). The Values Bank undertakes to comply with Market Research Society rules and not disclose individual responses. RCSA will not have access to your individual responses.

In addition to assisting the RCSA, the data will be used by George Brown a PhD student at The University of Adelaide as part of his thesis.

Who should fill out the survey?

This is an organisation survey. The manager or most senior member at your organisation should fill this out. If that is not you, please forward the survey to them.

PLEASE TAKE THE TIME TO ASSIST YOUR SELF AND YOUR FELLOW MEMBERS BY FILLING OUT THIS SURVEY

It will take around 5 minutes to fill out the survey. In general you will be asked to click on a button. Please answer every question.

PRIZE TO COMPLETE THE SURVEY

Two people who complete the survey will be nominated by The Values Bank to win a box of Church Block Wirra Wirra Wine valued at over \$130

1. Demographics

1.1. Does your business have office(s) in any of the following locations?	No	Yes
NSW	0	C
Victoria	O.	C
Queensland	C	-C
ACT	0	C
South Australia	0	C
Western Australia	0	C
Tasmania	0	C
Northern Territory	0	0
New Zealand	100	C

1.2. Organisation ownership

0	So	e	tra	de	er
	_			2	

Partnership

Company

1.3. What is your organisation's annual turnover in Australia?

Under \$1M

\$1M to \$5M

0	\$5M to \$10M
Ċ	\$10M to \$20M
0	\$20M to \$100M
C	\$100M and above

1.4. Estimate what proportion of your revenue is generated by.....

	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
On-hired employee services	0	G	0	C	C	C	C.	0	C	0	0
Contracing services	C	0	C	C	C.	C	0	0	0	0	G
Recruitment services	.0	0	1	0	0	C	0	0	0	0	0

Click here to see a definition of the services

2. Degree requirements for external candidates

Does your organisation assess candidates for ANY external positions where a Bachelor degree qualification (or higher) is MANDATORY for employment purposes?

A degree is a bachelor level or higher (including Graduate Certificate/ Graduate Diploma), issued by any higher education provider in the world

No

Yes

If the answer is No, skip to the end, fill out your email address to qualify for the prize and submit your responses.

3. Number of degree positions advertised annually?

How many positions requiring a degree qualification are advertised by you organisation annually?

C 1-10

0	11-50
C	51-100
C	101-500

Over 500

4. Checking acceptability of institution

As part of the recruitment process, does your organisation check the acceptability of EVERY institution from where the candidate claimed to earn his/her degree qualification?

○ No

Yes

If you answered No, skip to Question 6

5. Does your organisation use the following resources in order to determine the acceptability of the institution where the candidate earned his/her degree qualification?

	No	Yes
Check the Commonwealth Universities Yearbook	0	0
Check for a listing in Bears Guide	0	0
Check with the Ministry of Education or other equivalent authority in the country of origin	0	C
Check for a listing in the Country Education Profile book published by the National Office of Overseas Skills Recognition (NOOSR/AEI)	0	c
Check on the Australian Qualifications Framework (AQF) Register (Australian degrees only)	0	C
Check the website of the higher education institution to make sure it is accredited	0	d
Check for a listing in the International Handbook of Universities	0	C

Other resource - please specify in next	0	1
question	1	-

5.1. If you answered 'Other' above, can you please provide more information in the space below

6. (Only answer if your organisation does NOT check the acceptability of the institution) Which of the following describes your organisations reason for not checking the acceptability of the institution where the candidate earned their degree qualification?

	No	Yes
We are not concerned about this. A degree qualification is the same from any institution – it just needs to be a degree	0	(
We do not know who to contact in order to determine if a degree is acceptable for employment purposes	C	c
It is not our responsibility to verify the acceptability and/ or standing of the institution where the candidate earned their degree	0	6
Other	0	.0

6.1. If you answered 'Other' above, can you please provide more information in the space below

7. Checking the authenticity of the degree

Does your organisation verify	the authenticity	of EVERY	candidate's	claimed	degree
qualification?					

○ No

Yes

If you answered No, skip to Question 13

8. What method(s) does your organisation follow in order to verify the authenticity of a candidate's degree qualification?

	No	Yes
Notarised (ie authentication by a Justice of the Peace, or equivalent authority) photocopies of degree certificate and/or academic transcript	0	C
Photocopy of degree certificate and/or academic transcript provided by the candidate	C	C
Verbal confirmation of degree certificate and/or academic transcript provided by the higher education institution	0	0
Original copies of degree certificate and/or academic transcript provided by the higher education institution	0	0
Original copies of degree certificate and/or academic transcript provided by the candidate	0	E
E-mail confirmation of degree certificate and/or academic transcript provided by the higher education institution	C	c
Resume or CV provided by the candidate	0	0
Faxed confirmation of degree certificate and/or academic transcript provided by the higher education institution	o	C
Other	0	0

8.1. If other above, please specifiy

9. Failure to authenticate a candidate's degree qualification

If your organisation is unable to authenticate a candidate's degree qualification through any of the procedures outlined above, which of the following best describes your next steps?

C	The candidate cannot be considered for the position as the qualification must be authenticated
C	Information provided by the candidate is considered sufficient and is accepted
Ċ	The selection process is put on hold until a verification can be undertaken
C	The candidate is offered the position, on the provision that their qualification is authenticated at a later date
Ċ	Other, please specify

9.1. If other above, please specifiy

10. Has your organisation EVER discovered a candidate with a degree qualification that was not authentic?

○ No ○ Yes

If you answered No, skip to Question 12

11. Proportion on non-authentic degrees?

Approximately what percentage of total degree verifications, per year, turn out not to be authentic?

	O Name	
	None	
	C 1% to 5%	
	6% to 10%	
	11% to 15%	
	16% to 20%	
	21% to 29%	
	30% to 49%	
	C 50% to 74%	
	75% to 99%	
	C 100%	
12.	On discovering a non-authentic degree	
Mha	does your organisation typically do after discovering a potential candidate possesse	d a
legr	e that was not authentic?	
	Candidate is removed from the selection process and informed of the reason	
	Candidate is removed from the selection process but not informed of the reason	
	Candidate is not removed	
	Other	
	2.1. If you answered 'Other' above, can you please provide more information he space below	in
13	Only answer if your organisation does NOT verify candidate's degree	ee
qua	fication Which of the following best describes your organisations on for not verifying the authenticity of a candidate's degree	
qua	fication?	
	No Yes	

authenticity of candidates degree qualifications	C	0
We trust candidates to be truthful when purporting to hold a degree qualification It is not our responsibility to verify the	Ċ.	C
We do not know who to contact in the higher education institution to perform the verification for us	0	C
The process of verification takes too long - we do not have time to wait	0	C

13.1. If you answered 'Other' above, can you please provide more information in the space below

14. Systems for authenticating degree qualifications

If a system were introduced in order to verify the authenticity of degree qualifications, how would you rate the importance of the following criteria?

	Not at all important	Not important	Neutral	Important	Very important
Ease of use	C	- 0	C	0	0
Cost of use	- 0	0	0	0	0
Accuracy of verification	C	10	0	0.	0
Speed of verification	0	0	0	0	Ĉ
Security of verification process	0	0	- 0	0	0
Ability to verify overseas qualifications	C	0	0	C	C
Ability to verify Australian qualifications	C_	C	0	Ċ	C

15. Effectiveness in minimising the problem of fake degrees

How effective do you think the following methods would be in minimising the problem of fake degrees?

	Not at all effective	Not effective	Neutral	Effective	Very effective
Requiring candidates to provide notarised copies of qualifications	C	C	0	0	C
Requiring candidates to provide original copies of qualifications	0	0	0	C	0
Checking with the institution that conferred the degree via phone, fax or email	C.	r	C	C	ic.
Putting microchips into the degree qualification so there is a permanent record	6	ď	d	Č.	c.
The use of polymer paper (similar to bank notes) so as to minimise falsification and alteration of the academic records	o	Ö	С	C.	6
An online, web based verification system that links to institution's databases	0	0	0	q	0

16. Preferred communication of degree verification

If a degree verification system was introduced, which of the following communication methods would you prefer?

	No	Yes
Telephone		Y
Email	0	1
Fax	0	0
Letter	0	6
Web	0	1

17. Contact

17.1. Thank you for completing this survey.

If you would like to participate in the prize draw, please fill out your email address below.

Your email address will not be used for any other purpose.

Click the submit button to complete the survey

THANK YOU FOR PARTICIPATING IN THE SURVEY.

Click Here to Submit

e3 is © 1999-2004 Everyone Counts Pty Ltd ABN 097697777. All rights reserved. e3 Privacy Guidelines

Appendix 41 – Survey instrument for Public & Private Providers of Higher Education in Australia

SurveyMaker.com.au :: Intelligent survey design is only a click away

Page 1 of 1

Higher Education Public Postgraduate Providers Survey - 2006

PRINT THIS PAGE

Username:

Passcode:

Login



Click here for SurveyMaker's Privacy Policy.

PLEASE NOTE :.

- The survey should take approximately 4 minutes to complete.
- The survey is anonymous. For more information click here.
- Contact: George Brown (email: george.brown@student.adelaide.edu.au).
- This survey will open for access on 02/06/2006.
- This survey will close on 16/06/2006.

SurveyMaker.com.au :: Intelligent survey design is only a click away

Page 1 of 1

Higher Education Public Postgraduate Providers Survey - 2006



PRINT THIS PAGE

IMPORTANT INFORMATION :.

This survey is designed to seek information on your institution's procedures regarding the assessment of the acceptability and authenticity of a potential applicant's degree qualification for entry into one of your postgraduate programs.

A degree qualification (for the purposes of this study) is a Bachelor degree, or higher (including Graduate Certificate/ Graduate Diploma), issued by any higher education provider in the world.

Privacy

Neither you, nor your organisation, can be identified through this survey. Individual responses are entirely anonymous. Ethics clearance has been granted by the University of Adelaide's Ethics Committee.

The researcher will use the collated responses for a PhD thesis and may include collated data in research papers or conference presentations.

The broad demographic questions will only be used to group responses for statistical purposes.

Responses to open-ended questions will be placed in broad categories and the frequencies will be reported. Individual responses to open-ended questions may be used as an example in the PhD thesis, or in research publications, but only if they do not identify the individual or organisation.

If you have any problems with completing this survey, please call me on 0411037800.

Please click 'Continue' to begin.

Cancel Continue



PRINT THIS PAGE

 Does your institution assess applicants for ANY postgraduate program where a Bachelor degree qualification (or higher) is MANDATORY for entry?

Yes

No

PROGRESS: PAGE 1 OF 15 Next >>

SurveyMaker.com.au :: Intelligent survey design is only a click away

Page 1 of 1

Higher Education Public Postgraduate Providers Survey - 2006



As part of the admissions process, does your institution verify the acceptability of the institution indicated on the applicant's undergraduate degree qualification?

Yes

No

PROGRESS: PAGE 3 OF 15

Next >>



4. Which of the following statements BEST describes your institution's reason for not verifying the acceptability of the institution from where applicants earn their undergraduate degree?

So long as they have a degree qualification, it does not matter from which institution it was earned from The process takes too long - so long as they have the degree and it can be authenticated, it does not matter

We do not know who to contact in order to determine if a degree is deemed acceptable for our institution

PROGRESS: PAGE 4 OF 15	Next >>

SurveyMaker.com.au :: Intelligent survey design is only a click away

Page 1 of 1

Higher Education Public Postgraduate Providers Survey - 2006

PRINT THIS PAGE

- 6. Which of the following resources does your institution use in order to determine the acceptability of the institution indicated on the applicant's undergraduate degree qualification? (Select all the options that apply)
 - Check for a listing in the Commonwealth Universities Yearbook
 - Check for a listing in Bears Guide to Earning Degrees
 - Check with the Ministry of Education or other equivalent authority
 - Check for a listing in the NOOSR/ AEI Country Education Profiles
 - Check on the Australian Qualifications Framework Register (Australian qualifications only)
 - Check the website of the higher education institution to make sure it is accredited
 - Check for a listing in the International Handbook of Universities
 - Other resource please specify in next question
- 7. If you answered 'Other' for Question 6, please provide more details below.

PROGRESS: PAGE 6 OF 15 Next >>

Monday: April 16, 2007 [3:58:14 AM]



8. Does your institution verify the authenticity of every applicant's undergraduate degree qualification?

Yes

No

PROGRESS: PAGE 7 OF 15

Next >>

SurveyMaker.com.au :: Intelligent survey design is only a click away

Page 1 of 1

Higher Education Public Postgraduate Providers Survey - 2006

PRINT THIS PAGE

- Which of the following best describes your reasons for not verifying the authenticity of every applicant's undergraduate degree qualification? (Please check all that apply)
 - Qualifications must be notarised by a Justice of the Peace (or equivalent) and are therefore already
 - ☐ IDP and/ or our Agents verify the authenticity of the qualifications for us (Overseas students only)
 - It is not our responsibility to verify the authenticity of candidates degree qualfications
 - We trust candidates to be truthful when purporting to hold a degree qualification
 - The process of verification takes too long we do not have time to wait
 - We do not know who to contact in the institutions in order to perform the verifications
 - Australian qualifications do not need to be verified (Australian qualifications only)
 - Other reason please specify in next question
- 10. If you answered 'Other' to Question 9, please provide more information below.

PROGRESS: PAGE 8 OF 15

Next >>

Monday: April 16, 2007 [4:05:23 AM]



12.	Which of the following most accurately describes the method(s) your institution follows in order to verify the authenticity of an applicant's undergraduate degree qualification? (Select all the options that may apply):
	Resume or CV provided by the candidate
	Photocopy of degree certificate and/or academic transcript provided by the candidate
	Notarised (le authentication by a Justice of the Peace, or equivalent authority) photocopies of degree certificate and/or academic transcript
	Original copies of degree certificate and/or academic transcript provided by the candidate
	Original copies of degree certificate and/or academic transcript provided by the higher education institution
	Verbal confirmation of degree certificate and/or academic transcript provided by the higher education institution
	Faxed confirmation of degree certificate and/or academic transcript provided by the higher education institution
	E-mail confirmation of degree certificate and/or academic transcript provided by the higher education institution
	Copies of qualifications verified by IDP or equivalent authority
	Copies of qualifications verfied by an authorised Agent
	Other
13.	If you answered 'Other' for Question 12 above, please provide more details below
14.	For the purposes of this survey, let's assume that your institution is unable to authenticate an
	applicant's undergraduate degree qualification through any of the procedures outlined in Question 12 & 13 (above). Which of the following best describes your next steps?
	The applicant cannot be considered for admission
	Information provided by the applicant is considered sufficient

PROGRESS: PAGE 10 OF 15 Next >>

Monday: April 16, 2007 [3:58:53 AM]

The admission process is put on hold until a verification can be undertaken

The applicant is offered the position, on the provision a verification is undertaken later



15. Has your institution EVER found an applicant with an undergraduate degree qualification that could not be authenticated?

Yes

No

PROGRESS: PAGE 11 OF 15 Next >>

SurveyMaker.com.au :: Intelligent survey design is only a click away

Page 1 of 1

Higher Education Public Postgraduate Providers Survey - 2006



PRINT THIS PAGE

16. Approximately what percentage of total degree verifications, per year, are found to be NOT authentic?

Less than 1%

1% to 5%

6% to 10%

11% to 15%

16% to 20%

More than 20%

17. Which of the following best describes your institutions procedure after discovering a potential applicant possessed an undergraduate degree that was not authentic?

Applicant is not admitted into the program and informed of the reason

Applicant is not admitted into the program and not informed of the reason

PROGRESS: PAGE 12 OF 15 Next >>

Monday: April 16, 2007 [3:59:27 AM]

2006 PRINT THIS PAGE

18.	If a system were intr would you rate the in			ticity of degree qua	lifications, how
18.1	Ease of use				
	Not at all important	Not important	Neutral	Important	Very important
18.2	Cost of use				
	Not at all important	Not important	Neutral	Important	Very important
18.3	Accuracy in verification				
	Not at all important	Not important	Neutral	Important	Very important
18.4	Speed of verification				
	Not at all important	Not important	Neutral	Important	Very important
18.5	Security of verification	process			
	Not at all important	Not important	Neutral	Important	Very Important
18.6	Ability to verify oversea	as qualifications			
	Not at all important	Not important	Neutral	Important	Very important
18.7	Ability to verify Australi	ian qualifications			
	Not at all important	Not important	Neutral	Important	Very important

PROGRESS: PAGE 13 OF 15 Next >>

Monday: April 15, 2007 [3:59:41 AM]

PRINT THIS PAGE

19.	How useful and er problem of fake d	ffective do you think the egrees?	e following method	ds would be in mi	nimising the
19.1	Requiring candidate	s to provide notarised cop	ies of qualifications		
	Not Useful	Limited usefulness	Uncertain	Useful	Very Useful
19.2	Requiring candidate	es to provide original copie	s of qualifications		
	Not Useful	Limited usefulness	Uncertain	Useful	Very Useful
19.3	Checking with the in	nstitution that conferred th	ne degree via phone	, fax or email	
	Not Useful	Limited usefulness	Uncertain	Useful	Very Useful
19.4	Putting microchips	into the degree parchment	so there is a perma	nent record	
	Not Useful	Limited usefulness	Uncertain	Useful	Very Useful
19.5	The use of polymer academic records	paper (similar to bank no	tes) so as to minimis	se falsification and a	alteration of the
	Not Useful	Limited usefulness	Uncertain	Useful	Very Useful
19.6	An online, web base	ed verification system that	links to institution's	databases	
	Not Useful	Limited usefulness	Uncertain	Useful	Very Useful

PROGRESS: PAGE 14 OF 15 Next >>

Monday: April 16, 2007 [4:00:08 AM]



PRINT THIS PAGE

Fax verification		
Letter verification		
Email verification		
Web-based verification		
Telephone verification		

SurveyMaker.com.au :: Intelligent survey design is only a click away

Page 1 of 1

Higher Education Public Postgraduate Providers Survey - 2006



PRINT THIS PAGE

THANK YOU :.

Thank you for participating in the survey.

I shall send you a full copy of the survey's findings once completed.

Kind regards,

George Brown PhD candidate The University of Adelaide george.brown@student.adelaide.edu.au Tel: 0411 037 800

Log Off

Appendix 42 – Survey instrument for the Delphi Panel

SurveyMaker.com.au :: Intelligent survey design is only a click away

Page 1 of 1

Delphi expert panel survey - Round 1 - 2006

PRINT THIS PAGE

Email address:

Passcode:

Login



Click here for SurveyMaker's Privacy Policy.

PLEASE NOTE :.

- · The survey should take approximately 10 minutes to complete.
- The survey is confidential. For more information click here.
- Contact: George Brown (email: george.brown@student.adelaide.edu.au).
- This survey will open for access on 26/06/2006.
- This survey will close on 07/07/2006.

SurveyMaker.com.au :: Intelligent survey design is only a click away

Page 1 of 1

Delphi expert panel survey - Round 1 - 2006



IMPORTANT INFORMATION :.

Thank you for participating in this Delphi expert panel survey. This survey is Round 1. The survey is broken into two sections.

Section 1 lists a range of resources and methods which can be used to determine the ACCEPTABILITY of an academic qualification.

Section 2 lists a range of resources and methods which can be used to determine the AUTHENTICITY of an academic qualification.

For both sections, you are asked to rate the level of perceived risk an organisation may place itself in when using each particular resource or method. Please proceed to the next page...

Cancel

Continue

Delphi expert panel survey - Round 1 - 2006



SECTION 1

This section contains a list of resources and/ or methods which have been used by individuals in order to determine the ACCEPTABILITY of a qualification.

For each item, please indicate the level of risk you believe an individual may be placing themselves in when using this resource/ method in relation to the possibility of accepting a non-official qualification. Please assume that only this resource/ method is used to make an assessment and the qualification presented may come from any institution in the world.

For each item you MUST also tick the 'Other' box and provide a very brief reason as to why you chose that level of risk or why you could not provide a response.

1.	Commonwealth Universities Yearbook published by the Association of Commonwealth Universities, UK.
	☐ No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify
2.	Bears Guide to Earning Degrees by Distance Learning
	□ No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify
3.	Check with the Ministry of Education (or equivalent authority)
	☐ No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify

No	risk
☐ Mo	derate risk
Sut	ostantial risk
Ext	reme risk
☐ No	judgement
Oth	er, please specify
. AQF	tegister for verification of Australian Institutions only (located at http://www.aqf.edu.
AQF R	
□ No	
No Mod	risk
No Mod	risk Jerate risk
No Mod	risk Jerate risk Stantial risk
No Mod	risk Jerate risk stantial risk reme risk

PROGRESS: PAGE 1 OF 4

Next >>

Delphi expert panel survey - Round 1 - 2006



6.	Check the institution's website to make sure it is accredited
	□ No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify
7.	International Handbook of Universities published by the International Association of Universities (IAU), Paris
	No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify
8.	The Professional Association decides which qualifications are deemed acceptable
	☐ No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify
9.	Universities Admissions Centre determine acceptability for us. (Note - each state and territory of Australia has an official university admissions centre which is staffed by credential evaluators)
	□ No risk
	Moderate risk
	Substantial risk
	Extreme risk

	☐ No judgement
	Other, please specify
10.	Use the NARIC to verify for us
	☐ No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify
11.	FAIMER International Medical Education Directory
	No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify

No. of Concession, Name of Street, or other Designation, Name of Street, Name	
PROGRESS: PAGE 2 OF 4	Next >>

Monday: April 16, 2007 [6:23:00 PM]

Delphi expert panel survey - Round 1 - 2006



SECTION 2

The following is a list of resources/ methods used by individuals in order to determine the AUTHENTICITY of academic qualifications.

For each item please indicate the level of risk you believe an indvidual may be subjecting themselves to in relation to possibly accepting a faisified academic qualification. Please assume that only this method/item is used.

For each item you MUST also tick the 'Other' box and provide a brief reason for your rating choice or why you could not provide a response.

1	 Photocopies of original academ the candidate. 	nic documents certified by a Justice of the Peace and provided by
	No risk	
	Moderate risk	
	Substantial risk	
	Extreme risk	
	No judgement	
	Other, please specify	
1	 Photocopies of original academ 	nic documents provided by the candidate.
	☐ No risk	
	Moderate risk	
	Substantial risk	
	Extreme risk	
	No judgement	
	Other, please specify	
1	14. Verbal confirmation of a candid	dates academic record provided by the conferring institution.
	No risk	
	Moderate risk	
	Substantial risk	
	Extreme risk	
	No judgement	
	Other, please specify	

not copies but original	documents)				
No risk					
Moderate risk					
Substantial risk					
Extreme risk					
No judgement					
Other, please specify					
5. Original academic docu original documents)	ments provided by	y the candi	date. (Note: These	are not co	ples but
No risk					
Moderate risk					
Substantial risk					
Extreme risk					
No judgement					
Other, please specify					
7. Email confirmation of a	cademic document	tation prov	ided by the conferm	ing institu	tion
☐ No risk					
Moderate risk					
Substantial risk					
Extreme risk					
No judgement					
Other, please specify					
		F	PROGRESS: PAGE 3		Next >>

Delphi expert panel survey - Round 1 - 2006



18.	Curriculum Vitae provided by the candidate.
	No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify
19.	Faxed confirmation of academic documentation provided by the conferring institution
	No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify
20.	Copies of academic documents verified by a representative of IDP Australia (Note: IDP is Australian recruitment agency - see http://www.idp.com)
	No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify
21.	Copies of academic documents verified by an authorised education agent
-	
	No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement

	Other, please specify
22.	Professional Associations verify the authenticity of academic documents
	☐ No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify
23.	Use Qualsearch to verify authenticity (Note: This is a new web based online verification system linking only Australian universities together, see http://www.qualsearch.com.au)
	No risk
	Moderate risk
	Substantial risk
	Extreme risk
	No judgement
	Other, please specify
	Cities, please specify

PROGRESS: PAGE 4 OF 4 Submit

Monday: April 16, 2007 [6:25:48 PM]

Delphi expert panel survey - Round 1 - 2006



THANK YOU :.

Thank you for participating in the survey.

Your responses will now be collated and a summary will made available for Round 2 of the survey. I will be in touch soon.

Kind regards,

George Brown PhD candidate The University of Adelaide george.brown@student.adelaide.edu.au Tel: (+61)(0)411 037 800

Log Off

Appendix 43 – Theory pertaining to communities of practice

Defining a community of practice

A community of practice is defined as a group of people who are informally bound over a period of time with a common sense of purpose, seeking to share common expertise and passion for knowledge in a given area (Wenger and Snyder 2000). They are networks of individuals which identify issues of common concern that have both individual and joint meaning, and are prepared to share resources and approaches in order to reach a common goal. Individuals are drawn together in order to share opportunities or problems, and the need to learn from each other. In order for a community of practice to be defined as such, three characteristics are crucial (Wenger 2002, p.2339; 2004):

- 1) **The domain**—A community of practice is built upon a domain of shared knowledge being a common focus. Membership of the community implies a minimum level of knowledge of interest and knowledge in the domain and shared competence in the area:
- 2) The community Members engage in joint activities, discussion and help each other by sharing information and building relationships that enable collective learning. Members do not have to have the same job, title or level of expertise and whilst they may work alone, they join to share information and build on the domain of knowledge in their own shared manner;
- 3) **The practice** Members do not join just to share common interests. They join to develop a shared repertoire of resources, experiences, stories, tools, ways of addressing recurring problems they share practice, which anchors the learning into what they perform. Community members develop, over time, a knowledge base which is used and built upon to share new experiences.

The above three aspects, in combination, are what enable communities of practice to manage the knowledge that is created within them (Wenger 2004). The cultivated knowledge is disseminated both inwardly and externally so that other interested parties may assess their own competence and determine if they are eligible to join the community. Communities of practice are developed around shared issues that matter to individuals, and they share this knowledge in a free-flowing, creative manner which is designed to foster new approaches to problems (Wenger and Snyder 2000, p.140). The practices that results within these communities reflect the members' own understanding of what is important and operates fundamentally as a self-organizing system (Wenger 1998a).

Communities of practice differ considerably from what would be termed other formal and informal groupings of individuals. Wenger (2002) found that communities of practice possessed an enduring character as a social structure, with the capacity of accumulating collective cultural resources over a period of time. In seeking to delineate a community of practice from other commonly known models of formal/information relationships, Wenger & Snyder (2000, p.142) provided a useful comparative structure as below:

	What's the purpose?	Who belongs?	What holds it together?	How long does it last?
Community of Practice	To develop members' capabilities; to build and exchange knowledge	Members who select themselves	Passion, commitment, and identification with the group's expertise	As long as there is interest in maintaining the group
Formal work group	To deliver a product or service	Everyone who reports to the group's manager	Job requirements and common goals	Until the next reorganisation
Project Team	To accomplish a specified task	Employees assigned by senior management	The project's milestones and goals	Until the project has been completed
Informal network	To collect and pass on business information	Friends and business acquaintances	Mutual needs	As long as people have a reason to connect

In developing this community of practice addressing qualification fraud, the author hypothesises that these individuals will learn together by focusing on problems that are directly related to their work, which will make their jobs easier and effective in the long term. It is therefore envisaged that this community of practice will be self-perpetuating as new knowledge is generated on qualification acceptability and fraud and its associated approaches/solutions, this will be shared and reinforce the group which shall renew itself (Wenger and Snyder 2000, p.143)

The community of practice model proposed will bring academia and industry together, sharing best practice approaches to qualification verification and authentication from around the globe. In order to achieve this, the community of practice must create shared benefit; this achieved through knowledge management.

Knowledge management; the key aspect of a community of practice

Knowledge is defined simply as what individuals know. Studies addressing knowledge management define this as a mental process of comprehension, understanding and learning occurring solely in the mind. Whilst individuals constantly interact with the world outside ones own mind, knowledge is explicitly inherent within the individual (Wilson 2002). This study has demonstrated that there is significant amount of research, data, resources, systems, policies and practices that have been developed around the world in order to address the problem of qualification verification and authentication. Chapter 5 profiled the global 'pockets' of information, designed to be control systems either developed or under development, under the guidance of local governments, public and private enterprises. The author argues that since the provision of higher education is now borderless, so too are the issues of qualification verification and authentication. There exist generic bodies of knowledge that transcend country borders and affect all stakeholders involved in assessing

academic credentials. Networking and expanding these 'pockets' of information and transforming them into global knowledge banks has the potential to benefit all stakeholders throughout the world. In order to capture this information, research surrounding 'knowledge management' has determined that communities of practice are the cornerstone and social fabric of knowledge (Wenger 2004).

According to Wilson (2002), research on knowledge management did not emanate until the late eighties. Undertaking an incisive critique of journal and research articles on the topic, he determined that many of the leading researchers in the field separated, quite purposely, knowledge from information. Miller (cited in Wilson 2002) found that knowledge was a completely human function, being the dissemination of meaning from information. The classicist Drucker (cited in Wilson 2002) scoffed at the proposition of knowledge management, arguing that knowledge cannot be managed and existed, 'between two ears, and only between two ears'. Further critiquing information gleaned from a range of top management consultancy firms and ivy league business schools, Wilson (2002) found that 'knowledge management' and 'information management' were used synonymously, and in error. Allee (2000) saw the development of knowledge as a social phenomenon. She argued that knowledge travels through language, with conversations being an experiment in knowledge creation and testing.

Central to knowledge management is the capturing of both tacit and explicit knowledge. Tacit knowledge is the wealth of 'know-how' that resides in people's minds, deeply rooted in their life experience and learning, an unconscious pool of information that has the potential to be transformed into explicit knowledge. Explicit knowledge is that which gets deliberately shared, documented and communicated. This is also sometimes seen as codified and structured information (Kimble, Li and Barlow 2000). Researchers in the field of knowledge management insist that there is no knowledge outside of people. Externalized knowledge, it is claimed, is only information (Allee 2000). To provide meaning to knowledge (Wenger 1998b, p.62) contended that it was the duality of participation between participants and the reification process of knowledge through these interactions which provided meaning to individuals. In order to manage the risks identified in this study, they must become part of everyday work culture (ICAC 2002a, p.17), and these are present within both higher education and recruitment agencies work requirements. The determination of qualification acceptability and authenticity is central to their roles, and it is clear that they would benefit from learning and researching information in the area.

Communities of practice as learning and research tools

A community of practice is used primarily as a learning tool, with its underpinning roots evolving out of research pertaining to the apprenticeship model of learning (Lave and Wenger 1991). Further studies have determined that a complex set of social relationships emanated from the surrounding community and this acts as a living, breathing curriculum for the apprentice. Learning therefore takes place in a dynamic environment, and everyone within the community is affected and obtains a form of 'shared competence' (Wenger 2002). Learning is therefore seen as a dynamic, two-way relationship between people and the community, a transformational process, which created social structures. This approach is seen most beneficial for the changing and complex area of academic qualification acceptability and authenticity.

Appendix 44 – Theory pertaining to virtual communities of practice

The transition from physical to virtual communities

Many advantages have been provided for the use of virtual communities of practice as a natural progression from physical face to face models. Learning through the acquisition of tacit knowledge obtained actively through peers has been acknowledged as a more effective approach to knowledge acquisition rather than through mere maintenance of documentation and databases which lacks in adequate background to provide meaning and relevance to the individual (Mitchell, Wood and Young 2001). In order to engage in this transformational sharing of learning in the area of qualification acceptability and authenticity, the use of virtual communities is seen as most advantageous.

Research by Hildreth and Kimble (2004, p.xii) found that the Internet provided a single, convenient and flexible platform to support communities of practice, but at the same time, made it difficult for participants to know the scope and range of their 'virtual' networks. The transition of a community of practice into a virtual world is seen by Brown and Duguid (cited in Hildreth and Kimble 2004) as a Network of Practice (NOP), a network extending beyond the immediate business environment. This concept was further extended by Teigland and Wasko (2004a) who used the term 'Electronic Network of Practice'. Their research compared traditional communities of practice with geographically dispersed electronic knowledge exchange using the community of practice model, with the key challenge of '...turning an empty electronic space into a vital, active forum devoted to knowledge exchange' (Teigland and Wasko 2004a). In their research, Snyder & Wenger (in Conner and Clawson 2004) found that communities of practice typically engaged in an ecology of community learning activities that ranged from face-to-face to virtual; formal and informal; public and private.

In developing a community of practice for a large corporate bank in Australia and New Zealand, Hinton (2003) found that a simple email platform was deemed the most effective and appropriate for its various sub-communities. Citing significant early, voluntary take-up, a major draw back was that email was not stored in a central repository where threads could be reviewed for later use. In order for a community of practice to transition into the virtual environment and become an 'electronic network of practice', Teigland and Wasko (2004a, p.232) asserted that knowledge exchange needed to occur in the following fashion:

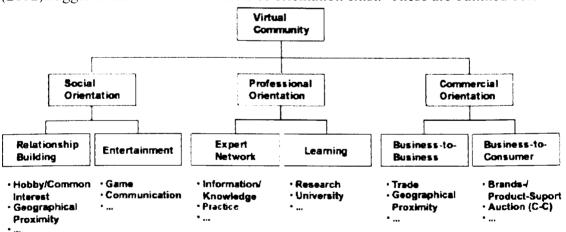
- 1. Active mutual engagement is recorded in forums where individuals may share ideas, solve problems and interact. This is opposed to static databases and other forms of document stores where group interaction is minimal, sporadic and knowledge bases remain relatively unshared;
- 2. Knowledge is exchanged though both synchronous but, primarily, through asynchronous methodologies. This allows participants to communicate with a far wider group and increases the chances of connecting with an individual in a position to assist. The threads of discussion are maintained for later searching and knowledge building, creating a 'repository' of knowledge which is accessible at all times.
- 3. Participation in the ENOP is voluntary and open to anybody throughout the world who shares a common interest in the domain of knowledge. This is opposed to other forms of virtual teams which are organised to produce a required product or service

4. Participants are generally strangers, and information is shared regardless of familiarity. This is opposed to standard cop groupings, where members generally know each other and form a group due to a shared knowledge of each other.

Mitchell, Wood and Young (2001, p.18) observed that while online communities of practice could be developed, they should be seen as sub-sets of physical organisational communities of practice. With the increased usage of internet technologies, increased bandwidth and new types of communication tools, the author contends that a virtual community of practice does not necessarily have to be a sub-set, but a community of practice in its own right. Results from this study suggest that recruitment agencies and higher education providers would prefer to use Internet technologies as a communication tool for qualification verification as opposed to other forms of traditional communication devices. Participants would thusly be able to enjoy what Wenger (1998b) termed, legitimate peripheral participation as a learning technique. Participants will engage with each other through interactions in a virtual world and provide meaning to their work via interactions with others. The objective of this activity is to reify tacit knowledge held within individuals (Wenger 1998b, p.58) and imbue this across the global virtual community of practice. This would therefore be transformed into meaningful information that can be shared with stakeholders across the globe. In order to maximise the take-up of information in a virtual community of practice, it is necessary to choose the most appropriate model for interaction.

Models for a virtual community of practice

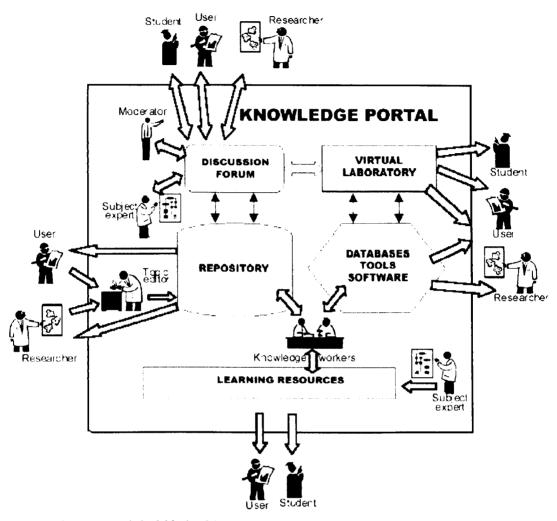
In developing a typology of operational virtual community of practice networks, Markus (2002) suggests that three main models of orientation exist. These are outlined below:



The research conducted by Markus (2002) found that the greater pecuniary interest members of the virtual community of practice had, the lower their level of commitment. Members of professionally oriented virtual communities had a lower level of commitment to a particular community, since they were usually members of several communities on one subject area. By consulting a larger information offering in several virtual communities, the time that members spend in each individual community is reduced, as is their allegiance and the level of commitment. These findings suggest that the proposed model for this study should not have any financial aspect involved with relation to membership, however the opportunity does exist for background promotion of other fee based tools.

At an operational level of a community of practice, research suggests that 'rhythms' are important aspects of a virtual community of practice. Rhythm consists of various

communiqués i.e. weekly listservs announcements, regular back channel emails and phone calls, bi annual meetings etc. This ecology of interactions was seen by Snyder & Wenger as providing multiple levels of interaction which provided for a 'presence' for the members and reinforced their belonging and identity within the community, a foundation for collective learning and collaboration. Visually, this could be depicted in the following model:



Source: Kondratova and Goldfarb (2004, p.3)

The author conducted an assessment of the many virtual communities of practice currently offered. Most appear to be commercial in nature (subscription fee based) which limits participation, ranging to free to air semi-moderated forums which are operated by individuals with vested interests and narrow perspectives. The new proposal offered in this research aims to position itself between both these two models, with a professional orientation hosted by the neutral position of UNESCO. Having this impartial body hosting the virtual community will allow for the domains of knowledge to be in the public arena and maintained for the 'public good' (Teigland and Wasko 2004b, p.234).

Appendix 45 – Sample list of proposed users of the GRIPAAAQ

AACRAO -- American Association of Collegiate Registrars and Admissions Officers - http://www.aacrao.org

ACA – Academic Cooperation Association – Belgium - http://www.aca-secretariat.be

AIEA -- Association for International Education Administrators - http://www.aieaworld.org

ASIE - Association for Studies in International Education - http://www.asie.org

ACPET – Australian Council for Private Education and Training – http://www.acpet.edu.au American Councils - http://www.americancouncils.org

AMPEI – Associacion Mexicana para la Educaion Internacional – Mexican Association for International Education - http://www.edumexico.org/ampei/home.php

ANZSSA - Australian and New Zealand Student Services Association Inc

http://www.adcet.edu.au/anzssa/default.aspx

ANZCIES The Australian and New Zealand Comparative Education http://www.anzcies.org

ATEM – Association for Tertiary Education Management - http://www.atem.org.au

AHRI - Australian Human Resource Institute - http://www.ahri.com.au

All private providers of higher education – Admission staff

All public providers of higher education – Admissions staff

All Private Background screening companies

ACTAC - Australasian Conference of Tertiary Admissions Centres - http://www.actac.edu.au

ADCET - Australia and New Zealand Student Services Association Inc -

http://www.adcet.edu.au/anzssa/default.aspx

AUA - Association of University Administrators – http://www.aua.ac.uk

BCCIE - British Columbia Centre for International Education - http://www.bccie.bc.ca

CBIE - Canadian Bureau for International Education - http://www.cbie.ca

CERC - Comparative Education Research Centre, Hong Kong -

http://www.hku.hk/cerc/index.htm

CONAHEC -Consortium for North American Higher Education Collaboration

http://www.conahec.org/conahec/index.jsp

CORIS by Transparency International – see http://www.corisweb.org/article/archive/334

EAIE – European Association for International Education - http://www.eaie.nl

ENIC/NARIC - http://www.enic-naric.net

European Students Association - http://www.aegee.org

European University Association - http://www.eua.be/eua/index.jsp

ERASMUS - Student network - http://www.esn.org

EURYDICE - Information Network on Education in Europe http://www.eurydice.org

FIBS - Institute of Education and Socio-Economic Research and Consulting http://www.fibs-koeln.de/eindex.html

IAU - International Association of Universities http://www.unesco.org/iau

ISANA – International Education Association Inc. - http://www.isana.org.au

IDP Education- http://www.idp.edu.au

IEAA - International Education Association of Australia - http://www.ieaa.org.au

HE - Institute of International Education - http://www.aieaworld.org

IEAC - International Educators Association, Canada - http://www.ieac.ca

JAFSA – Japan Network for International Education - http://www.jafsa.org

NOOSR/AEL - National Office of Overseas Skills Recognition, Australian Education

International - http://aci.dest.gov.au/AEI/QualificationsRecognition/default.htm

NACES - National Association of Credential Evaluation Services http://www.naces.org

NAFSA – Association of International Educators - http://www.nafsa.org

NASPA – Student Affairs Administrators in Higher Education http://www.naspa.org/

NUFIC – Netherlands Organization for International Cooperation in Higher Education - http://www.nuffic.nl

RCSA – Recruitment and Consulting Services Association of Australia and New Zealand - http://www.rcsa.com.au

USIS – United States Intelligence Services http://www.usis.com

UA - Universities Australia - http://www.universitiesaustralia.edu.au

UNESCO – United Nations Educational, Scientific and Cultural Organization – http://www.unesco.org

UK NARIC - National Recognition Centre for the UK - http://www.naric.org.uk

WCCES - World Council of Comparative Education Societies -

http://www.hku.hk/cerc/wcces

US Dept of Ed Network http://www.ed.gov/about/offices/list/ous/international/usnei/edlite-index.html

UMAP – University Mobility in Asia and the Pacific - http://www.umap.org

UKCOSA - Council for International Education - http://www.ukcosa.org.uk

http://www.ncci-cu.org/Visitors/Events/AnnualMeeting/confindex.cfm

WES - World Education Services - http://www.wes.org

Online Mailing lists:

IERES-L

EAIE

AIEA

MOBILE

Inted-L

Inter-L

ASHEINTERNTL

SECUSS-L

INTERNATIONAL-OFFICERS

References

80 Percent Of Physicians From DR Congo Fake - Association (2006). <u>Angola Press</u>. Luanda: Accessed 26/4/06 online at http://www.angolapress-angop.ao/noticia-e.asp?ID=435282.

AACRAO (1987). Misrepresentation in the Marketplace: Recognizing Fraudulent Credentials. Washington D.C., American Association of Collegiate Registrars and Admissions Officers: 32.

AACRAO (2006a). AACRAO Files Lawsuit to Protect the Association's Trademarks, American Association of Collegiate Registrars and Admissions Officers.

AACRAO (2006b). <u>Guide to Bogus Institutions and Documents</u>. Washington D.C., American Association of Collegiate Registrars and Admissions Officers.

AACRAO (2006c). <u>The Registrar's Guide: Evolving Best Practices in Records and Registration</u>. Washington D.C., AACRAO.

Aamodt, Mike (2003). How Common is Resume Fraud? in Assessment Council News. Alexandria, VA, IPMA-HR Assessment Council: Accessed 22/2/06 online at http://www.ipmaac.org/acn/acn_0302.pdf.

Abagnale, Frank W. (2000). <u>Catch me if you can: the amazing story of the youngest and most daring con man in the history of fun and profit</u>. Netley, South Australia, Bantam Books.

Abel, Charles F. and Sementelli, Arthur J. (2002). "Academic background and admissions to American universities." New Directions for Higher Education (117): 53-56.

Abela, Paul and Ozog, Conrad (2000). <u>But will this degree be recognised? Recognition of Australian degrees overseas for postgraduate study</u>. Towards 2001: an education odyssey: 14th Australian International Education Conference, Brisbane Convention and Exhibition Centre, Queensland 8-11 August 2000, Accessed 9/11/05 online at http://pandora.nla.gov.au/pan/23566/20020424/classic.idp.com/conf2000/papers/day1/session4/1433_Ozog-Abela.pdf.

Academic Credential Falsification (2003). <u>Chapter 139 - Education</u>: Accessed 4/5/06 online at http://www.legis.nd.gov/assembly/58-2003/session-laws/documents/EDUCA.pdf.

Adam, Stephen (2001a). Transnational Education Project. Report and Recommendations. Brussels, Confederation of European Union Rectors' Conferences.

Adam, Stephen (2001b). Transnational Education Project. Report and Recommendations, Confederation of European Union Rectors' Conferences: Accessed 16/3/06 online at http://www.esib.org/prague/documents/transnational_education_project.pdf.

Adam, Stephen (2002). <u>Too much or just right: how can information for recognition be improved?</u> Council of Europe Seminar on Recognition Issues in the Bologna Process, 11-12 April, Lisbon, Portugal.

Adams, John (1995). Risk. London, UCL Press.

Adams, Jonathan and DeFleur, Margaret H. (2005). "The Acceptability of a Doctoral degree earned online as a credential for obtaining a faculty position." The American Journal of Distance Education 19(2): 71-85.

Adams, Jonathan and DeFleur, Margaret H. (2006). "The Acceptability of Online Degrees Earned as a Credential for Obtaining Employment." Communication Education 55(1): 32-45.

Adams, Jonathan and Eveland, Vicki (2007). "Marketing online degree programs: How do traditional-residential programs compete?" <u>Journal of Marketing for Higher Education</u> **17**(1).

Adán, Eva-Angela (2004). The Forensics of Academic Credential Fraud Analysis and Detection: Accessed 3/9/05 online at http://www.adsec.nafsa.org/fraud.pdf.

Adán, Eva-Angela (2006). The Forensics of Academic Credential Fraud Analysis and Detection. <u>Guide to Bogus Institutions and Documents</u>. Washington DC, American Association of Collegiate Registrars and Admissions Officers: 5-21.

ADP (2004). 2004 ADP Hiring Index: The Importance of Screening and Selection, Automatic Data Processing Inc.: Accessed online 17/4/05 at http://www.adp.com/corporate/es/email/scrselA.asp.

Adviser's qualifications - McSweeney must provide explanation (2005). <u>Irish Examiner</u>. Accessed 11/11/05 online at http://www.examiner.ie/pport/web/opinion/Full_Story/didsgeDC1uAYVB6Msgdq-nXlDAyFE.asp.

AEI (2004). China Blacklists More Illegal University Qualification Websites. Canberra, Department of Education Science and Training, Australian Education International.

AEI (2005). AEI-NOOSR Launches Qualifications Assessment Online. Canberra, Accessed 1/07/05 online at http://aci.dest.gov.au/AEI/MIP/ItemsOfInterest/05Interest40.htm.

AEI (2006a). April 2006 International Student Enrolment Data. Canberra, Australian Education International: Accessed 17/06/06 online at http://aei.dest.gov.au/AEI/MIP/ItemsOfInterest/06Interest26.htm.

AEI (2006b). International Student Enrolments in Higher Education in 2005. Canberra, Australian Education International: Accessed 17/6/06 online at http://aei.dest.gov.au/AEI/PublicationsAndResearch/Snapshots/08SS06_pdf.pdf.

Ahn, Justin (2004). Pentagon check reveals fraudulent degree; Job applicant could have landed position renovating the Department of Defence. <u>Diamondback Online, University of Maryland</u>: Accessed 25/5/06 online at http://www.nslc.org/colleges/dv/pdfs/Diamondback_040104.pdf.

Alatas, Syed Hussein (1968). <u>The Sociology of Corruption</u>; <u>The Nature, Function, Causes and Prevention of Corruption</u>. Singapore, Donald Moore Press Ltd.

Allee, Verna (2000). "Knowledge Networks and Communities of Practice." <u>OD Practitioner;</u> <u>Journal of the Organization Development Network</u> **32**(4): Accessed 12/09/05 online at http://www.odnetwork.org/odponline/vol32n4/knowledgenets.html.

Allen, I. Elaine and Seaman, Jeff (2006). Making the Grade: Online Education in the United States, 2006. Needham, MA, Babson Survey Research Group & The Sloan Consortium: Accessed 11/11/06 online at http://www.sloan-c.org/publications/survey/index.asp.

Allen, Joseph Baneth (2004). Resume fraud by job applicants on the rise. <u>Charleston Regional</u> Business Journal. Accessed 1/6/04 online at http://www.charlestonbusiness.com.

Allianz (2005). Good qualifications are number one life aim for Germans. Munich, GfK Market Research: Accessed 8/12/05 online at http://www.allianz.com/azcom/dp/cda/0,,965908-44,00.html.

Allison, Lisa (2005a). 'Nurse' used forged papers to work. The Advertiser. Adelaide: 5.

Allison, Lisa (2005b). Stevens in hiding over fake nurse. The Advertiser. Adelaide: 13.

Alsever, Jennifer (2004). U.S. Congressional Committee to Probe Use of Fake Diplomas by Federal Workers. <u>Denver Post, The (CO)</u>.

Alsop, Ronald (2006). Recruiters Are Holding M.B.A.s To Higher Standards of Integrity. <u>CareerJournal.com</u>; <u>Wall Street Journal</u>. New York: Accessed 24/3/06 online at http://www.careerjournal.com/myc/school/20060321-alsop.html?cjpos=home_whatsnew_minor.

Altbach, Philip G. (1999). Comparative Perspectives on Private Higher Education. <u>Private Prometheus: Private Higher Education and Development in the 21st Century</u>. P. G. Altbach. Westport, CT, Greenwood Press: 1-14.

Altbach, Philip G. (2002). "Knowledge and Education as International Commodities: The Collapse of the Common Good." <u>International Higher Education</u> **28**(1): Accessed 12/8/06 online at http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/News28/text001.htm.

Altbach, Philip G. (2004). "The Question of Corruption in Academe." <u>International Higher Education</u> **34**(Winter).

Altbach, Philip G. (2005). Stench of rotten fruit fills groves of academe. <u>Times Higher</u> Education <u>Supplement</u>: 12.

Altbach, Philip G. (2006). Globalization and the University: Realities in an Unequal World. <u>International Handbook of Higher Education</u>. J. J. F. Forest and P. G. Altbach. New York, Springer. **1:** 121-139.

Altman, Douglas G and Bland, J Martin (1995). "Statistics notes: Absence of evidence is not evidence of absence." <u>British Medical Journal</u> **311**(7003): 485.

American Association of Collegiate Registrars and Admissions Officers vs. American Universities Admissions Program Inc and Jean Noel Prade (2006). Complaint and Application for a Temporary Restraining Order, United States District Court District of Columbia: Accessed 9/2/06 online at http://www.aacrao.org/reporting/complaint.pdf.

Anderson, D., Johnson, R. and Milligan, B. (2000). Quality Assurance and Accreditation in Australian Higher Education: An assessment of Australian and international practice. Canberra, Department of Education, Training and Youth Affairs.

Anderson, Kyle (2004). Fake Diplomas Could Put Your Career At Risk. <u>NBC 4</u>. Columbus, Ohio: Accessed 27/5/05 online at http://wwwnbc4i.com/print/3962400/detail.html.

Andler, Edward C. (2003). The complete reference checking handbook: the proven (and legal) way to prevent hiring mistakes. New York, American Management Association.

Ansley, Greg (2006). The judge, the lawyer and the jilted prostitute. <u>New Zealand Herald</u>. Auckland: Accessed 26/8/06 online at http://www.nzherald.co.nz/section/story.cfm?c_id=2&ObjectID=10398083.

AP (2003). Bill Outlaws Fake Degrees. <u>News Channel 5</u>. Nashville, Tennessee: Accessed 18/1/04 online at http://www.newschannel5.com/news/0303/21/fakedegree.htm.

AP (2007). Universities Work to Stifle Sites Offering Phony Diplomas. 13 wibw.com. Kansas City: Accessed 20/3/2007 online at http://www.wibw.com/home/headlines/6571627.html.

APM (2005). Tertiary Education in NSW - Attitudes and Expectations of Parents, Students, Employers and Career Advisers. Sydney, APM Training Institute: Accessed 2/2/06 online at http://www.apm.edu.au/research/.

Ariano, Louis (2004). Not for Novelty Purposes: Fake Diplomas, Fraudulent Transcripts and Verification Services. ARUCC 2004 - The Service Transformation Summit. Annual Conference for the Association of Registrars of the Universities and Colleges of Canada (ARUCC), Ottawa, Ontario Canada - June 27-30 2004, Accessed 20/11/05 online at http://arucc2004.centennialcollege.ca/documents/A3.pdf.

Armour, Stephanie (2004). 28 top officials have fake degrees. USA Today: 05b.

Armstrong, J. S. (1995). "The devil's advocate responds to an MBA student's claim that research harms learning." <u>Journal of Marketing</u> **59**: 101-106.

Arnstein, G. (1982). "Credentialism: Why We Have Diploma Mills." Phi Delta Kappan 63(8): 550-552.

Arrow, K.J. (1973). "Higher Education as a filter." <u>Journal of Public Economics</u> **2**(3): 193-216.

Ashenden, D. (1992). "The Australian Skills Agenda - Productivity Versus Credentialism." <u>Educational & Training Technology International</u> **29**(3): 240-248.

Ashenden, Dean (1988). "Stop the gravy train, I want to get on: credentialism and the economy." <u>Education Australia(3)</u>: 7-9.

Ashwill, Mark A. (2006). "US Institutions Find Fertile Ground in Vietnam's Expanding Higher Education Market." <u>International Higher Education</u> **44**(Summer): 13-14.

Askins, Peggy C., Ed. (1996). <u>Misrepresentation in the Marketplace and Beyond: Ethics under Siege</u>. Madison, American Association of Collegiate Registrars and Admissions Officers (AACRAO) Task Force on Credential Fraud. Magna Publications.

Assemblyman Maze Highlights Legislative Success (2006). <u>California Chronicle</u>: Accessed 2/5/06 online at http://www.californiachronicle.com/articles/viewArticle.asp?articleID=8829.

Associated Press. (2004). Man who sold fake diplomas sentenced to eight months in prison. Mercury News. San Jose, California: Accessed 7/4/2004 online at http://www.mercurynews.com/mld/mercurynews/.

Associated Press. (2006a). Diploma mill linked to Liberian diplomats. <u>Seattle Times</u>. Spokane: Accessed 30/3/06 online at http://seattletimes.nwsource.com/html/localnews/2002879758 webnigerians21.html.

Associated Press. (2006b). Lawyer: Gov't Workers Got Fake Diplomas. <u>Washington Post</u>. Washinton DC: Accessed 14/10/06 online at http://www.washingtonpost.com/wp-dyn/content/article/2006/10/12/AR2006101200680_pf.html.

Associated Press. (2006c). RadioShack CEO quits amid resume questions. <u>MSNBC</u>. Dallas: Accessed 21/2/06 online at http://www.msnbc.msn.com/id/11465251/.

Aubert, Eric (1991). "Credential checks are adequate but beware bogus universities." Australian Campus Review Weekly(October 17-23): 5.

Aumann, Ron (2006). "Dubious degrees: organizations can avoid negative press by ensuring new employees have valid academic credentials." <u>Internal Auditor</u> **63**(2): 83-87.

Australia, Government of Western (2005a). *Inquiry into the City of Joondalup*. Inquiry under Division 2, Part 8, Local Government Act 1995. Joondalup, Western Australia, Accessed 15/10/05 online at http://www.joondalupinquiry.wa.gov.au/: 625.

Australia, Standards Association of (1999). DR 99025: Human resources management Part 1: Pre-employment checking. North Sydney, Standards Australia: Accessed 4/7/05 online at http://www.standards.com.au/catalogue/Script/Details.asp?docn=AS12688973AASS.

Australia, Standards Association of (2003). Fraud and Corruption Control (AS 8001-2003). North Sydney, Standards Australia.

Australia, Standards Association of (2005b). *Employment screening* (DR 05024). North Sydney, Standards Australia: Accessed 4/7/05 online at http://www.standards.com.au/catalogue/Script/Details.asp?DocN=MSWD05024ATCRD.

Authorities on alert for fake documents (2004). <u>Otago Daily Times</u>. Accessed 21/6/04 online at http://www.odt.co.nz.

AV-CC (2005). Key Statistics on Higher Education. Canberra, Accessed 12/06/05 online at http://www.avec.edu.au/documents/publications/stats/2005Edition.pdf.

AV-CC (2003). Integrity of Higher Education a Must - AV-CC. Canberra, Australian Vice-Chancellors Committee: Accessed 29/4/06 online at http://www.avcc.edu.au/documents/news/media_releases/2003/avcc_media_05_03.pdf.

Ayodo, Harold (2006). Commission to act on bogus universities. <u>The Standard</u>. Nairobi: Accessed 2/7/06 online at

http://www.eastandard.net/hm_news/news.php?articleid=1143954741.

Backus, Dan (1987). "Hiring Personnel: It's a Gamble." Security Management 31(9): 144.

Balnaves, Mark and Caputi, Peter (2001). <u>Introduction to quantitative research methods: an investigative approach</u>. London, Sage.

Bar on fake exam certificate man (2006). <u>BBC News</u>. London: Accessed 8/6/06 online at http://news.bbc.co.uk/1/hi/education/5055900.stm.

Bartlett, Thomas and Smallwood, Scott (2004). "The University of Spam." <u>The Chronicle of Higher Education</u> **50**(42): A14.

Baty, Phil (1997). Degrees for sale on the Internet. <u>Times Higher Education Supplement</u>. London: 1.

Baty, Phil (1999). High Court finally halts internet trade in fake degrees. <u>Times Higher</u> Education Supplement. London: 48.

Baty, Phil (2004). Whistleblowers: 'If you want to get into LSE, pay me £7,000. <u>Times Higher Education Supplement</u>. London: Accessed 14/4/06 online at http://www.thes.co.uk/current_edition/story.aspx?story_id=2016752.

Baty, Phil (2005). Alarm at the ungentlemanly claims by bogus 'university'. <u>Times Higher</u> Education <u>Supplement</u>. London: Accessed 19/8/05 online at http://www.thes.co.uk/.

Bean, Martin (2002). Will the Real Certified Candidate Please Stand Up? <u>Certification Magazine</u>: Accessed 13/4/04 online at http://www.certmag.com/issues/jan02/contrib_bean.cfm?printversion=1.

Bear, John (2000). Tilting at the diploma mills. The Australian. Sydney: 37-37 & 39.

Bear, John and Bear, Mariah (2003). <u>Bear's Guide to Earning Degrees by Distance Learning</u>. Berkley, Ten Speed Press.

Bear, John and Douglas, Richard (2000). <u>Acceptance of Degrees by Registrars of Regionally-Accredited Universities in the United States</u>. American Association of Collegiate Registrars and Admissions Officers Conference, April 2000, Seattle, Washington.

Bear, John, Koenig, Ann M. and Johansson, Erik (2004). <u>Fraud Busters International:</u> <u>Verification of Foreign Academic Records</u>. AACRAO 90th Annual Meeting, April 19-22, 2004, Las Vegas, Nevada.

Bear, Mariah P. and Nixon, Thomas (2006). <u>Bears Guide to Earning Degrees By Distance</u> Learning. Berkeley, Ten Speed Press.

Beaudin, Yves E. (2005). International Quality Provision in Cross-Border Higher Education and the Internationalization of Canadian Degree-Granting Institutions. Toronto, York University & The Council of Ministers of Education, Canada (CMEC): Accessed 23/4/06 online at http://www.yorku.ca/yorkint/global/conference/canada/papers/Yves-Beaudin.pdf. Beck, Ulrich (1999). world Risk Society. Padstow, Cornwall, Polity Press.

Becker, Gary S. (1975). <u>Human capital: a theoretical and empirical analysis, with special reference to education</u>. New York, National Bureau of Economic Research, Columbia University Press.

Bell, Emma and Taylor, Scott (2005). "Joining the club: the ideology of quality and business school badging." <u>Studies in Higher Education</u> **30**(3): 239-255.

Berg, I. (1970). Education and Jobs: the Great Training Robbery, Harmondsworth: Penguin.

Bernama (2006). Ministry Aware On Bogus Degrees. <u>Bernama.com - Malaysian National News Agency</u>. Kuala Lumpur: Accessed 4/4/06 online at http://www.bernama.com.my/bernama/v3/news.php?id=189677.

Bernasconi, Christophe (2006). The E-Apostille Pilot of the HCCA and the NNA. The Hague, Hague Conference on Private International Law: Accessed 11/5/06 online at http://hcch.e-vision.nl/upload/wop/genaff pd10e2006.pdf.

Bernoth, Ardyn (1999). \$140 buys a degree on Black's market. The Age. Melbourne: 9.

Bhushan, Sudhanshu (2006). Foreign Education Providers in India: Mapping the Extent and Regulation. Issue 38, March 2006, The Observatory on Borderless Higher Education. Association of Commonwealth University and Universities UK.: 23.

Biggs, John and Davis, Richard, Eds. (2002). <u>The Subversion of Australian Universities</u>. Wollongong, Fund for Intellectual Dissent.

Bills, David B. (1990). "Employers' use of job history data for making hiring decisions: A fuller specification of job assignment and status attainment." The Sociological Quarterly 31(1): 23-35.

Bills, David B. (1992). "The Mutability of Educational Credentials as Hiring Criteria: How employers evaluate atypically highly credentialed job candidates." Work and Occupations 19(1): 79-95.

Bills, David B. (2003a). "Credentials, Signals, and Screens: Explaining the Relationship Between Schooling and Job Assignment." <u>Review of Educational Research</u> **73**(4): 441-469.

Bills, David B. (2004). <u>Creeping Credentialism in the United States and Germany: Changing Relationships between Educational Credentials and Occupational Assignment</u>. Prepared for the International Sociological Association Research Committee on Social Stratification and Mobility (RC28), Meeting in Rio de Janeiro, Brazil, 7-9 August, 2004, Accessed 9/3/06 online at

http://scholar.google.com/url?sa=U&q=http://www.iuperj.br/rc28/papers/bills%2520rc28%25 20brazil%2520hiring%2520trends.pdf.

Bills, David W. (2003b). "Credentials, Signals, and Screens: Explaining the Relationship Between Schooling and Job Assignment." Review of Educational Research 73(4): 441-469.

Birnbaum, R. (1983). Maintaining Diversity in Higher Education. San Francisco, Jossey-Bass.

Birrell, B., Healy, E. and Kinnaird, B. (2007). "Cooks galore and hairdressers aplenty." People and Place 15(1): 30-44.

Bishop, Mandi (2004). Questionable Degrees: Too Easy To Get? <u>WAOI: San Antonio News</u>. San Antonio: Accessed 15/5/05 online at http://www.woai.com/troubleshooters.

Blair, Alexandra (2007). Don't search for essays. The Australian. Sydney: 36.

Blaug, M. (1972). "The Correlation between Education and Earnings: What does it signify?" Higher Education 1: 73.

Bloemers, Wolf and Wisch, Fritz-Helmut, Eds. (2003). <u>Research Methods in the Social Sciences</u>. Frankfurt, Peter Lang Europaisher Verlag der Wissenshaften.

Board sacks Maori TV chief executive (2002). <u>The New Zealand Herald</u>. Auckland: Accessed 31/5/02 online at http://www.nzherald.co.nz/storyprint.cfm?storyID=1842523.

Bogus degree sites shut down (2003). <u>BBC News</u>. London: Accessed 18/6/06 online at http://news.bbc.co.uk/1/hi/education/2829237.stm.

Bogus Degrees and Fake Diplomas (nd). Publication details unknown, The British Library Document Supply Centre.

Bogus document does not stop stay (2005). <u>The Age</u>. Sydney: Accessed 12/12/05 online at http://www.smh.com.au/news/National/Bogus-document-does-not-stop-stay/2005/05/08/1115491047070.html.

Bok, Sissela (1978). <u>Lying: moral choice in public and private life</u>. Hassocks, Harvester Press.

Boss of new TV channel sacked for false credentials (2002). <u>The Age</u>. Melbourne: Accessed 31/5/02 online at http://www.theage.com.au/breaking/2002/04/29/FFXRWD78L0D.html.

Boudville, S. E. (1985). "Educational credentials as a screening device: some evidence from Western Australia." <u>Professional Administrator</u> **37**(3): 22 - 36.

Bouma, Gary D. (2000). The Research Process. Singapore, Oxford University Press.

Bourdieu, Pierre and Passeron, Jean-Claude (1977). <u>Reproduction in education, society and culture</u>. London; Beverly Hills, Sage Publications.

Bowden, Roger J. (1993). "The curse of credentialism." Quadrant (Sydney) 37(9): 51-52.

Bowes, J (1984). <u>Credentialism: an exploratory study of issues and attitudes.</u> Canberra, Australia. Dept of Education and Youth Affairs.

Boylan, R.D. (1993). "The effect on the number of diplomas on their value." <u>Sociology of Education</u> **66**(3): 206-221.

Brennan, Joe and Walsh, Graham (2005). Overseas 'Irish colleges' told to stop using link. The Sunday Times. London: Accessed 14/4/06 online at http://www.timesonline.co.uk/article/0,,2095-1714732,00.html.

Bretag, T. (2007). "The emperor's new clothes: yes, there is a link between English language competence and academic standards." <u>People and Place</u> **15**(1): 13-21.

Bridges, W.P. (1996). Educational credentials and the labor market: An inter-industry comparison. <u>Generating social stratification: Toward a new research agenda</u>. A. C. Kerckhoff. Boulder, Westview Press: 173-199.

Brimble, Mark and Stevenson-Clarke, Peta (2005). "Perceptions of the Prevalence and Seriousness of Academic Dishonesty in Australian Universities." <u>The Australian Educational</u> Researcher **32**(3): 19-44.

Brooks, Kenneth W. (1979). "Delphi Techniques: Expanding Applications." <u>North Central</u> Association Quarterly **53**(3): 377-85.

Brown, David (2001a). The Social Sources of Educational Credentialism: Status Cultures, Labor Markets, and Organizations. <u>Sociology of Education</u>, American Sociological Association. **74:** 19-34.

Brown, George M. (2001b). Are virtual universities in Australia a guise for degree/diploma mills to thrive? School of Education. Adelaide, Flinders University of South Australia: 213.

Brown, George M. (2002). <u>Competing for the Cyber-Savvy: challenging the competitor you never knew you had.</u> New Times, New Approaches. 16th Australian International Education Conference, University of Tasmania, Hobart, Australia, IDP Education Australia.

Brown, George M. (2004). <u>Protecting Australia's Higher Education System: A Proactive Versus Reactive Approach in Review (1999-2004)</u>. Australian Universities Quality Forum (AUQF) 2004. *Quality in a time of change*, Adelaide, South Australia, Australian Universities Quality Agency.

Brown, George M. (2005a). An analysis of qualification verification and authentication approaches; towards a best practice systems model for Australia. *Unpublished, draft PhD thesis*. School of Professions, Faculty of Education. Adelaide, The University of Adelaide.

Brown, George M. (2005b). <u>Credential Fraud...or is it?</u> Paper presented at The HR Summit 2005, 3rd March 2005, Sydney Convention & Exhibition Centre; Sydney, Australia.

Brown, George M. (2005c). <u>Degrees of Doubt: Best practice in verifying the legitimacy and authenticity of prospective staff and student's qualifications</u>. Australian Council for Private Education and Training. National Conference; *Private Education and Training in Australia - a Fundamental Shift*. 25-27 August, 2005, Adelaide Convention Centre, Adelaide, South Australia.

Brown, George M. (2005d). <u>Degrees of doubt: legitimate, real and fake qualifications in a global market</u>. Paper presented at the Australian Tertiary Education Management Association 2005 Higher Education Update: 15th Queensland Branch Conference, Brisbane, Queensland, Australia.

Brown, George M. (2005e). "Fighting Credential Fraud. A Brief Critique of Australian and American Approaches to Qualification Verification and Authentication." World Education News & Reviews 18(5): 2.

Brown, George M. (2005f). <u>Recognition and authentication of higher education qualifications in a transnational market: sorting the cyber wheat from the digital chaff</u>. Internationalisation - Practical Solutions: A Trans Tasman work-out. ISANA International Education Association 16th International Conference, 29th November to 2nd December 2005, The Hotel Grand Chancellor, Christchurch, New Zealand.

Brown, George M. (2005g). <u>Recognition and authentication of overseas students</u> qualifications: towards a best practice model for Australia. Opportunities in a Challenging

Environment. 19th IDP Australia International Education Conference, Gold Coast Convention & Exhibition Centre, Queensland, Australia, IDP Education Australia.

Brown, George M. (2005h). <u>Recognition, regulation and governance of internet based higher education providers: beyond the Bologna Declaration</u>. Shifting Boundaries of Sovereignty: Governance and Legitimacy in the European Union and Australasia, The Australian National University, Shine Dome, Canberra, Australia.

Brown, George M. (2005i). *Three 'Controversial' Virtual Universities: Lessons from the Australian Experience*. Issue 33, August, 2005., The Observatory on Borderless Higher Education. Association of Commonwealth University and Universities UK.

Brown, George M. (2006). "Degrees of doubt: legitimate, real and fake qualifications in a global market." <u>Journal of Higher Education Policy and Management</u> **28**(1): 71-79.

Buckell, Jim (2003). Survey to target phoney operators. The Australian. Sydney: p.21.

Buckridge, Christina (2005). "New academic transcripts are safe as money in the bank." <u>Uninews; University of Melbourne</u> **14**(8): Accessed 4/5/06 online at http://uninews.unimelb.edu.au/articleid 2330.html.

Buon, Tony (1993). Occupational credentialism: employers' use of educational credentials for the selection of training professionals. <u>School of Education</u>. North Ryde NSW, Macquarie University.

Buon, Tony (1998). "The use of educational credentials for employee selection." <u>Unpublished article</u>: Accessed 26/4/04 online at http://www.buon.net/papers/credential.htm.

Buon, Tony and Compton, Bob (1990). "Credentials, credentialism and employee selection: personnel management in action." <u>Asia Pacific HRM</u> **28**(4): 126-132.

Business Council of Australia. (2006). New Concepts in Innovation: The Keys to a Growing Australia. Melbourne, Business Council of Australia: Accessed 15/3/06 online at http://www.bca.com.au/content.asp?newsid=99520.

Byrd, Shelia (2006). State officials looking into 'diploma mill' entities; Attorney General to seek certification, accreditation information. <u>Commercialappeal.com</u>. Memphis: Accessed 19/8/06 online at

http://www.commercialappeal.com/mca/desoto/article/0,1426,MCA_451_4917116,00.html.

Caldwell, Alison (2005). Calls for tighter checks for doctors. <u>ABC Online</u>. Accessed 23/4/05 online at http://www.abc.net.au.

Callahan, D. (2004a). <u>The cheating culture: why more Americans are doing wrong to get ahead</u>. Orlando., Harcourt Books.

Callahan, Shawn (2004b). Cultivating a Public Sector Knowledge Management Community of Practice. Knowledge Networks. Innovation Through Communities of Practice. P. Hildreth and C. Kimble. Hershey, PA, Idea Group Publishing: 267-281.

Calote, Robin Joyce (2001). Diploma Mills: What's the Attraction? <u>School of Education and Organisational Leadership</u>, Department of Educational Leadership. La Verne, University of LaVerne: 124.

Campion, Vikki (2005). Inquiry 'hunted' for Berg. <u>Townsville Bulletin</u>. Townsville: Accessed 19/9/05 online at http://townsvillebulletin.news.com.au/printpage/0,5942,16629245,00.html.

Capogrossi, Douglas (2002). "The Assurance of Academic Excellence among Non-traditional Universities." Higher Education in Europe **27**(4): 481-490.

Carnevale, Dan (2002). "Colleges Demand That Fakedegrees.com Remove Their Names From Its Web Site." The Chronicle of Higher Education **49**(02): A44.

Carnevale, Dan (2003a). "North Dakota Contemplates a Law Prohibiting the Use of Fake Degrees." Chronicle of Higher Education **50**(22): A41.

Carnevale, Dan (2003b). "North Dakota Lawmakers Move to Bar the Use of Fake Degrees." The Chronicle of Higher Education **49**(21): A.33.

Carnevale, Dan (2004). "Don't Judge a College by Its Internet Address." <u>Chronicle of Higher</u> Education **51**(14): A29.

Carr, Kim (2001). Senate calls for urgent action to protect students and Australian Universities. Press release and motion to the Senate. Canberra, Senate.

Castagnetti, Carolina, Chelli, Francesco and Rosti, Luisa (2005). "Educational Performance as Signalling Device: Evidence from Italy." <u>Economics Bulletin</u> **9**(4): 1-7.

Cat Gets MBA Degree From Online College (2004). <u>Local6.com</u>. Orlando, Florida: Accessed 15/10/05 online at http://www.local6.com/education/3976875/detail.html.

CBC News. (2006). RadioShack CEO quits in resumé scandal. <u>CBC News</u>: Accessed 21/2/06 online at http://www.cbc.ca/story/business/national/2006/02/20/shack-060220.html.

Challenger, Gray & Christmas. (2004). Fierce Competition Impacts Resume Language. Shorter the job list, taller the tale. Chicago, Challenger, Gray & Christmas Inc.: 4.

Chapter 410 - False Academic Degrees or Certificates (2005). <u>Sec. 1. 20-A MRSA c. 410</u>: Accessed 4/5/06 online at http://www.mainelegislature.org/legis/bills/billdocs/LD131701.doc.

CHARLES GREENHOUSE, individually and on behalf of all others similarly situated; EVELYN ROSEN; WILLIAM B. MOUK v. MCG CAPITAL CORPORATION; BRYAN MITCHELL; JANET C. PERLOWSKI; STEVEN F. TUNNEY, (2004). Alexandria, California, United States Court of Appeals for the Fourth Circuit. No: 03-2318: Accessed 21/2/06 online at http://caselaw.lp.findlaw.com/data2/circs/4th/032318p.pdf.

CHEA (2005). Degree Mills: An Old Problem and a New Threat. <u>Council of Higher Education Accreditation</u>. Washington DC: Accessed 8/6/06 online at http://www.chea.org/degreemills/paper.asp.

CHEA (2006). CHEA Update; Degree Mills. Washington DC, Council for Higher Education Accreditation: Accessed 24/9/06 online at http://www.chea.org/Government/HEAupdate/CHEA_HEA31.htm.

Chen, Wang Su (2006). Degrees: Fake or Bona Fide? Sarawak, Swinburne University of Technology Sarawak Campus: Accessed 9/6/06 online at

http://www.swinburne.edu.my/corporate/newsevent/pr/campus&beyond/cb-may0306-DegreesFakeorBonaFide.htm.

Chin, Tan Shiow (2005). Beware fake degree. <u>The Star. Petaling Jaya: Accessed 14/11/05 online at http://thestar.com.my/education/story.asp?file=/2005/11/13/education/12463888.</u>

China ready to authenticate all foreign degrees, diplomas (2005). <u>China News Service</u>. Accessed 21/8/05 online at http://www.chinanews.cn/news/2005/2005-08-16/9448.shtml.

Clabaugh, Jeff (2002). MCG Capital CEO: 'No excuse for the inexcusable'. <u>Washington Business Journal</u>. Washington DC: Accessed 21/2/06 online at http://www.bizjournals.com/washington/stories/2002/11/04/daily1.html.

Cleave, Louisa and Middleton, Julie (2002). Maori TV chief in gun over MBA degree. <u>The New Zealand Herald</u>. Auckland: Accessed 31/5/02 online at http://www.nzherald.co.nz/storyprint.cfm?storyID=1793222.

Cleave, Louisa and NZPA (2002). John Davy sent to prison for eight months. <u>The New Zealand Herald</u>. Auckland: Accessed 31/5/02 online at http://www.nzherald.co.nz/storyprint.cfm?storyID=2043885.

Clemow, Matt (2004). Jail threat for false resumes. The Sunday Mail. Adelaide: p.17.

Clifford, W. (1983). "The criminology of lying." <u>Australian Journal of Forensic Sciences</u> **16**(1): 20-25.

Cobban, A.B. (1975). <u>The Medieval Universities: their development and organization</u>. Chatham, Methuen & Co Ltd.

Cochran, Samuel W. (1983). "The Delphi Method: Formulating and Refining Group Judgements." <u>Journal of Human Sciences</u> **2**(2): 111-117.

Cohen, David (2002). Australia and New Zealand Consider Database to Combat Fake Degrees. <u>The Chronicle of Higher Education</u>. Accessed 15/4/02 online at http://chronicle.com/free/2002/03/2002030502u.htm.

Cohen, David (2004). Govt moves ahead of Newlands v Murdoch. <u>National Business Review</u>. Wellington.

Cole, MS, Field, HS and Giles, WF (2003). "What Can We Uncover about Applicants Based on Their Resumes? A Field Study." <u>Applied HRM Research</u> 8(2): 51-62.

Colla, Renzo (2006). A University in Seborga? Not really... <u>The Seborga Times</u>. Sydney: Accessed 14/5/06 online at http://seborgatimes.blogspot.com/2006/02/university-in-seborganot-really.html.

College of Physicians and Surgeons of Saskatchewan, . (2005). "Other actions relating to physicians conduct or competence." <u>College Newsletter</u> **21**(63): p.8.

Collins, Randall (1979). <u>The Credential Society: An Historical Sociology of Education and Stratification</u>. New York, Academic Press.

Conner, Marcia L and Clawson, James G, Eds. (2004). <u>Create a Learning Culture: Strategy, Practice and Technology</u>. Our World as a Learning System: a Communities-of-Practice Approach. New York, Cambridge University Press.

Contractor, Aban (2007). Production-line fakes. The Australian. Sydney: p.32.

Contreras, Alan (2001). "International Diploma Mills Grow with the Internet." <u>International Higher Education</u>(Summer 2001): Accessed 23/4/06 online at http://www.bc.edu/bc_org/ayp/soe/cihe/newsletter/News24/text003.htm.

Contreras, Alan (2002). Praise for pressure on degree mills. The Australian. Sydney: p.30.

Contreras, Alan (2005). Why States Shouldn't Accredit. <u>Inside HigherEd</u>. Washington D.C.: Accessed 6/4/06 online at http://insidehighered.com/views/2005/08/30/contreras.

Contreras, Alan (2006a). <u>Degrees of Crime: a guide to busting diploma mills</u>. AACRAO 92nd Annual Meeting, 17th-20th April 2006. Breakout session presented under the theme "Fighting Diploma Mill Fraud: What YOU Can Do", Monday 17th April 2006, San Diego, California, American Association of Collegiate Registrars and Admissions Officers.

Contreras, Alan (2006b). Evaluation in the Shadowlands: When government approval isn't worth the paper it's forged on. <u>Diploma Mills & Bogus Institutions: Guide to Handling an International Problem</u>. Forthcoming. Forthcoming, American Association of Collegiate Registrars and Admissions Officers.

Conway, James V.P. (1978). <u>Evidential Documents</u>. Springfield, IL, Charles C Thomas Publisher.

Cook, Rebecca M. (2005a). <u>Affordable Resources For International Credential Evaluation</u>. Milwaukee WI, Educational Credential Evaluators Inc.

Cook, Rebecca M. (2005b). <u>The Dilemma of Forgery: Altered Documents In An International</u> Context. Milwaukee WI, Educational Credential Evaluators Inc.

Cooper, B., Funk, P. and Garcia-Penalosa, C. (2001). "Status Effects and Negative Utility Growth." <u>The Economic Journal</u>(111): 642-665.

Correy, Stan (2000). Virtual Universities - Testing Quality in Australian Higher Education. <u>ABC Radio National - Background Briefing</u>. S. Correy. Sydney.

"Corruption Plagues Academe Around the World." (2002). <u>Chronicle of Higher Education</u> **48**(47): A32.

Corwin, Julie A. (2006). Russia: U.S. Academics Charge Putin With Plagiarizing Thesis. Radio Free Europe Radio Liberty. Washington: Accessed 27/3/06 online at http://www.rferl.org/featuresarticle/2006/03/0c2fcd1d-b6d2-4922-80fe-791cd0d0f943.html.

Council of Europe. (1986). List of Non-Accredited Institutions of Higher Education. Strasbourg, Council for Cultural Co-Operation: 37.

Council of Europe. (1991). List of Institutions of Higher Education The Diplomas and Degrees of Which are Not in General Officially Recognised in Europe. Strasbourg, Council for Cultural Co-Operation: 60.

Council of Europe. (1993). List of Institutions of Higher Education The Diplomas and Degrees of Which are Not in General Officially Recognised in Europe. Strasbourg, Council for Cultural Co-Operation: 63.

Council of Europe. (1994). Addendum to List of Institutions of Higher Education The Diplomas and Degrees of Which are Not in General Officially Recognised in Europe. Strasbourg, Council for Cultural Co-Operation: 3.

Council of Europe. (1997a). Confidential List of Non-Recognised Institutions in Europe and ENIC Network, Higher Education and Research Division.

Council of Europe. (1997b). Recommendation No. R (97) 1 of the Committee of Ministers to Member States on the recognition and quality assessment of private institutions of higher education. Strasbourg Cedex, France, Council of Europe: Accessed 20/2/06 online at https://wcd.coe.int/com.instranet.InstraServlet?Command=com.instranet.CmdBlobGet&DocI d=560006&SecMode=1&Admin=0&Usage=4&InstranetImage=43578.

Cox, Kate (2002). \$18,000 uni degree.con. The Sun Herald. Sydney: p.25.

Cox, Nicole (2005). Unis bank on plastic prints. Solution to fake online degrees. <u>The Sunday</u> Mail. Adelaide: 31.

Cox, Noel (2002-2003). "Dispensations, Privileges, and Conferment of Graduate Status: With Special Reference to Lambeth Degrees." <u>Journal of Law and Religion</u> **18**(1): 249-274.

Cramer, Robert J. (2004). DIPLOMA MILLS. Federal Employees Have Obtained Degrees from Diploma Mills and Other Unaccredited Schools, Some at Government Expense. Washington DC, United States General Accounting Office: Accessed 22/12/05 online at http://www.gao.gov/new.items/d04771t.pdf.

Crane, William (2006). Duped out of a quality education. <u>Spectator On Line Seattle University</u>. Seattle: Accessed 24/2/06 online at http://www.spectator-online.com/vnews/display.v/ART/2006/02/22/43fd55ecb9777.

Crier, Catherine and Thompson, Cole (2005). <u>A deadly game: the untold story of the Scott Peterson investigation</u>. New York, Regan Books.

Crimes (Currency Act) (1981). <u>Accessed 4/5/06 online at http://www.austlii.edu.au/au/legis/cth/consol_act/ca1981181/s8.html.</u>

Criminal Code of 1961 (2003). <u>Criminal Code Public Act 093-0239</u>: Accessed 4/5/06 online at http://www.ilga.gov/legislation/publicacts/fulltext.asp?name=093-0239&GA=93&SessionId=3&DocTypeId=HB&DocNum=1448.

Criminal Law Consolidation Act - South Australia (1935). <u>Accessed 4/5/06 online at http://www.parliament.sa.gov.au/Catalog/legislation/Acts/c/1935.2252.un.htm.</u>

Crisp, J., Pelletier, D., Duffield, C., Nagy, S. and Adams, A. (1999). "It's all in a name. When is a 'Delphi study' not a Delphi study?" <u>Australian Journal of Advanced Nursing</u> **16**(3): 32-37.

Crouch, Brad (2003). Unis act on bogus degrees. <u>The Sunday Mail</u>. Adelaide, South Australia: 31.

Cunningham, S, Ryan, Y, Stedman, L, Tapsall, S, Bagdon, K, Flew, T and Coaldrake, P (2000). The Business of Borderless Education. Canberra, DETYA.

Cunningham, S, Tapsall, S, Ryan, Y, Stedman, L, Bagdon, K and Flew, T (1997). New Media and Borderless Education: A Review of the Convergence between Global Media Networks and Higher Education Provision. Canberra, Department of Education, Training and Youth Affairs.

Curry, Ann (2004). <u>Unreliable Research: Are Librarians Liable</u>. World Library and Information Congress: 70th IFLA General Conference and Council. 22-27 August 2004, Buenos Aires, Argentina.

Curtis, Polly (2005). GMC launches inquiry into private medical schools. <u>Guardian Unlimited</u>. Accessed 8/11/05 online at http://education.guardian.co.uk/higher/news/story/0,9830,1636346,00.html.

Cvetkovich, George and Löfstedt, Ragnar (1999). <u>Social trust and the management of risk</u>. London, Earthscan.

Dalkey, N. and Helmer, O. (1963). "An Experimental Application fo the Delphi Method to the Use of Experts." Management Science 9(3): p.458.

Dalkey, Norman Crolee (1969). The Delphi Method: An Experimental Study of Group Opinion. Santa Monica, California, RAND Corporation: Accessed 9/5/06 online at http://www.rand.org/pubs/research_memoranda/2005/RM5888.pdf.

Damme, Dirk Van (2001). <u>Higher Education in the Age of Globalisation</u>. <u>The need for a new regulatory framework for recognition, quality assurance and accreditation</u>. UNESCO Expert Meeting, Paris, 10-11 September 2001, UNESCO.

Damme, Dirk Van (2002). <u>Trends and Models in International Quality Assurance and Accreditation in Higher Education in Relation to Trade in Education Services</u>. OECD/ US Forum on Trade in Educational Services, Washington DC, 23-24th May 2002, OECD.

Daniel, Sir John (2006). <u>The Reality of Cross-Border Delivery in Higher Education:</u> <u>Challenge, Myth and Opportunity</u>. 2006 International Investment Forum for Private Higher Education International Finance Corporation Headquarters, 3 February 2006, Washington, D.C.

David Fasold & Anor v Allen Roberts & Anor [1997] 439 FCA (2 June 1997) (1997). Federal Court of Australia. **No. NG 942 of 1992:** Accessed 6/2/06 online at http://www.austlii.edu.au/au/cases/cth/federal_ct/1997/439.html.

Davies, Geoffrey (2005). Queensland Public Hospitals Commission of Inquiry. Brisbane, Queensland Government: 558.

Davies, John L. (2001). "Borderless Higher Education in Continental Europe." <u>Minerva</u> **39**(1): 27-48.

Davis, D. J. (1981). "Back to Beginnings: Credentialism, Productivity, and Adam Smith's Division of Labour." <u>Higher Education</u> **10**(6): 649-661.

Davis, Glyn (2006). Campus Unrest. Australian Financial Review. Sydney: 1-11.

DEA (2006). Bogus qualifications. Brisbane, Department of Education and the Arts - Office of Higher Education, Queensland: Accessed 15/2/06 online at http://education.qld.gov.au/strategic/accreditation/university/bogus-quals.html.

DeFleur, Margaret H. and Adams, Jonathan (2004). "Acceptability of online bachelor's degrees as criterion for admission to graduate school." <u>Journal of Computing in Higher Education</u> **16**(1): 150-163.

DEST (2002). Fake Degrees and Unaccredited Higher Education Providers. Canberra, Department of Education Science and Training: Accessed 13/1/06 online at http://www.dest.gov.au/sectors/higher_education/policy_issues_reviews/key_issues/assuring_quality_in_higher_education/fake_degrees.htm.

DEST (2006a). Alert on Greenwich University. Canberra, Department of Education, Science and Training: Accessed 15/2/06 online at http://www.dest.gov.au/sectors/higher_education/policy_issues_reviews/key_issues/assuring_quality_in_higher_education/alert_on_greenwich_university.htm.

DEST (2006b). The Bologna Process and Australia: Next Steps. Canberra, Department of Education, Science and Training: Accessed 5/4/06 online at http://www.dest.gov.au/sectors/higher_education/publications_resources/profiles/Bologna_Process_and_Australia.htm.

DEST-AEI (2005). Education without borders: international trade in education. Barton, A.C.T., Dept. of Foreign Affairs and Trade: xiv, 69.

DET (2002). NSW Submission to the Commonwealth Government Review of Higher Education. Sydney, NSW Department of Education and Training: Accessed 17/6/06 online at https://www.det.nsw.edu.au/reviews/subhighedu/index.htm.

DET (2005). Skills for Jobs and Growth. Brisbane, Queensland Department of Employment and Training.

DET (2006a). Universities not recognised in New South Wales. Sydney, Department of Education and Training, New South Wales, Higher Education: Accessed 5/3/06 online at http://www.highered.nsw.gov.au/reports/notapproved.htm.

DET (2006b). Warning - Fake Degrees. Sydney, NSW Department of Education & Training: Accessed 15/2/06 online at https://www.det.nsw.edu.au/aboutus/higheredu/fakedegrees.htm.

DETC (2006). DETC Degree Programs: Graduates and Employers Evaluate Their Worth. Washington DC, Distance Education Training Council: Accessed 9/8/06 online at http://www.detc.org/downloads/2006%20Graduates%20and%20Employers%20Evaluate%20Their%20Worth.pdf.

Devine, Alex and O'Shea, Frances (2003). Captain of industry an unqualified success. <u>The Daily Telegraph</u>. Sydney: p.9.

Devlin, Edward (2002). "Why verification of suspicious foreign records is important." College and University(Spring 2002): 49-50.

Devlin, Edward (2006). Why Verification of Suspicious Foreign Records Is Important. <u>Guide to Bogus Institutions and Documents</u>. Washington DC, American Association of Collegiate Registrars and Admissions Officers: 1-5.

Diamond, Daniel E. and Bedrosian, Hrach (1972). "Job Performance and the New Credentialism." California Management Review 14(4): 21.

Dickeson, Robert C. (2006). The Need for Accreditation Reform. Washington D.C, The Secretary of Education's Commission on the Future of Higher Education. US Department of Education: Accessed 1/4/06 online at http://www.ed.gov/about/bdscomm/list/hiedfuture/reports/dickeson.pdf.

Dima, Ana-Maria (2004). <u>Organizational typologies in private higher education</u>. CHER 17th Annual Conference Public-Private Dynamics in Higher Education, September 17-19, 2004, University of Twente, The Netherlands, Accessed 20/2/06 online at http://www.utwente.nl/cheps/documenten/dimapresentation.pdf.

DIMIA (2003). Report on the Review of Settlement Services for Migrants and Humanitarian Entrants. Canberra, Department of Immigration and Multicultural and Indigenous Affairs: Accessed 24/1/06 online at http://www.immi.gov.au/settle/settle_review/#report.

DIMIA (2004). Discussion Paper: Options for regulating migration agents overseas and the immigration related activities of education agents. Canberra, Department of Immigration and Multicultural and Indigenous Affairs: Accessed 12/09/05 online at <a href="http://www.immi.gov.au/general/agent_reg_paper/agent_reg_paper_fv.pdf#search='regulation_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020education_0020edu

DIMIA (2005). Managing the border: Immigration Compliance 2004-05. Belconnen ACT, Dept of Immigration and Multicultural and Indigenous Affairs: Accessed 10/3/06 online at http://www.immi.gov.au/illegals/mtb/.

DIMIA (2006). Top 10 Countries of Birth for all Migrant Settlers between 1 January 2004 and 1 January 2006. Canberra, Department of Immigration & Multicultural Affairs Settlement Database: Accessed 15/6/06 online at http://www.settlement.immi.gov.au/settlement/enterSelectReport.do.

Document forgery causing concern (2004). <u>Television New Zealand</u>. Wellington: Accessed 21/6/04 online at http://www.tvnz.co.nz/.

Dodds, John W. (1935). "The Doctor Sees Double." New Outlook CLXV(June 1935): p.35.

Donaghy, Brian (1999). Wanna buy a university degree, mate? Campus Review: 1.

Dore, Robert (1981). <u>Certification, Education and Work</u>. Milton Keynes, The Open University Press.

Dore, Ronald (1976a). <u>The Diploma Disease</u>. <u>Education, Qualification and Development</u>. Berkley, University of California Press.

Dore, Ronald (1976b). "Human capital theory, the diversity of societies and the problem of quality in education." <u>Higher Education</u> **5**(i): 79 -102.

Dore, Ronald and Little, Angela (1981). <u>Certification, Education and Work</u>. Milton Keynes, The Open University Press.

Dorfman, Brad (2006). RadioShack CEO says his resume incorrect. <u>iWon Money & Investing</u>. Chicago: Accessed 17/2/06 online at http://money.iwon.com/ht/nw/bus/20060216/hl_bus-n16319784.html?PG=home&SEC=news.

dos Santos, Sergio Machado (2002). "Regulation and Quality Assurance in Transnational Education." Tertiary Education and Management **8**(2): 97-112.

Douglas, Mary (1986). <u>Risk: Acceptability According to the Social Sciences</u>. Padstow, Cornwall, Routledge & Kegan Paul.

Douglas, Richard (2003). The Accreditation of Degree-Granting Institutions and Its Role in the Utility of College Degrees in the Workplace. Cincinnati, OH, Union Institute and University: 146.

Dowd, Helen (2005). UK kudos hit by fake degrees. <u>Times Higher Education Supplement</u>. London: Accessed 23/12/05 online at http://www.thes.co.uk/search/story.aspx?story_id=2026901.

Dullroy, Joel (2004). Academic stripped of doctoral title. <u>The Courier Mail</u>. Brisbane: Accessed 6/01/04 online at http://www.couriermail.news.com.au/.

Durkheim, Emile and Catlin, George E. G. (1966). <u>The rules of sociological method</u>. New York, Free Press.

Easterlin, R.A. (1973). "Does Money Buy Happiness?" Public Interest 3(Winter 1973): 3-10.

Eaton, Judith S. (2001). Distance Learning: Academic and Political Challenges for Higher Education Accreditation. CHEA Monograph Series 2001, Number 1, Council for Higher Education Accreditation: Accessed 23/2/06 online at http://www.chea.org/pdf/mono_1_dist_learning_2001.pdf.

Eckstein, Max A. (2003). Combating academic fraud. Towards a culture of integrity. Paris, International Institute for Educational Planning UNESCO: Accessed 29/5/06 online at http://unesdoc.unesco.org/images/0013/001330/133038e.pdf.

Educause (2006). .edu Internet Domain to Continue Under EDUCAUSE Management. Boulder, Colorado, EDUCAUSE: Accessed 30/3/06 online at http://www.educause.edu/content.asp?page_id=1175&ID=1304&bhcp=1.

Edukugho, Emmanuel (2006). Plagiarism makes mockery of research in tertiary institutions. <u>Vanguard Media Limited</u>. Lagos: Accessed 19/5/6 online at http://www.vanguardngr.com/articles/2002/features/education/edu218052006.html.

Eells, Walter Crosby (1963). <u>Degrees in higher education</u>. Washington, D.C., The Center for Applied Research in Education.

Eells, Walter Crosby and Haswell, Harold A (1960). <u>Academic Degrees</u>. Washington D.C., Department of Health, Education and Welfare.

Eisenhammer, John (1992). German 'students' pay others to study for them. <u>Sydney Morning Herald</u>. Sydney: p.9.

Eisenschenk, Doug and Davis, Elaine (2004). "Background Checks in Hiring and Compensation: The Next Generation." <u>Benefits and Compensation Digest</u> **41**(10): Accessed 7/3/06 online at http://www.ifebp.org/PDF/webexclusive/04oct.pdf.

Evans, M D R and Kelley, J (1998). "Why is education rewarded: necessary skills or arbitrary credentialism?" <u>Australian Social Monitor</u> **2**: 35-40.

Exam forger ordered to stop selling fake grades (2006). <u>The Times</u>. London: Accessed 8/6/06 online at http://www.timesonline.co.uk/article/0,,200-2215525,00.html.

Ezell, Allen (2005). "Transcript Fraud and Handling Fraudulent Documents." <u>College and University</u> **80**(3): 49-55.

Ezell, Allen (2006). Accreditation Mills. <u>Guide to Bogus Institutions and Documents</u>. Washington DC, American Association of Collegiate Registrars and Admissions Officers: 103-115.

Ezell, Allen (2007). <u>Accreditation Mills</u>. Washington D.C., American Association of Collegiate Registrars and Admissions Officers.

Ezell, Allen and Bear, John (2005). <u>Degree Mills: The Billion-Dollar Industry That Has Sold Over a Million Fake Diplomas</u>. Amherst, New York, Prometheus Books.

Faia, Michael A. (1981). "Selection by Certification: A Neglected Variable in Stratification Research." The American Journal of Sociology **86**(5): 1093-1111.

Fake degrees 'blight UK standing' (2005). <u>BBC News</u>. London: Accessed 11/3/06 online at http://news.bbc.co.uk/2/hi/uk_news/education/4552764.stm.

Fake Diplomas Flood China (2005). <u>Brooke Consulting</u>. Accessed 16/01/05 online at http://www.brookeconsulting.com/newsletteroctober2.htm.

Fallows, James (1985). "The case against credentialism." Atlantic Monthly 256(15): 49.

False CVs (2005). The Advertiser. Adelaide, South Australia: 21.

Faniso, Mzwandile (2005). More than 100 000 cases of CV fraud uncovered. <u>Business Report South Africa</u>. Accessed 28/10/05 online at http://www.busrep.co.za/index.php?fArticleId=2949130.

Farrell, Michael O' (2001). Bogus universities are still operating. <u>Irish Examiner</u>. Dublin: Accessed 12/4/06 online at http://archives.tcm.ie/irishexaminer/2001/12/13/story19150.asp.

Farrington, Dennis J. (2001). "Borderless Higher Education: Challenges to Regulation, Accreditation and Intellectual Property Rights." Minerva **39**(1): 63-84.

Feds Crack Down On Alleged Diploma Mills (2005). <u>News4 - kxly.com</u>. Accessed 12/08/05 online at http://www.kxly.com/common/getStory.asp?id=44745.

Fenton-Jones, M (2001). Bringing fraudsters to account. <u>The Australian Financial Review</u>: 53.

Ferguson, Sarah (2005). Khalid Yasin: The new voice of Islam? <u>The Sunday Program - Cover Stories</u>. N. Rushworth, Channel 9, Australia: Accessed 9/10/05 online at http://sunday.ninemsn.com.au/sunday/cover-stories/transcript-1883.asp.

Ferrara, Alessandro (1998). <u>Reflective Authenticity: Rethinking the Project Modernity</u>. London, Routledge.

Fielden, John (2005). VC-NET - The news service for the network of Vice-Chancellors and Presidents in membership of the Association of Commonwealth Universities. S. Bjarnason. London, Association of Commonwealth Universities: Accessed 3/2/06 online at http://www.acu.ac.uk/policyandresearch/venet/venet60.pdf.

Finnie, R. and Usher, A. (2005). Measuring the Quality of Postsecondary Education - concepts, current practices and a strategic plan. Ottawa, Canadian Policy Research Networks.

FIRs against fake varsities ordered (2006). <u>Hindustan Times - Lucknow Edition</u>. Lucknow: Accessed 10/6/06 online at http://www.hindustantimes.com/news/5922 1717168,0015002500000005.htm.

Fisher, Anne (2005). How Can We Be Sure We're Not Hiring a Bunch of Shady Liars? <u>Fortune Magazine</u>: Accessed 27/3/05 online at http://www.fortune.com/fortune/annie/0,15704,1028010,00.html.

Flint, John (2000a). Discredited teacher dropped. Sunday Times. Perth: p.3.

Flint, John (2000b). Doctor, doctor, it's a phoney degree. The Australian. Sydney: p.29.

Flint, John (2000c). Drug lecturer 'popped pills as he taught'. The Sunday Times. Perth: p.3.

Flint, John (2000d). My uni honour legal: Gale. The Sunday Times. Perth: p.5.

Flint, John (2000e). Teacher's degrees worthless. Sunday Times. Perth: p.4.

Flint, John (2000f). Teacher's JP title at risk. Sunday Times. Perth: p.3.

Foley, C J and McKown, T R (2002). "Credentials analysis 101: a methodology for simplifying evaluation." <u>International Educator</u> **11**(3): 18-23.

Ford, Charles (1996). <u>Lies!, lies!!</u>, <u>lies!!!</u> The psychology of deceit. Washington, DC, American Psychiatric Press.

Foreshaw, Jennifer (2005). State to build degree data store. The Australian: 29.

Forgery bust doesn't surprise consultants (2004). <u>New Zealand City Ltd.</u> Wellington: Accessed 21/6/04 online at http://www.nzcity.co.nz.

Foster, Andrea (2002). "Board Backs Plan to Fight Phony Degrees." <u>Chronicle of Higher</u> Education **48**(32): A36.

Foster, Andrea. L. (2003). "Colleges Face Uphill Battle in Fight Against Sites Selling Fraudulent Transcripts." <u>The Chronicle of Higher Education</u> **49**(22): A.25.

Fraudulent Credentials. (1985). Fraudulent Credentials. A joint report by the Chairmen of the Subcommittee on Health and Long-term Care and the Subcommittee on Housing and

Consumer Interests of the Select Committee on Ageing. Port Townsend, WA, Loompanies Unlimited: 79.

Frean, Alexandra (2003). Bogus degree website shut. The Times. London: p.3.

Fuchs, Derek J. (2004). Some resumes too good to be true. <u>Tribune-Review</u>. Pittsburgh: Accessed 30/3/04 online at http://www.pittsburghlive.com.

Fullerton, Ticky (2005). The Degree Factories. <u>Four Corners</u>. Accessed 28/06/05 online at http://www.abc.net.au/4corners/content/2005/s1401933.htm, Australian Broadcasting Corporation.

Gallagher, Sean and Poroy, Basar (2005). Online Distance Education Market Update 2005: Growth in the Age of Competition. Boston MA, Eduventures: 14.

Garrett, Richard (2005). Fraudulent, sub-standard, ambiguous - *the alternative borderless higher education*. London, The Observatory on Borderless Higher Education: 17.

Golden, Daniel (2004). "Federal Workers Use Tax Dollars For Fake Degrees." <u>Wall Street</u> Journal - <u>Eastern Edition</u> **243**(92): B1-B5.

Goldenberg, Suzanne (2006). Pro-Bush Nasa official quits over false CV. <u>The Guardian</u>. London: Accessed 10/2/06 online at http://www.guardian.co.uk/space/article/0,,1705709,00.html.

Goldstein, Nancy H (1975). A Delphi on the Future of the Steel and Ferroalloy Industries. <u>The Delphi Method: Techniques and Applications</u>. H. A. Linstone and M. Turoff. Reading, Mass., Addison-Wesley.

Gollin, George (2005). <u>Degrees of Suspicion</u>. Access and Opportunity: Higher Education within reach. Annual conference convened by the American Association of Collegiate Registrars and Admissions Officers (AACRAO) Ninety First Annual Meeting, New York.

Gough, Deborah (2006). Students 'vastly over-qualified'. <u>The Age</u>. Sydney: Accessed 13/3/6 online at http://www.theage.com.au/news/national/students-vastly-overqualified/2006/03/11/1141701735275.html.

Government of Western Australia. (2005). *Inquiry into the City of Joondalup*. Inquiry under Division 2, Part 8, Local Government Act 1995. Joondalup, Western Australia, Accessed 15/10/05 online at http://www.joondalupinquiry.wa.gov.au/: 625.

Graduate Careers Australia. (2006). Graduate Salaries 2005. Carlton Victoria, Graduate Careers Australia: Accessed 21/9/06 online at http://www.graduatecareers.com.au/content/view/full/1785.

Graziano, A. and Raulin, M. (2000). <u>Research Methods: A Process of Inquiry (4th Ed.)</u>. Boston, Allyn & Bacon.

Green, Jacqui Elson (2006). Tight tension between status-seeking and equality. <u>Campus</u> Review. Sydney: p.16.

Grolleau, Gilles, Lakhal, Tarik and Mzoughi, Naoufel (2005). <u>The Economics for Fake Degrees</u>. Paper presented at the 39th Annual Meeting of the Canadian Economics Association, May 27th-29th 2005, McMaster University, Hamilton, Ontario.

Grover, Michael, Dharamshi, Farah and Goveia, Crystal (2001). "Deception by Applicants to Family Practice Residencies." <u>Residency Education</u> **33**(6): 441-446.

Guardian (2002). Majority of applicants lie on CVs. <u>Guardian Unlimited</u>. London: Accessed 16/9/04 online at http://money.guardian.co.uk/work/story/0,1456,791636,00.html.

Gubser, Lyn and Millard, Richard M (1982). Academic Fraud: A Threat to Quality. Washington D.C., American Association of State Colleges and Universities.

Guerry, AnTuan (2005). Cracking Down on Bogus Diplomas. Who's Your Alma Mater? dcmilitary.com-The Journal. Landover: Accessed 9/12/05 online at http://www.dcmilitary.com/navy/journal/10/48/features/38651-1.html.

Haakstad, J. (2001). "Accreditation: The new quality assurance formula? Some reflections as Norway is about to reform its quality assurance system." Quality in Higher Education 7(1): 77-82.

Habermalz, Steffen (2003). "An Examination of Sheepskin Effects Over Time." <u>Discussion Paper Series. Institute for the Study of Labor (IZA)</u>: Accessed 11/7/05 online at http://opus.zbw-kiel.de/volltexte/2003/234/pdf/dp725.pdf.

Hag, E H W van 't (1994). Qualifications and credentialism: personal fulfilment or a paper chase? N. T. University. Casuarina NT, Northern Territory University.

Hallak, Jacques and Poisson, Muriel (2002). Ethics and Corruption in Education. Paris, UNESCO - International Institute for Educational Planning: Accessed 30/05/06 online at http://www.unesco.org/iiep/PDF/Forum15.pdf?

Hallak, Jacques and Poisson, Muriel (2005). Academic fraud and quality assurance: Facing the challenge of internationalisation of higher education. Paris, UNESCO - International Institute for Educational Planning: Accessed 10/08/05 online at http://www.unesco.org/iiep/eng/research/highered/polforum/Papers/Day2/HallakPoisson.pdf.

Hallak, Jacques and Poisson, Muriel (2007). Corrupt Schools, corrupt universities: What can be done? Paris, UNESCO - International Institute for Educational Planning: Accessed 11/06/07 online at http://www.unesdoc.unesco.org/images/0015/001502/150259e.pdf.

Halpin, Tony (2005). Universities hit by boom in bogus degrees online. <u>The Times Online</u>. London: Accessed 23/12/05 online at http://www.timesonline.co.uk/article/0,,2-1953142,00.html.

Hamshere, Duncan (2005). <u>Identification of Fraud in International Documentation</u>. The UK NARIC Annual Conference 2005, Queen Elizabeth II Conference Centre, London, 4th November 2005, Accessed 15/11/05 online at http://naric.org.uk/conference/presentations/Identification%20of%20Fraudulent%20Qualifications.pps#257,1,Slide 1.

Hapgood, David (1971). Diplomaism. New York, Donald W. Brown, Inc.

Haralambos, Michael and Heald, Robin (1980). <u>Sociology: Themes and Perspectives</u>. Bungay, Suffolk, University Tutorial Press.

Harman, G. and Meek, L. (2000). Repositioning Quality Assurance and Accreditation in Australian Higher Education. Canberra, Department of Education, Training and Youth Affairs.

Harris, John and Troutt, William (1978). Educational Credentials: Past, Present, and Future. Credentialing Educational Accomplishment. Report and Recommendations of The Task Force on Educational Credit and Credentials. J. W. Miller and O. Mills. Washington D.C., American Council on Education.

Harvey, Lee (2004). "The Power of Accreditation: Views of academics." <u>Journal of Higher Education Policy and Management</u> **26**(2): 207-223.

Haspel, Abraham E. (1978). "The questionable role of higher education as an occupational screening device." <u>Higher Education (Historical Archive)</u> **7**(3): 279-294.

Hasson, Felicity, Keeney, Sinead and McKenna, Hugh (2000). "Research guidelines for the Delphi survey technique." <u>Journal of Advanced Nursing</u> **32**(4): 1008-1015.

Hauptman, Robert (2002). "Dishonesty in the Academy." Academe 88(6): 39-44.

Hawkins, Damian (2002). "The unsuspecting, the uninformed and the unaccredited." Community College Week 14(12): 4-5.

Headwaters News. (2006). Wyoming Wonders What to do with Online, Overseas Universities. New West. Missoula, MT: Accessed 21/1/06 online at http://www.newwest.net/index.php/main/article/5269/.

Healey, Thomas J. (2003). "Fighting Corporate Recidivism." Hoover Digest(4).

Healy, Guy (2005). Crackdown promised on fraudulent qualification rackets. <u>Campus Review</u>. Sydney: 3.

Heckman, Candace (2006). Lying on résumé could land you in jail. Bill would make it illegal to pass off fake degree as real. <u>Seattle Post Intelligencer</u>. Seattle: Accessed 4/3/06 online at http://seattlepi.nwsource.com/local/261747 <u>diplomamill04.html</u>.

Heinrichs, Paul (2002a). Fake degrees find a market in Asia. <u>The Age</u>. Sydney: Accessed 14/4/02 online at http://www.theage.com.au/news/state/2002/02/10/FFX2FSHAGXC.html.

Heinrichs, Paul (2002b). Fake degrees flood market. Sunday Age. Sydney: 4.

Hernes, Gudmund (2005). <u>Introduction: Successful creature or endangered species?</u> UNESCO International Institute for Educational Planning Sixth Annual Policy Forum, *Accreditation and the Global Higher Education Market*, Paris, UNESCO - International Institute for Educational Planning.

Hersh, Richard H. (2005). What Difference Does a College Make? <u>Declining by Degrees:</u> Higher Education at Risk. R. H. Hersh and J. Merrow. New York, Palgrave Macmillan.

Hildreth, Paul and Kimble, Chris, Eds. (2004). <u>Knowledge Networks: Innovation Through Communities of Practice</u>. Hershey, PA, Idea Group Publishing.

Hills, Graham and Lingard, Robin (2003). <u>UHI: The Making of a University</u>. Edinburgh, Dunedin Academic Press.

Hinton, Brad (2003). <u>Knowledge Management and Communities of Practice: an experience from Rabobank Australia and New Zealand</u>. IAMA World Food and Agribusiness Symposium, June 20-21, 2003, Cancun, Mexico., Accessed 11/09/05 online at http://www.ifama.org/conferences/2003Conference/papers/hinton.pdf.

Hirsch, F. (1976). Social Limits to Growth. New York, Twentieth Century Fund.

Hobson, Karen (1989). Discord at music school: a question of degree. <u>The Canberra Times</u>. Canberra: pp1 & 2.

Hockley, Catherine (2003). Speaker challenged over uni 'degree'. <u>The Advertiser</u>. Adelaide: p.2.

Holzer, Harry J., Raphael, Steven and Stoll, Michael A. (2002). Will Employers Hire Ex-Offenders? Employer Preferences, Background Checks, and Their Determinants. Madison, Institute for Research on Poverty, University of Wisconsin-Madison: Accessed 15/12/05 online at http://www.ssc.wisc.edu/irpweb/publications/dps/pdfs/dp124302.pdf.

Hopkins, David, Kontnik, Lewis and Turnage, Mark (2003). <u>Counterfeiting exposed:</u> protecting your brand and customers. Hoboken, New Jersey, John Wiley & Sons.

Hoyt, Anne Harvey (2004). Would I lie to you? You betcha. <u>Finger Lakes Times Online</u>. Geneva, New York: Accessed online 25/3/04 at http://www.fltimes.com.

Hui, Shek-wai (2004). "The "Sheepskin Effects" of Canadian Credentials." <u>Unpublished draft journal article</u>.

IB-Groep CIDM (2005). Press Report - Netherlands Initiative Against Diploma Mills. Den Haag, Coordination Office for Information on Diploma Mills.

ICAC (2002a). Degrees of Risk. A corruption risk profile of the New South Wales university sector. Sydney, Independent Commission Against Corruption: 56.

ICAC (2002b). Investigation into the conduct of officers and students at University of Technology, Sydney. Sydney, Independent Commission Against Corruption: Accessed 8/6/06 online at http://www.icac.nsw.gov.au/index.cfm?objectID=58238B64-FAAD-2F59-9A50F49A7588A34D&NavID=917AF6FE-A375-A618-AB9B8648F7B03657.

ICAC (2003a). Report on investigation into certain applications made to the Department of Fair Trading for building and trade licences. Sydney, Independent Commission Against Corruption: Accessed 8/6/06 online at http://www.icac.nsw.gov.au/index.cfm?objectID=C7E7D78E-A40E-70A5-3E112E6BB22A47A4&NavID=917AF6FE-A375-A618-AB9B8648F7B03657.

ICAC (2003b). Report on investigation into Mr Glen Oakley's use of false academic qualifications. Sydney, Independent Commission Against Corruption: Accessed 12/12/03

online at http://www.icac.nsw.gov.au/index.cfm?objectid=5CF19B34-C33A-C1B6-34AC21C70A9FCD5F.

ICAC (2004a). Report on investigation into safety certification and training in the NSW construction industry. Sydney, Independent Commission Against Corruption: Accessed 8/6/06 online at http://www.icac.nsw.gov.au/index.cfm?objectID=72A6ACD6-E06A-F3EA-31FA63B248A3EBAD&NavID=917AF6FE-A375-A618-AB9B8648F7B03657.

ICAC (2004b). University of Sydney – fraudulent student applications. Sydney, Independent Commission Against Corruption: Accessed 8/6/06 online at http://www.icac.nsw.gov.au/index.cfm?objectid=6F54A667-DC49-CB68-730E8B1D0A2F9E15.

ICAC (2005a). Office of Fair Trading and TAFE – builder licences and qualifications. Sydney, Independent Commission Against Corruption: Accessed 6/10/05 online at http://www.icac.nsw.gov.au/index.cfm?objectid=A9174691-D404-C3E0-2FF1516115A94883.

ICAC (2005b). Report on investigation into schemes to fraudulently obtain building licences. Sydney, Independent Commission Against Corruption: Accessed 23/12/05 online at http://www.icac.nsw.gov.au/files/pdf/Ambrosia_Report.pdf.

ICAC (2005c). Report on investigation into the University of Newcastle's handling of plagiarism allegations. Sydney, Independent Commission Against Corruption: Accessed 7/7/05 online at http://www.icac.nsw.gov.au/index.cfm?objectID=C6017040-C82E-1434-EC1130F0F39241BE&NavID=262BA41B-D0B7-4CD6-F955BD8CEE4CDF37.

ICAC (2006). Protecting identity information and documents; Guidelines for public sector managers. Sydney, Independent Commission Against Corruption: Accessed 23/3/07 online at http://www.icac.nsw.gov.au/files/pdf/Protecting_Identity_Information_Documents_for_web.pdf.

IDP (2002). Global student mobility 2025: forecasts of the global demand for international higher education. Sydney, IDP Education Australia.

"Illegitimate "degrees" being used by some teachers to obtain higher pay." (2004). <u>Evergreen Freedom Foundation</u> **14**(26): Accessed 29/12/04 online at http://www.effwa.org/highlighters/v14_n26.php.

Illing, Dorothy (1997). QUT misled on credentials. The Australian. Sydney: p.40.

Illing, Dorothy (2001). Dark side to export boom. The Australian. Sydney: 034.

Illing, Dorothy (2006). European standard poses a challenge. The Australian. Sydney: 25.

Illinois Board of Higher Education. (2002). Proposed legislation to prohibit the use of false degrees. Springfield, Illinois Board of Higher Education: Accessed 4/5/06 online at http://www.ibhe.state.il.us/Board/Agendas/2002/April/Item%207.pdf.

International Association of Universities. (2006). IAU 2005 International Survey; Preliminary Findings Report. Paris

New York, International Association of Universities; Stockton Press: Accessed 13/3/07 online at http://www.unesco.org/iau/internationalization/pdf/internationalization_2005.pdf.

The international encyclopedia of higher education (1977). San Francisco, Jossey-Bass.

Internet scam offers fake degrees from Melbourne universities (2002). <u>ABC News Online</u>. Accessed 15/4/02 online at

http://www.abc.net.au/news/australia/2002/02/item20020210173636_1.htm.

Investigation over bogus nurse (2005). The Advertiser. Adelaide: 4.

Irwin, Alan (1985). <u>Risk and the control of technology</u>. Manchester, Manchester University Press.

Issa, Wafa (2006). Holders of false qualifications will be deported. <u>Gulf News</u>. Dubai: Acessed 21/6/06 online at http://www.gulfnews.com/nation/Employment/10048376.html.

ITNews (2002). The Resume Lying Game, SAP Info. Accessed online 10/4/05 at http://www.sap.info.

Jackson, Michelle (2001). Meritocracy, Education and Occupational Attainment: What Do Employers Really See as Merit? Oxford, Nuffield College: Accessed 21/5/06 online at http://www.sociology.ox.ac.uk/swps/2001-03.pdf.

Jacobs, Jane (2004). "Credentialing vs. Educating." <u>The Virginia Quarterly Review</u> **80**(2): 154-165.

Jaeger, Carlo, Renn, Ortwin, Rosa, Eugene A and Webler, Thomas (2001). Risk, uncertainty and rational action. London, Earthscan.

Jarvenpaa, Sirkka L., Tractinsky, Noam and Vitale, Michael (2000). "Consumer trust in an Internet store." Information Technology and Management 1(1 - 2): 45-71.

Jaschik, Scott (2005a). Bogus Transcript Ring in California. <u>Inside HigherEd</u>. Washington D.C.: Accessed 29/8/05 online at http://www.insidehighered.com/news/2005/05/19/transcript.

Jaschik, Scott (2005b). Keeping Transcripts Secure. <u>Inside HigherEd</u>. Washington D.C.: Accessed online 29/9/05 online at http://insidehighered.com/news/2005/08/23/records.

JCQ (2004). Fake Certificates: Stopping the Con. London, Joint Council for Qualifications: Accessed 8/6/06 online at

 $\frac{http://www.jcq.org.uk/attachments/published/158/1/JCQ\%20Statement\%20Fake\%20Certificates\%20-\%20Stopping\%20the\%20Con\%20Final\%202\%2007\%2004.pdf.$

Jian, Jiun-Yin, Bisantz, Ann M. and Drury, Colin G. (2000). "Foundations for an Empirically Determined Scale of Trust in Automated Systems." <u>International Journal of Cognitive Ergonomics</u> **4**(1): 53-71.

Johansson, Erik (2005a). <u>Diploma mills, fake universities, and bogus credentials</u>. 17th Annual European Association for International Education (EAIE) Conference, Krakow, Poland, 14-17 September, 2005, Accessed 3/10/05 online at

http://www.eaie.nl/krakow/programme/test.asp?Working%20number=217&button=massessions.

Johansson, Erik (2005b). <u>Diploma Mills; A Nordic Problem?</u> NORRIC Meeting, September 1st 2005, Copenhagen, Denmark.

Johansson, Erik, Stannard, Jessica and Koenig, Ann (2004). <u>Diploma Mills and Other Non-Recognized Institutions of Higher Education</u>; three approaches to fighting diploma mill fraud. 16th Annual Conference of the European Association for International Education, 15th-18th December 2004, Torino, Italy, Accessed 21/10/05 online at http://www.eaie.org/torino/.

Johnson, Creola (2006a). "Credentialism and the Proliferation of Fake Degrees: The Employer Pretends to Need a Degree; The Employee Pretends to Have One." <u>Hofstra Labor & Employment Law Journal</u> **23**: Accessed 29/11/2006 online at http://ssrn.com/abstract=925243.

Johnson, Creola (2006b). "Degrees of Deception: Are Consumers and Employers Being Duped by Online Universities and Diploma Mills?" <u>Journal of College and University Law</u> **32**(51): Accessed 3/1/07 online at http://ssrn.com/abstract=925237.

Johnson, Mary (2004). Resume fraud made easier. <u>Daily Illini</u>. Champaign, Illinois: Accessed 1/4/04 at http://www.dailyillini.com.

Jones, Carolyn (1992). Higher degrees of punishment. The Australian. Sydney: 17.

Jones, Glenn. R. (2001). "Bridging the Challenges of Transnational Education and Accreditation." <u>Higher Education in Europe</u> **XXVI**(1): 107-116.

Jones, Lyndon (1972a). BA (Dubious). Times Higher Educational Supplement. London.

Jones, Lyndon (1972b). "Degrees for sale." The Technical Journal (May).

Jones, Lyndon (1973a). "Degrees by Return." Education & Training(July): 248.

Jones, Lyndon (1973b). "Sale of honours." Education & Training(June).

Jones, Lyndon (1974a). "Honoris causa - or call me doctor." <u>Education & Training(July/August)</u>: 152.

Jones, Lyndon (1974b). "Return of the Medicine Men." Education & Training 16(2).

Jones, Lyndon (1974c). "Time for the third degree?" Education & Training 16(6): 121.

Jones, Lyndon (1974d). "Unlike the mills of God..." Education & Training 16(7): 149-150.

Jones, Lyndon (1975). "Quack, quack....but it's time somebody cooked their goose." Education & Training 17(5): 109-122.

Jones, Lyndon (1976). "We return to the attack on bogus degree mills." Education & Training **18**(10).

Jopson, Debra (2005). Migration agents risk universities' future. <u>The Age</u>. Sydney: Accessed 12/12/05 online at http://www.smh.com.au/news/National/Migration-agents-risk-universities-future/2005/05/08/1115491047064.html.

Jopson, Debra and Burke, Kelly (2005). English tests faked to cheat on residency. <u>The Age. Sydney: Accessed 12/12/05 online at http://www.smh.com.au/news/National/English-tests-faked-to-cheat-on-residency/2005/05/08/1115491048581.html.</u>

Jude M. Werra & Associates, LLC (2002). 2002 Faxback Survey - Liars Index®.

Jude M. Werra & Associates, LLC (2006). Liars Index® Climbs to Highest Percent in Five Years. Brookfield WI, Jude M. Werra & Associates, LLC.

Kamotho, Kihumba (2002). Kenya smashes fake degree scam. <u>Times Higher Education Supplement</u>. London: 10.

Katz, Nancy (2004). <u>Doing a Background Check on Your Performers: Foreign Education</u>
<u>Document Alteration and Diploma Mills</u>. 82nd Annual IACRAO Conference, October 27-29, 2004, Illinois, Accessed 25/3/06 online at http://www.iacrao.org/presentations/2004/diploma.pdf.

Kearney, Richard (1994). "Detecting Forged Credentials in High-Tech World." <u>World Education News & Reviews</u>(Fall 1994): Accessed 22/4/06 online at http://www.wes.org/ewenr/wenrarchive/FBC_DetectForgedCredsFall94.pdf.

Keating, Jack, Nicholas, Tanya, Polesel, John and Watson, Jocelyn (2005). Qualifications use for recruitment in the Australian labour market. Adelaide, National Centre for Vocational Education Research: Accessed 21/5/06 online at http://www.ncver.edu.au/research/proj/nr1021.pdf.

Keats, John (1965). The Sheepskin Psychosis. Philadelphia, Lippincott.

Kempen, Luuk Van (2003). "Fooling the eye of the beholder: deceptive status signalling among the poor in developing countries." <u>Journal of International Development</u> **15**(2): 157-177.

Kersey, John (2004). "Some thoughts in favour of private universities." <u>Libertarian Alliance - Educational Notes</u>: Accessed 18/4/07 online at http://www.libertarian.co.uk/lapubs/educn/educn035.pdf.

Kessler-International (2000). Labour market doesn't absolve companies of resume-checking. Kansas, Kessler International: Accessed 17/7/2002 online at http://www.investigation.com/articles/library/2000articles/articles4.htm.

Kettler, Bill (2006). State questions wellness expert's degree. <u>Mail Tribune</u>. Medford, Oregon: Accessed 21/1/06 online at http://www.mailtribune.com/archive/2006/0120/local/stories/05local.htm.

Keyes, Ralph (2004). <u>The Post-Truth Era: Dishonesty and Deception in Contemporary Life.</u> New York, St Martin's Press.

Khan, Frank (2005). Minister is considering future for State adviser. <u>Sunday Independent</u>. Dublin: Accessed 14/11/05 online at http://www.unison.ie/irish_independent/stories.php3?ca=9&si=1505679&issue_id=13270.

Kidwell, Ronald E. (2004). ""Small" lies, big trouble: The unpleasant consequences of résumé padding, from Janet Cooke to George O'Leary." <u>Journal of Business Ethics</u> **51**: 175-184.

Kigotho, Wachira (2006). "East Africa to Crack Down on Unaccredited Universities." Chronicle of Higher Education **52**(44): Accessed 15/7/06 online at http://chronicle.com/weekly/v52/i44/44a04301.htm. Killeen, J., Turton, R., Diamond, W., Dosnon, O. and Wach, M. (1999). "Education and the labour market: subjective aspects of human capital investment." <u>Journal of Education Policy</u> **14**(2): 99-116.

Kimble, Chris, Li, Feng and Barlow, Alexis (2000). "Effective Virtual Teams Through Communites of Practice." <u>Strathclyde Business School</u>. <u>Management Science Theory</u>, Method & Practice(Research Paper No. 2000/9).

King, Carolyn (2005). Fraudulent Qualifications. G. Brown. Melbourne, BHP Billiton Mitsubishi Queensland.

Kirkwood, Ian, Smith, Alexandra and Holland, Miguel (2003). Oakley had minister's seal on job. Newcastle Herald. Newcastle: 1415.

Knight, Jane (2004). Programs, Providers and Accreditors on the Move: Implications for Recognition of Qualifications. Riga, Latvia, Background Paper for the Bologna Seminar on 'Improving the Recognition System of Degrees and Study Credit Points': Accessed 3/4/06 online at http://www.bologna-bergen2005.no/EN/Bol_sem/Seminars/041203-04Riga/01203-04 Knight.pdf.

Knight, Jane (2005a). Crossborder education: implications for quality assurance and recognition of qualifications. The decade ahead challenges for quality assurance in South African higher education. M. Smout. Pretoria, South African Universities Vice-Chancellors Association: 163-180.

Knight, Jane (2005b). "The International Race for Accreditation." <u>International Higher Education</u> **40**(Summer 2005): Accessed 8/10/06 online at http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/Number40/p2_Knight.htm.

Knight, Jane (2005c). "New Typologies for Crossborder Higher Education." <u>International Higher Education</u>(Winter 2005): Accessed 17/6/06 online at http://www.bc.edu/bc_org/avp/soe/cihe/newsletter/News38/text002.htm.

Knight, Jane (2006a). "Cross-border education: not just students on the move." <u>International</u> Educator **15**(2): 4-5.

Knight, Jane (2006b). Internationalization: Concepts, Complexities and Challenges. <u>International Handbook of Higher Education</u>. J. J. F. Forest and P. G. Altbach. New York, Springer. **1:** 207-227.

Knight, Jane (2007). "Internationalization Brings Important Benefits as Well as Risks." International Higher Education **46**(Winter 2007): 8-10.

Knudsen, Inge, Haug, Guy and Kirstein, Jette (1999). Trends in Learning Structures in Higher Education. Bologna, Confederation of European Union Rectors' Conferences and the Association of European Universities (CRE): Accessed 19/4/06 online at http://www.eua.bc/eua/jsp/en/upload/OFFDOC_BP_trend_1.1068715136182.pdf.

Koehn, Daryl (1999). "Rewriting history: Resume falsification more than a passing fiction." Houston Business Journal **30**(21): 30A.

Koenig, Ann M and Shephard, Jane Yahr (2006). A Practical Guide to Documentation Review and Verification in International Admissions. Guide to Bogus Institutions and

<u>Documents</u>. Washington DC, American Association of Collegiate Registrars and Admissions Officers: 23-35.

Koenig, Ann M. (2006). <u>AACRAO Pre-Conference Workshop</u>. 2006 Western States Certification Conference, January 10-12, 2006, San Francisco, California.

Koenig, Ann M. and Devlin, Edward (2004). <u>Diploma Mills and Bogus Credentials</u>. NAFSA: Association of International Educators; Region XII Conference, Sacramento, California.

Koenig, Ann M. and Shephard, Jane Yahr (2002). "A practical guide to documentation review and verification in international admissions." <u>College and University</u> 77(4): 43-47.

Kojima, Shigeru (2007). Diploma Mill Shock in Japan. Tokyo, Tenbosha.

Kokosalakis, Nikos, Ed. (1999). <u>Non-official Higher Education in the European Union</u>. Athens, Library of Social Science and Social Policy (Kekmokop).

Kondratova, I. and Goldfarb, I. (2004). <u>Virtual Communities of Practice: Design for Collaboration and Knowledge Creation</u>. European Conference on Products and Processes Modelling (ECPPM2004), Istanbul, Turkey, September 8-11 2004, National Research Council of Canada.

KPMG (2001). 2001 Global e.fr@ud.survey. Melbourne, KPMG Forensic & Litigation Services.

KPMG (2004). Forensic Fraud Survey 2004. Melbourne, KPMG: 31.

Kruger, Paula (2006). Revelations NASA employee lied about college education. <u>ABC Radio - The World Today</u>. Canberra: Accessed 11/2/06 online at http://www.abc.net.au/worldtoday/content/2006/s1567034.htm.

Kuo, Kaiser (2005). Sorting wheat from chaff. The decline in the number of MBA applicants boils down to more than a soft job market. <u>Asia Inc - Asian Business Asian Views</u>. Hong Kong: Accessed online 26/06/05 at http://www.asia-inc.com/May05/mba2_sorting_may.htm.

Lady, R. Andrew (1967). "Honoris Causa: An Examination of the Doctor of Philosophy Degree." The Journal of Higher Education 38(4): 197-205.

Lamicq, Hélène and Jensen, Henrik Toft (2001). Towards Accreditation Schemes For Higher Education In Europe? Lisboa/Oeiras, CRE Project, co-funded by the SOCRATES Programme (Complementary Measures for Higher Education): Accessed 19/4/06 online at http://www.worldbank.org/afr/teia/pdfs/Towards%20Accreditation%20for%20European%20Higher%20Education.pdf.

Landy, Heather (2006). RadioShack CEO's résumé in question. <u>Star Telegram</u>. Forth Worth, Texas: Accessed 17/2/06 online at http://www.dfw.com/mld/dfw/13867927.htm.

Lane, Bernard (2006). Alarm over bogus degrees. <u>The Australian</u>. Sydney: Accessed 15/3/06 online at

 $\frac{http://www.theaustralian.news.com.au/common/story_page/0,5744,18464906\%255E12332,0}{0.html}.$

Lanford, H. W. (1972). <u>Technological Forecasting Methodologies: A Synthesis</u>. New York, American Management Association Inc.

Lasala, Raffaele and Rizzello, Rossella (1999). "The facility between certification and accreditation." Quality Assurance: Good Practice, Regulation, and Law 6(3): 137 - 148.

Lave, J. and Wenger, E. (1991). <u>Situated Learning</u>. <u>Legitimate peripheral participation</u>. Cambridge, University Press.

Lawnham, Patrick (2002a). Degree databank could deter fakes. The Australian. Sydney: 31.

Lawnham, Patrick (2002b). Discordant degrees axed. The Australian. Sydney: p.35.

Lawnham, Patrick (2002c). Exam-free MCSE warning. <u>The Australian</u>. Sydney: Accessed online 11/4/02 online at

http://australianit.news.com.au/articles/0,7204,4108063^15306^^nbv^,00.html.

Lawnham, Patrick (2002d). Mail-Order Bachelors. The Australian. Sydney: 31-32.

Lawnham, Patrick (2002e). Not worth the paper. The Australian. Sydney: 21 & 30.

Lawnham, Patrick (2002f). Oh, *that* doctorate in business administration. <u>The Australian.</u> Sydney: p.31.

Lawnham, Patrick (2002g). Recognition of doctorate stirs debate. <u>The Australian</u>. Sydney: Accessed 28/11/03 online at http://www.theaustralian.news.com.au/printpage/0,5942,5842945,00.html.

Lawnham, Patrick (2002h). Unaccredited degrees begin to win wider acceptance. <u>The Australian</u>: p.23.

Lawnham, Patrick (2002i). Unis on the lookout for degree vendors. <u>The Australian</u>. Sydney: 30.

Lawnham, Patrick (2002j). Windows open for more fakes. <u>The Australian</u>. Sydney: Accessed 11/4/02 online at http://www.australianit.news.com.

Lawnham, Patrick (2003). Obscure operators returning by degrees. <u>The Australian</u>. Sydney: p.28.

Lederman, Doug (2006a). Dropping a Bomb on Accreditation. <u>Inside Higher Ed.</u> Washington D.C.: Accessed 1/4/06 online at http://insidehighered.com/news/2006/03/31/accredit.

Lederman, Doug (2006b). Registrars' Group Takes On Diploma Mills. <u>Inside Higher Ed.</u> Washington DC: Accessed 11/2/06 online at http://insidehighered.com/news/2006/02/10/aacrao.

Lee, Yew Liang and Miller, Paul W. (2004). "Screening and Human Capital in the Australian Labour Market of the 1990s." <u>Australian Economic Papers</u> **43**(2): 117-135.

Leech, Graeme (1991). 'Imposter" unmasked going for promotion. <u>The Australian</u>. Sydney: 15.

Leeuw, Herman de (2007). "The unbearable lightness of sheepskin." Forum 9(1): 34-35.

Legal action against fake degrees (1999). BBC News. London: Accessed 11/3/06 online at http://news.bbc.co.uk/1/hi/education/436807.stm.

Levicoff, Steve (1992). Name it and Frame It: New Opportunities in Adult Education and How to Avoid Being Ripped Off by "Christian" Degree Mills. Ambler, PA, Institute on Religion and Law.

Lewis, Peter (2003). Profile: Hon Peter Lewis. Adelaide, Parliament of South Australia: Accessed 15/2/06 online at

http://web.archive.org/web/20030727181355/http://www.parliament.sa.gov.au/Internet/Deskt opModules/memberdrill.aspx?PID=541.

Lewis, Peter (2005). Profile: Hon Peter Lewis. Adelaide, Parliament of South Australia: Accessed 15/2/06 online at

http://web.archive.org/web/20050325100822/http://www.parliament.sa.gov.au/Internet/Deskt opModules/memberdrill.aspx?PID=541.

Lewis, Peter (2006). Profile: Hon Peter Lewis. Adelaide, Parliament of South Australia: Accessed 15/2/06 online at

http://www.parliament.sa.gov.au/Internet/DesktopModules/memberdrill.aspx?PID=541.

Lezon, Dale (2005). Fake diploma case goes to court. A Spring couple is accused of selling nearly \$1 million in bogus documents. Houston Chronicle. Houston: Accessed 11/12/05 online at http://www.chron.com/disp/story.mpl/metropolitan/3510548.html.

Lies, damned lies and CVs (2005). The Dominion Post. Accessed 13/08/05 online at http://www.stuff.co.nz/stuff/0,2106,3375435a1864,00.html.

Lieven, Michael and Martin, Graeme (2006). "Higher Education in a Global Market: The Case of British Overseas Provision in Israel." <u>Higher Education</u> **52**(1): 41-68.

Linstone, Harold A. and Turoff, Murray (1975). The Delphi method: techniques and applications. Reading, Mass, Addison-Wesley Pub. Co. Advanced Book Program.

Lockhart, Joe and Serotte, Liz (2005). Media Release: Penn State Selects Certified Transcript Services from GeoTrust and Adobe to Secure Academic Records. Needham, Massachusetts, GeoTrust: Accessed 4/10/05 online at

http://www.geotrust.com/about/news_events/press/pr_pennstate_100305s.pdf.

Long, M. (1999). The match between educational qualifications and jobs. Clayton, Monash University Centre for Economics of Education and Training.

Lowe, Peter and Matz, Steven (nd). Anti-Counterfeiting Technology: A Guide to Protecting and Authenticating Products and Documents. Barking, ICC Commercial Crime Services.

Loyer, Edward and Schmidt, Paul (1989). "Fraudulent Documents: The Michigan Definition." College and University 64(3): 280-287.

Lucas, Joel (2004). "Taking the guesswork out of employment screening." KPMG: Forensic Insight Advisory(3): 6.

Luk, Helen (2002). Despite Crackdown on Forgers, Fake University Diplomas A Booming Business in China. <u>The Seattle Medium</u>. Seattle: Accessed 11/08/05 online at http://seattlemedium.com/News/article/article.asp?NewsID=13900&sID=33.

Lumadue, Richard T. (2006). "When Graduate Degrees Prostitute the Educational Process: Degrees Gone Wild." <u>Christian Higher Education</u> **5**(3): 263 - 278.

Lupton, Deborah (1999). Risk. New York, Routledge.

Lynch, Adrian (1990). Director under academic scrutiny. The Australian. Sydney: p.15.

Lynch, Donal (2005). Degree of doubt for Bertie's boffin. <u>The Irish Independent</u>: Accessed 11/10/05 online at http://home.eircom.net/content/unison/national/6475970?view=Eircomnet.

Lyon, David (2002). "Everyday Surveillance: Personal data and social classifications." Information, Communication & Society 5(2): 242-257.

Lyons, Tom (2006). Famed charity boss lied in bid to get US grant. <u>Irish Independent</u>. Dublin: Accessed 22/7/06 online at http://home.eircom.net/content/unison/national/8462811?view=Eircomnet.

MacLeod, Donald (2003). Sounds grand. <u>The Guardian</u>. London: Accessed 28/11/05 online at http://education.guardian.co.uk/administration/story/0,9860,1037877,00.html.

Macquarie University. (2006). Macquarie University Qualification Verification (QV) Report. Sydney, Macquarie University: 1.

MacWilliams, Bryon (1999). "Diplomas for Sale on Moscow's Streets." <u>Chronicle of Higher Education</u> **45**(45): A43.

Maglen, L.R. (1990). "Challenging the Human Capital Orthodoxy: The Education-Productivity Link Re-examined." <u>Economic Record</u> Economic Record J1 - Economic Record **66**(195): 281.

Maiden, Samantha and Kerr, Joseph (2006). Graduates 'lacking job skills'. <u>The Australian</u>. Sydney: Accessed 14/3/06 online at http://www.theaustralian.news.com.au/common/story_page/0,5744,18442030%255E12332,0 0.html.

Maiolo, Rosa (1993). Group's activity embarrasses university. <u>The Sydney Morning Herald.</u> Sydney: 2.

Malden, Henry (1835). On the origin of universities and academical degrees. London, Samuel Bentley.

Malizio, Andrew G and Whitney, Douglas R (1985). Educational Credentials in Employment: A Nationwide Survey. GED Research Brief. Washington, DC, American Council on Education, GED Testing Service.: 5.

Mancuso, Roberta and Donaghy, Dave (2005). Fake nurse pleads guilty. <u>Herald Sun.</u> Accessed 30/09/05 online at http://www.heraldsun.news.com.au/common/story_page/0,5478,16614050%255E1702,00.ht ml.

Mangan, Katherine (2002). "The Fine Art of Fighting Fakery: Admissions officers and credentials consultants increasingly have to check documents for forgery." <u>Chronicle of Higher Education</u> **49**(10): A39.

Marginson, Simon (1995). "The Decline in the Standing of Educational Credentials in Australia." Australian Journal of Education **39**(1): 67-76.

Marginson, Simon (2001). <u>The Global Market in Foreign Higher Education: The Case of Australia</u>. Association for Studies in Higher Education (ASHE); 26th Annual Conference, 15th-18th November 2001, Richmond, Virginia, USA.

Marginson, Simon (2004a). "Competition and Markets in Higher Education: a 'glonacal' analysis." Policy Futures in Education **2**(2): 175-244.

Marginson, Simon (2004b). "National and Global Competition in Higher Education." <u>The Australian Educational Researcher</u> **31**(2).

Marginson, Simon (2004c). "A Revised Marxist Political Economy of National Education Markets." Policy Futures in Education **2**(3&4): 439-453.

Marginson, Simon (2006a). "Australian universities in the global context." <u>Campus Review</u> **12**(11): 8-9.

Marginson, Simon (2006b). "Dynamics of national and global competition in higher education." <u>Higher Education</u> **52**(1): 1-39.

Markus, Ursula (2002). "Characterizing the Virtual Community." <u>Collaboration – Working Efficiently in a Complex Network of People and Information</u>(5): Accessed 19/1/06 online at http://www.sapdesignguild.org/editions/edition5/overview_edition5.asp.

Marquand, Robert (2006). Research fraud rampant in China; A Chinese study found that 60 percent of PhD candidates admitted to plagiarism, bribery. <u>Christian Science Monitor</u>. Boston MA: Accessed 19/5/06 online at http://www.csmonitor.com/learning/index.html.

Martin, Brian (1989). "Fraud and Australian Academics." Thought and Action 5(2): 95-102.

Martin dealing with McSweeney issue: Ahern (2005). <u>Radio Telefis Éireann</u>. Cork: Accessed 12/11/05 online at http://www.rte.ie/news/2005/1111/mcsweeneyb.html.

Martorella, Peter H. (1991). "Consensus Building Among Social Educators: A Delphi Study." Theory and Research in Social Education **19**(1): 83-94.

Marx, K. (1936). The poverty of philosophy. London, Lawrence and Western.

Maslen, Geoff (1991a). Academic resigns as diploma questioned. <u>Sydney Morning Herald</u>. Sydney: 4.

Maslen, Geoff (1991b). Deakin relives academic fraud issue. <u>Campus Review Weekly</u>. Melbourne: 5.

Maslen, Geoff (1992). Former professor lied about degrees. <u>The Sydney Morning Herald.</u> Sydney: 8.

Maslen, Geoff (2002). "Unis alerted to fake degrees scam." Campus Review 12(6): 1-2.

Mason-Draffen, Carrie (2004). Resume lies on rise: Surveys show more applicants are fudging credentials, hurting their job prospects and costing firms money. <u>Sun-Sentinel.com</u>. Accessed online 11/6/04 at http://www.sun-sentinel.com.

Mass marketed tax effective schemes and investor protection (2001). <u>Senate Economic References Committee</u>. Melbourne, Commonwealth of Australia: Accessed 9/2/06 online at http://wopared.aph.gov.au/hansard/senate/commttee/s4652.pdf.

Maxam, June (2006). Oh, Oh, Schiavo---Another State Criminalizes Lying On Resume. <u>The North Country Gazette</u>. New York State: Accessed 6/3/06 online at http://www.northcountrygazette.org/articles/030506ResumeLying.html.

McBurnie, Grant and Ziguras, Christopher (2001). "The regulation of transnational higher education in Southeast Asia: Case studies of Hong Kong, Malaysia and Australia." <u>Higher</u> Education **42**(1): 85-105.

McBurnie, Grant and Ziguras, Christopher (2006). <u>Transnational education: issues and future trends for borderless education</u>, Routledge.

MCEETYA (2006). National Protocols for Higher Education Approval Processes. Carlton, Victoria, Ministerial Council on Education, Employment, Training and Youth Affairs: Accessed 23/7/06 online at http://www.mceetya.edu.au/mceetya/default.asp?id=15212.

McGee, Marianne Kolbasuk (2002). IT Execs Have Nothing On Shamed Notre Dame Coach. InformationWeek. Accessed online 4/1/02 at http://www.informationweek.com.

McIntosh, Philip (1990). Doctor takes his fictitious degrees overseas. The Age. Sydney: p.5.

McSweeney move - Doctorate debacle will follow him (2005). <u>Irish Examiner</u>. Dublin: Accessed 18/11/05 online at h6oPogsgHuTLc4nqWo2.asp.

Merritt, Chris (2006). Former judge's PhD 'not worth the paper'. <u>The Australian</u>. Sydney: Accessed 20/8/06 online at http://www.news.com.au/story/0,23599,20176434-2,00.html.

Meyer, J.W. (1977). "The effects of education as an institution." <u>American Journal of Sociology</u> **83**: 55-77.

Mgobozi, I (2004). "Human Capital and Credentialism: The Sociological Explanation of Racial Inequalities in South Africa." <u>Current Sociology</u> **52**(5): 775-783.

Middlehurst, Robin (2001). Quality Assurance Implications of New Forms of Higher Education. Part 1 A Typology. <u>ENQA Occasional Papers 3</u>. Helsinki, European Network for Quality Assurance in Higher Education: Accessed 28/12/2005 online at http://www.uv.es/alfa-acro/documentos/documentosinteres/10.pdf.

Middlehurst, Robin (2002). <u>The Developing World of Borderless Higher Education: Markets, Providers, Quality Assurance and Qualifications</u>. First Global Forum on International Quality Assurance, Accreditation and the Recognition of Qualifications in Higher Education: "Globalization and Higher Education", Paris, 17-18th October, 2002, United Nations Educational, Scientific and Cultural Organization.

Middlehurst, Robin (2003). A world of borderless higher education - impact and implications. The virtual university; models and messages, lessons from case studies. S. d'Antoni, UNESCO, International Institute for Educational Planning: Accessed online 26/06/05 at http://www.unesco.org/iiep/virtualuniversity/files/chap3.pdf.

Miller, D. (1991). "No classes, no campus, no problems: non-traditional degree-granting programs (how diploma mills operate)." <u>Adult Learning</u> **3**(3): 17-20.

Miller, Jerry and Mills, Olive, Eds. (1978). <u>Credentialing Educational Accomplishment.</u> <u>Report and Recommendations of the Task Force on Educational Credit and Credentials.</u> Washington, D.C., American Council on Education.

Miller, Jerry W. and Boswell, L.E. (1979). "Accreditation, Assessment, and the Credentialing of Educational Accomplishment." <u>Journal of Higher Education</u> **50**(2): 219-225.

Milligan, Louise (2002). Study shows degree of cheating. The Australian. Sydney: p.5.

Mindlin, Alex (2004). Pass/fail: sizing up foreign academic credentials. <u>The International</u> Herald Tribune Online. New York: Accessed online 30/9/2004 at http://www.iht.com.

Minkler, Bill (2005). Diploma mill. Nuclear News: 88.

Mitchell, John, Wood, Sarah and Young, Susan (2001). Communities of Practice: Reshaping Professional Practice and Improving Organisational Productivity in the Vocational Education and Training (VET) Sector – Resources for Practitioners. Melbourne, Australian National Training Authority: Accessed 11/09/05 online at http://www.reframingthefuture.net/publications/cop.pdf.

Monash student records systems secure (2002). Monash Newsline: Media Releases. Accessed 11/9/04 online at http://www-pso.adm.monash.edu.au/news/Story.asp?ID=530&SortType=15.

Moodie, Gavin (2007). "Regulating 'university' and degree-granting authority: Changing of the guard." <u>Journal of Higher Education Policy and Management</u> **29**(1): 103-117.

Mooney, Paul (2000). China Tests Database to Crack Down on Counterfeit College Degrees. <u>The Chronicle of Higher Education</u>: Accessed 10/9/04 online at http://chronicle.com/free/2000/06/2000061505n.htm.

More than meets the eye (2005). <u>Human Capital Magazine</u>: Accessed 3/1/07 online at http://www.hcamag.com/hca_aus/detail_article.cfm?articleID=635.

Morgan, M.G. (1990). Choosing and Managing Technology-Induced Risks. <u>Readings in Risk</u>. T. S. Glickman and M. Gough. Washington D.C., Resources for the Future: 5-15.

MORI (2001). British Job Applicants Are Lying On Their CVs. London, Market and Opinion Research International: Accessed online 14/4/05 at http://www.mori.com/polls/2001/cv.shtm.

Morlin, Bill (2005). Agents visit diploma mill sites. <u>The Spokesman-Review.com</u>. Accessed 13/08/05 online at http://www.spokesmanreview.com/local/story.asp?ID=84975.

Morris, Sophie (2006). An academic passport to overseas jobs. <u>Australian Financial Review</u>. Sydney: p.26.

Moses, Ingrid (2004). <u>Global Aspects of Quality Assurance in Education - An Australian Perspective</u>. Toward Mutual Recognition: Educational Benchmarking and Quality Assurance, Sofitel Central Hua Hin Resort, Prachuab Kirikhan, Thailand 16-19 November 2004.

Muiruri, Mwangi (2006). Body formed to regulate education in EA. <u>Kenya Times</u>. Nairobi: Accessed 29/7/06 online at http://www.timesnews.co.ke/28jul06/nwsstory/news1.html.

Mulindwa, Rogers (2006). Uganda: NCHE Throws Out Nadduli Petition Against Ndawula. <u>The Monitor</u>. Kampala: Accessed 30/3/06 online at http://allafrica.com/stories/200603280862.html.

Mulligan, Matthew (2003). Legislation set to tackle fake degrees. <u>The School of Journalism and Communication</u>. Accessed 16/12/03 online at http://www.sjc.uq.edu.au/tqi/education/02.htm.

Murphy, Kim (2006). Fakes, Fakes and More Fakes. <u>St Petersburg Times</u>. Moscow: Accessed 26/7/06 online at http://www.times.spb.ru/index.php?action_id=2&story_id=18344.

Murray, John P (1992). "Expectations of Department Chairpersons: A Delphi Case Study." Journal of Staff, Program, & Organization Development 10(1): 13-21.

Murry, John W. and Hammons, James O. (1995). "Delphi: A Versatile Methodology for Conducting Qualitative Research." <u>The Review of Higher Education</u> **18**(4): 423-436.

NAFSA (2005). "Letters to the Editor." <u>Admissions wRAP Up: A newsletter for those interested in international admissions and recruiting. *NAFSA: Association of International Educators* **2**(5): Accessed 30/10/05 online at http://www.adsec.nafsa.org/news0509.pdf.</u>

Nassirian, Barmak (2006). Diploma Mill Legislation Introduced in House of Representatives. Washington DC, American Association of Collegiate Registrars and Admissions Officers: Accessed 1/9/06 online at

http://www.aacrao.org/transcript/index.cfm?fuseaction=show_view&doc_id=3263.

Nationwide News Pty Limited v The University of Newlands & Anor [2005] NZCA 317 9 December (2005). Court of Appeal of New Zealand Decisions: Accessed 30/4/06 online at http://www.nzlii.org/nz/cases/NZCA/2005/317.html.

Neary, Ben (2005). Officials urge private school crackdown. <u>Casper Star Tribune</u>. Wyoming: Accessed 29/10/05 online at

 $\frac{http://www.casperstartribune.net/articles/2005/10/26/news/wyoming/6cc0a84fa9ba43278725}{70a5007f3852.txt}.$

Neave, G. (1997). <u>The European Dimension in Higher Education</u>. The Relationship between Higher Education and the Nation State, 7-9 April 1997, Enshede, The Netherlands, CHEPS.

Nelson, Brendan (2004). Rationalising Responsibility for Higher Education in Australia. Canberra, Department of Education Science and Training: Accessed 20/12/04 online at http://www.dest.gov.au/ministers/nelson/dec_04/report.htm.

Nettler, Gwynn (1982). Lying, cheating, stealing. Cincinnati, Ohio, Anderson Pub. Co.

New Jersey Commission on Higher Education. (1986). New Jersey Statutes & Regulations Regarding Academic Degrees. Trenton, New Jersey Commission on Higher Education: Accessed 4/5/06 online at http://www.nj.gov/highereducation/degreeregs.htm.

News, BBC (1999). 'CV Cheats lie to get jobs', BBC News. Accessed online 23/7/04 at http://news.bbc.co.uk/1/hi/business/446324.stm.

NewsBoss (2002). Immigrants caught using fake qualifications tops 120-education officials say. <u>IRN News</u>. Christchurch.

Noah, Harold J. and Eckstein, Max A. (2001). <u>Fraud and Education: The Worm in the Apple</u>. Lanham, Md., Rowman & Littlefield.

Noble, Tom (2005). Foreign doctor crackdown. <u>The Age</u>. Sydney: Accessed 5/5/05 online at http://www.theage.com.au/news/National/Foreign-doctor-crackdown/2005/05/04.

Noon, Chris (2006). RadioShack's Edmondson Apologizes For Resume Flubs. <u>Forbes</u>. London: Accessed 18/2/06 online at http://www.forbes.com/2006/02/16/radioshack-edmondson-resume-ex_cn_0216autofacescan11.html.

Norton, Andrew (2002). Higher Education? Yes, we can have too much of the thing. <u>ON LINE opinion - Australia's e-journal of social and political debate</u>. Fortitude Valley, Queensland: Accessed 12/7/05 online at http://www.onlineopinion.com.au/view.asp?article=1856.

Not enough checks on Davy's background, says Harawira (2002). <u>The New Zealand Herald</u>. Auckland: Accessed 31/5/02 online at http://www.nzherald.co.nz/storyprint.cfm?storyID=1842470&type=nzh.

NSW to crack down on fake degrees (2003). <u>Campus Review</u>. Accessed 7/7/05 online at http:/<u>www.campusreview.com.au/article.asp?typeId=1&catId=2&articleId=1739</u>.

NUFFIC (2006). International Information Tool on Recognised Higher Education Institutions. The Hague, Netherlands Organisation for International Cooperation in Higher Education.

NZPA (2002). NZQA catches dozens of fakers. The Nelson Mail. Wellington.

O'Farrell, Michael (2005a). Experts dismiss McSweeney claim over degree mill. <u>Irish Examiner</u>. Cork, Ireland: Accessed 6/11/05 online at http://www.examiner.ie/pport/web/ireland/Full_Story/did-sgQJHNG1czgkssgadLjt5C3211.asp.

O'Farrell, Michael (2005b). Government science adviser resists calls to step down. <u>Irish Examiner</u>. Cork, Ireland: Accessed 15/11/05 online at http://www.examiner.ic/pport/web/ireland/Full_Story/did-sg-VAwP5LHV5YsgdL11Zs5FWAE.asp.

O'Farrell, Michael (2005c). Pressure mounts on science adviser over dubious PhD. <u>Irish Examiner</u>. Cork, Ireland: Accessed 5/11/05 online at http://www.examiner.ie/pport/web/ireland/Full_Story/did-sgsZK1CRkddyMsgHuTLc4nqWo2.asp.

O'Farrell, Michael (2005d). Two top lecturers have dodgy degrees. <u>Irish Examiner</u>. Dublin: Accessed 28/11/05 online at http://www.examiner.ie/pport/web/ireland/Full_Story/didsg6zlY4N-8HHgsg0aewFBADppk.asp.

O'Farrell, Michael and Ring, Evelyn (2005). Coalition backs McSweeney as move sparks anger. <u>Irish Examiner</u>. Dublin: Accessed 18/11/05 online at http://www.examiner.ie/pport/web/ireland/Full_Story/did-sgCk5mw6AhMtM.asp.

Oakley, Richard (2005a). Martin asks state's science adviser about 'bogus degree'. <u>The Sunday Times</u>. Accessed 23/10/05 online at http://www.timesonline.co.uk/newspaper/0, 176-1838760,00.html.

Oakley, Richard (2005b). US academics dismiss Dublin chief adviser's PhD. <u>The Sunday Times</u>. London: Accessed 7/11/05 online at http://www.timesonline.co.uk/article/0,,2091-1860086,00.html.

Oates, John (2006). IT grads damn university courses. <u>The Register</u>. London: Accessed 14/1/06 online at http://www.theregister.com/2006/01/11/grads_say_courses_no_good/.

OECD (1996). 'Lifelong Learning for All'. Paris, Organisation for Economic Co-Operation and Development.

OECD (2001). <u>Cities and regions in the new learning economy</u>. Paris, Organisation for Economic Co-Operation and Development.

OECD (2003). Enhancing consumer protection in cross-border higher education: key issues related to quality assurance, accreditation and recognition of qualifications. Trondheim, Norway, Organisation for Economic Co-Operation and Development: Accessed 17/6/06 online at http://www.oecd.org/dataoecd/11/38/20196012.pdf.

OECD (2004a). Background Paper For The OECD Workshop on Spam. Paris, Organisation for Economic Co-Operation and Development: Accessed 5/7/05 online at http://www.olis.oecd.org/olis/2003doc.nsf/LinkTo/dsti-iccp(2003)10-final.

OECD (2004b). Education at a glance: OECD Indicators 2004. Paris, Organisation for Economic Co-Operation and Development: Accessed 17/09/2004 online at http://www.oecd.org/edu/eag2004.

OECD (2004c). Education Levels Rising in OECD Countries but Low Attainment Still Hampers Some. Paris, Organisation for Economic Co-Operation and Development.

OECD (2004d). Internationalisation of Higher Education. Paris, OECD - Policy Brief: Accessed 29/1/06 online at http://www.oecd.org/dataoecd/33/60/33734276.pdf.

OECD (2004e). Proposal on an international database on recognised higher education institutions. Initiatives of listing recognised higher education institutions. Paris, Organisation for Economic Co-Operation and Development: Accessed 16/1/06 online at http://portal.unesco.org/education/en/file_download.php/0e711ffe322cb2bfc9ee61ea0636a7ed annex_revised_intl_info_tool.pdf.

OECD (2004f). Quality and Recognition in Higher Education; The Cross-Border Challenge. Paris, Centre for Educational Research and Innovation, Organisation for Economic Co-Operation and Development.

OECD (2004g). Quality Provision in Cross Border Higher Education: Key issues related to Quality Assurance, Accreditation and Recognition of Qualifications. Background document. Paris, OECD/ CERCI: Accessed 16/1/06 online at

 $\underline{http://portal.unesco.org/education/en/file_download.php/abc33683935027eee65b9daa0fbebfb} \ cUNESCO-OECD+-+background+paper.PDF.$

OECD (2005a). Guidelines for Quality Provision in Cross-border Higher Education. Paris, Organisation For Economic Co-operation and Development: Accessed 7/12/05 online at http://www.oecd.org/dataoecd/27/51/35779480.pdf.

OECD (2005b). Guidelines for quality provision in cross-border higher education: jointly elaborated by UNESCO and the OECD. Paris, Organisation for Economic Co-Operation and Development: Accessed 20/3/05 online at http://www.oecd.org/dataoecd/47/45/34470324.pdf.

OECD (2005c). Next Steps: Pilot Study on an International Information Tool on Recognized Higher Education Institutions. Paris, Organisation for Economic Co-Operation and Development: Accessed 10/11/05 online at http://www.oecd.org/dataoecd/54/61/34266462.pdf.

OECD (2006). Education at a glance: OECD Indicators 2006. Paris, Organisation for Economic Co-Operation and Development: Accessed 13/09/2006 online at http://www.oecd.org/document/52/0,2340,en_2649_34515_37328564_1_1_1_1_1,00.html.

O'Farrell, Michael (2005a). Government science adviser resists calls to step down. <u>Irish Examiner</u>. Dublin: Accessed 20/11/05 online at http://www.examiner.ie/pport/web/ireland/Full_Story/did-sg-VAwP5LHV5YsgdL11Zs5FWAE.asp.

O'Farrell, Michael (2005b). What a difference a year makes ... <u>Irish Examiner</u>. Dublin: Accessed 18/11/05 online at http://www.examiner.ie/pport/web/ireland/Full_Story/did-sg3giU7lXaGllsgHuTLc4nqWo2.asp.

O'Keefe, Brendan (2005). Checks to shut down the fakes. The Australian. Sydney: p.36.

Okoli, Chitu and Pawlowski, Suzanne D. (2004). "The Delphi method as a research tool: an example, design considerations and applications." <u>Information & Management</u> **42**(1): 15-29.

O'Leary, George (2001). Statement from George O'Leary. Accessed 14/08/05 online at http://und.collegesports.com/sports/m-footbl/spec-rel/121401aab.html.

Oliver, Paula (2002). PM hints that Maori TV's recruiters face legal action. <u>The New Zealand Herald</u>. Auckland: Accessed 31/5/02 online at http://www.nzherald.co.nz/storyprint.cfm?storyID=1842643.

Olson, P. A. (1983). "Credentialism as Monopoly, Class War, and Socialization Scheme - Some Historical Reflections on Modern Ways of Determining Who Can Do a Job." <u>Law and Human Behavior</u> 7(2-3): 291-299.

Online buy-a-degree scam targets Asians (2002). <u>Straits Times</u>. Accessed 14/4/02 online at http://it.asia1.com.sg/newsdaily/news009 20020211.html.

Oppermann, Ian (2002). Praise for pressure on degree mills. The Australian. Sydney: p.30.

O'Regan, Eilish and Molony, Senan (2005). Harney criticises scientist's use of dodgy doctorate. <u>Irish Independent</u>. Dublin: Accessed 18/11/05 online at http://www.unison.ie/irish_independent/stories.php3?ca=9&si=1507433&issue_id=13281.

Orr, James, M.A., D.D. General Editor (2005). Entry for 'PARCHMENT'". "International Standard Bible Encyclopaedia", Accessed 30/5/05 online at http://www.searchgodsword.org/enc/isb/view.cgi?number=T6692.

Osborne, Jonathan, Collins, Sue, Ratcliffe, Mary, Millar, Robin and Duschl, Rick (2003). "What "Ideas-about-Science" Should Be Taught in School Science? A Delphi Study of the Expert Community." <u>Journal of Research in Science Teaching</u> **40**(7): 692-720.

O'Sullivan, Jan (2005). Gov must respond to bogus PhD claim on science adviser. Dublin, The Irish Labour Party: Accessed 22/10/05 online at http://www.labour.ie/press/listing/20051009162932.html.

O'Sullivan seeks an immediate investigation into online degrees (2005). <u>Limerick Post</u>. Limerick: Accessed 10/12/05 online at http://www.limerickpost.ie/dailynews.elive?id=6953&category=Daily-Fri.

Over 1,700 Vietnamese policemen use illegitimate degrees, certificates (2004). <u>Xinhua</u>. Xinhua, China: Accessed 6/2/05 online at http://www.ebscohost.com.

Overland, Martha Ann (2004). "Institution Prints Its Diplomas on Paper Typically Used in Bank Notes." <u>Chronicle of Higher Education</u> **51**(12): A37.

Page, Donna (2002). Forged degrees sold on Internet. <u>Newcastle Herald</u>. Newcastle: Accessed 24/5/04 online at http://newsstorc.f2.com.au.

Pandey, Vineeta (2006). Check on online *phoren* degrees. <u>Daily News and Analysis</u>. New Delhi: Accessed 17/7/06 online at http://www.dnaindia.com/report.asp?NewsID=1042099.

Pappas, Theodore (1998). <u>Plagiarism and the Culture War: The Writings of Martin Luther King Jr. and Other Prominent Americans</u>. Tampa, Florida, Hallberg.

Parker, Derek (2005). Privates prove their worth. Weekend Australian. Sydney: 5.

Parkes, Wayne (1985). Recruiting in Australia. Frenchs Forest, Reed Books.

Pass, Penny (2005). U.S. Attorney Press Release - US v. Randock, et al. (Diploma Mill Fraud Case). Spokane, Washington, U. S. Department of Justice.

Pathan, Bashir (2006). Certificate scam: Govt cracks whip. <u>Ahmedabad Newsline</u>. Gandhinagar: Accessed 19/2/06 online at http://cities.expressindia.com/fullstory.php?newsid=170267.

Patrick O'Neill, G (1991). "The Diploma Mill Trap." <u>Canadian Journal of Counselling</u> **25**(1): 81-90.

Paul McKenna - and - MGN Ltd (2006). <u>The Hon. Mr Justice Eady</u>, High Court of Justice Queen's Bench Division.

Pedersen, Olaf (1997). <u>The first universities: *Studium generale* and the origins of university education in Europe</u>. Cambridge, Cambridge University Press.

Perceptions of European higher education in third countries: final report (2006). Brussels, European Commission: Accessed 17/6/06 online at http://ec.europa.eu/education/programmes/mundus/acareport.pdf.

Perkin, Harold (2006). History of Universities. <u>International Handbook of Higher Education</u>. J. J. F. Forest and P. G. Altbach. New York, Springer: 159-205.

Permanent Bureau. (2005). Questionnaire: Diplomas and other education documents within the framework of the Apostille Convention. The Hague, Hague Conference on Private International Law - Apostille Convention: Accessed 5/5/06 online at http://hcch.e-vision.nl/upload/quest_diplomas_e.pdf.

Perotin, Maria M. (2003). Employers Falling for Job Applicants with Bogus College Degrees. Fort Worth Star-Telegram (TX). Dallas.

Perry, Lee-Anne (2007). "Daring to trust. Beyond risk minimisation in schools." <u>Professional</u> Educator **6**(1): 6-13.

Pfeffer, Jeffrey and Fong, Christina T. (2002). "The End of Business Schools? Less Success Than Meets the Eye." <u>Academy of Management Learning and Education</u> 1(1): 78-95.

Phat, M (2006). Hanoi police raid counterfeit diploma ring. <u>Than Nien News</u>. Hanoi: Accessed 20/4/06 online at http://www.thanhniennews.com/society/?catid=3&newsid=14568.

Phillips, Stephen (2005). A stress-free PhD? A snip at \$250. <u>The Times Higher Education Supplement</u>. London: Accessed 11/12/05 online at http://www.thes.co.uk/search/story.aspx?story_id=2026348.

PhillipsKPA (2007). National Guidelines for Higher Education Approval Processes: Guidelines for the registration of non-self-accrediting higher education institutions and the accreditation of their course/s. Draft version 2.2.07. Melbourne, Joint Committee on Higher Education & PhillipsKPA Pty Ltd: 31.

"Phony degrees proliferate down under." (2003). ASEE Prism 13(2): 14.

Pinnock, Tom (2004). Oxford degree for £165. <u>The Oxford Student</u>. Oxford: Accessed 15/4/06 online at http://www.oxfordstudent.com/mt2004wk0/news/oxford_degree_for_%A3165.

PM confirms announcement on Maori TV chief expected (2002). <u>The New Zealand Herald</u>. Auckland: Accessed 31/5/02 online at http://www.nzherald.co.nz/storyprint.cfm?storyID=1842458&type=nzh.

Pockley, Peter (1992). "Unconventional degrees: how the universities protect their own." Campus Review Weekly(June 11-17): pp.11 & 19.

Police Bust Fake Document Operation (2004). <u>XTRAMSN; Xtra Limited</u>. Christchurch: Accessed online 18/6/04 at http://xtramsn.co.nz.

Poprzeczny, Joe (1993). Bogus credentials force resignation. The Australian. Sydney: 11.

Porter, Lee (1972). Degrees for Sale. New York, Arco.

Potter, Will (2003a). Diploma mills in demand. The Australian. Sydney: 28.

Potter, Will (2003b). "States Try to Crack Down on Diploma Mills." <u>Chronicle of Higher Education</u> **50**(17): A26.

Prater, Tammy and Kiser, Sara Bliss (2002). "Lies, Lies, and More Lies." <u>SAM Advanced Management Journal</u> **67**.

Press, Associated (2005). Bail granted for alleged operators of online diploma mill. <u>Seattle Post</u>. Accessed 28/10/05 online at http://seattlepi.nwsource.com/local/6420AP_WA_Diploma_Mill.html.

Private Varsity Degrees Bogus, Declares State (2005). <u>AllAfrica.com</u>. Nairobi: Accessed 19/8/05 online at http://allafrica.com/stories/200508190056.html.

Productivity Commission, . (2006). *Economic Impacts of Migration and Population Growth*. Position Paper, January. Canberra, Productivity Commission of Australia: Accessed 24/1/06 online at http://www.pc.gov.au/study/migrationandpopulation/positionpaper/index.html.

Prohibiting false or misleading college degrees (2006). HB 2507 - 2005-06.

Prøitz, Tine S., Stensaker, Bjørn and Harvey, Lee (2004). "Accreditation, standards and diversity: an analysis of EQUIS accreditation reports." <u>Assessment and Evaluation in Higher Education</u> **29**(6): 735-750.

Puffer, Glenn Robert (2005). Graduates, Employers and the Academy: Perceptions of the quality and utility of external degrees over twenty five years. <u>School of Education</u>. Bozeman Montana, Montana State University.

Quann, James C. (1979). <u>Admissions, Academic Records, and Registrar Services</u>. San Francisco, Jossey-Bass Inc.

Question and Answers (1993). <u>Parliament of New South Wales</u>. Sydney: Accessed 8/2/06 online at

 $\underline{\text{http://www.parliament.nsw.gov.au/prod/lc/lcpaper.nsf/0/504E7DA54906DBC8CA256EF000}}\ 01AE7A.$

Quiggin, J. (1999). "Human Capital Theory and Education Policy in Australia." <u>The Australian Economic Review</u> **32**(2): 130-144.

RadioShack board to investigate CEO (2006). <u>Dallas Business Journal</u>. Dallas Fort Worth: Accessed 17/2/06 online at http://pacific.bizjournals.com/dallas/dailyedition.html#16.

Rauhvargers, Andrejs (2004a). Improving the Recognition of qualifications and study credit points. Riga, Latvia, Lisbon Recognition Convention Committee: Accessed 21/5/06 online at http://www.upf.edu/bolonya/butlletins/2004/nov1/arauh.pdf.

Rauhvargers, Andrejs (2004b). "Improving the Recognition of Qualifications in the Framework of the Bologna Process." <u>European Journal of Education</u> **39**(3): 331-347.

Rauhvargers, Andrejs (2004c). Recognition of Foreign Qualifications. Amsterdam, European Association for International Education. Admissions Officers and Credential Evaluators. Latvian Rectors Council: Accessed 25/1/06 online at http://www.aic.lv/ace/ace_disk/Recognition/exp_text/atz_gram_spec.pdf.

Rayner, Steve (1992). Cultural Theory and Risk Analysis. <u>Social Theories of Risk</u>. S. Krimsky and D. Golding. Westport, CT, Praeger: 53-79.

Redden, Elizabeth (2007). Cracking Down on the Unaccredited. <u>Inside HigherEd</u>. Washington DC: Accessed 20/1/07 online at http://insidehighered.com/news/2007/01/18/unaccredited.

Reichert, S and Tauch, C (2004). "Reforming Europe's higher education area: as the fog clears, new obstacles emerge." <u>International Educator</u> **13**(1): 35-41.

Reid, Robert (1959). <u>American degree mills</u>, a study of their operations and of existing and potential ways to control them. Washington, American Council on Education.

Reid, Robert (1963). Degree Mills in the United States. <u>Education, general</u>. New York, Columbia University.

Renesse, Rudolf L. van (2005). Optical Document Security. Boston/London, Artech House.

Renn, Ortwin (1992). Concepts of Risk: A Classification. <u>Social Theories of Risk</u>. S. Krimsky and D. Golding. Westport, CT, Praeger: 53-79.

Renn, Ortwin (1998). "Three decades of risk research: accomplishments and new challenges." Journal of Risk Research 1(1): 49 - 71.

Reuters (1986). Volvo Cancels Fermenta Link. <u>New York Times</u>. New York: Accessed 18/2/06 online at

http://query.nytimes.com/gst/fullpage.html?res=9A0DE2DD173EF935A15751C0A960948260.

Reuters (1987). A Bankruptcy In Sweden. <u>New York Times</u>. New York: Accessed 18/2/06 online at

 $\frac{\text{http://query.nytimes.com/gst/fullpage.html?res=9B0DEED8163DF936A1575AC0A96194826}}{\underline{0}.}$

Reuters (2004). Resume fraud gets slicker and easier. Half of job seekers submitted false data in 2003, survey finds. <u>CNBC</u>. Accessed online 10/3/04 at http://msnbc.msn.com/id/4488908.

Revkin, Andrew C (2006). A Young Bush Appointee Resigns His Post at NASA. New York Times. New York: Accessed 9/2/06 online at http://www.nytimes.com/2006/02/08/politics/08nasa.html? r=2&adxnnl=1&oref=slogin&adx

http://www.nytimes.com/2006/02/08/politics/08nasa.html?_r=2&adxnnl=1&oref=slogin&adxnnlx=1139450667-5KG5laGG872FRzBB1sMGWg&oref=slogin.

Rich, Katherine (2002). Heads should roll over botched Maori TV appointment. <u>National Party of New Zealand</u>. Christchurch: Accessed 31/5/02 online at http://www.national.org.nz/wEmailPrint.asp?Mode=Print&PageID=100005026.

Richardson, Jane (1992a). "Beware the degrees that put a time bomb in your c.v." <u>Australian Campus Review Weekly</u>(March 12-18): 18.

Richardson, Jane (1992b). "Beware the degrees that put a time bomb in your c.v." <u>Australian Campus Review Weekly</u>(March 12-18): p.18.

Ridoutt, Lee, Smith, Chris Selby, Hummel, Kevin and Cheang, Christina (2005). What value do employers give to qualifications? Adelaide, National Centre for Vocational Education Research: Accessed 15/12/05 online at http://www.ncver.edu.au/research/proj/nr1020.pdf.

Riley, Dan (1991). <u>Fraud and Australian Academics</u>. Australian Association for Research in Education, 1991 Annual Conference, Ramada Inn, Surfers Paradise, Queensland, Accessed 17/1/06 online at http://www.aare.edu.au/91pap/riled91203.txt.

Rintoul, Stuart (2004). The great pretender. The Weekend Australian Magazine: 22-25.

Risen, Clay (2006). Degree Burns. The scourge of fake diplomas. The New Republic: 13-15.

Rizvi, Meraj (2005). Hassle-free certificate verification from Sept 3. <u>Khaleej Times Online</u>. Dubai: Accessed 5/5/06 online at

http://www.khaleejtimes.com/DisplayArticle.asp?xfile=data/theuae/2005/August/theuae_August661.xml§ion=theuae.

Rizvi, Meraj (2006). Emirates Post introduces online application mandatory. <u>Khaleej Times Online</u>. Dubai: Accessed 21/5/06 online at http://www.khaleejtimes.com/DisplayArticle.asp?xfile=data/theuae/2006/May/theuae_May74 5.xml§ion=theuae.

RMIT University. (2004). Press Release. Hanoi, RMIT University: Accessed 25/10/04 online at http://www.rmit.edu.vn/public/asp/news.asp#42.

Robinson, Paul (2000). Would-be execs use websites to falsify CVs. <u>The Age</u>. Sydney: Accessed online 13/5/2000 at http://www.theage.com.au/news/20000513/A57351-2000May12.html.

Rocha, Euan (2006). UPDATE 3-RadioShack chief resigns over resume controversy. <u>Reuters</u>. Philadelphia: Accessed 21/2/06 online at RETAIL-RADIOSHACKCORP-UPDATE-3.XML.

Rochford, Francine (2006). "Is there *any* Clear Idea of a University?" <u>Journal of Higher Education Policy and Management</u> **28**(2): 147-158.

Roesler, Richard (2006). Tougher fake-degree penalties sought. <u>The Spokesman Review</u>. Spokane, WA: Accessed 29/1/06 online at http://www.spokesmanreview.com/local/story.asp?ID=113443.

Rogers, James L., Howard, Kenneth I. and Vessey, John T. (1993). "Using Significance Tests to Evaluate Equivalence Between Two Experimental Groups." <u>Psychological Bulletin</u> **113**(3): 553-565.

Rood, David (2005). Degree checks on the way. <u>The Age</u>. Melbourne: Accessed 5/10/05 online at http://www.theage.com.au/news/National/Degree-checks-on-the-way/2005/05/08/1115491043670.html.

Royal Association of Justices of SA Inc. (2004a). Guidebook. Adelaide, Royal Association of Justices of SA Inc. 129.

Royal Association of Justices of SA Inc. (2004b). Training Manual for Justices of the Peace in South Australia. Adelaide, Royal Association of Justices of SA Inc. 129.

Rumberger, Russell W. (1981). <u>Overeducation in the U.S. Labor Market</u>. New York, Praeger Publishers.

Rumyantseva, Nataliya L. (2005). "Taxonomy of Corruption in Higher Education." <u>Peabody</u> Journal of Education **80**(1): 81-92.

Rutledge, Amy (2004). Buying phony degrees online. <u>WATE 6</u>. Knoxville: Accessed online 26/6/05 at http://www.wate.com/Global/story.asp?S=2567661&nav=E8YzT9L5.

Ryan, Colleen (2005a). China's 600,000 university degrees of desperation. <u>The Australian Financial Review</u>: 29.

Ryan, Collen (2005b). China's 600,000 university degrees of desperation. <u>The Financial</u> Review. Sydney: 29.

Ryan, May-Ellen (1997). "QUT lecturer resigns after qualification allegations." <u>Campus Review</u> 7(11): p.2.

Ryan, Yoni and Stedman, Lawrence (2002). The Business of Borderless Education - 2001 Update. Canberra, Evaluations and Investigations Programme, Higher Education Group,: Accessed 10/2/06 online at

http://www.dest.gov.au/archive/highered/eippubs/eip02_1/eip02_1.pdf.

Saarinen, Taina (2005). "'Quality' in the Bologna Process: from 'competitive edge' to quality assurance techniques." <u>European Journal of Education</u> **40**(2): 189-204.

Sahadi, Jeanne (2004). Top 5 resume lies. <u>CNN Money</u>. Accessed online 17/4/04 at http://cnnmoney.com.

Sahakian, Curtis E. (1997). <u>The Delphi Method</u>. Skokie, Illinois, Corporate Partnering Institute.

Salama, Samir (2006). PhD degree turns out to be fake. <u>Gulf News</u>. Dubai: Accessed 3/11/06 online at http://www.gulfnews.com/nation/Employment/10086815.html.

Saltman, Paul (2004). What Is--and What Is Not--a Diploma Mill. <u>Chronicle of Higher</u> Education, Chronicle of Higher Education. **50:** B4-B14.

Samuels, Mark (2005). UKeU: the sorry tale of elearning scheme. <u>Computing</u>. 3rd March, Accessed online 21/3/05 at http://www.vnunet.com/print/it/1161614.

Sands, Trent (2000). <u>Fake ID by Mail and Modem</u>. Port Townsend, Washington, Loompanics Unlimited.

Sauter, David M (1998). "Electronic Fraud on Campus." About Campus 3(5): 25-27.

Savage, Donald C. (1994). Discussion paper on fraud and misconduct in academic research and scholarship. Reviewed by the CAUT Academic

Freedom & Tenure Committee March 2003. Ottawa, Canadian Association of University Teachers: Accessed 17/1/06 online at http://www.caut.ca/en/about/committees/dp fraudmisconduct.pdf.

Sayers, Steven (2000). Lies, damn lies ... and CVs! <u>t Magazine</u>: Accessed 13/09/01 online at http://www.tmag.co.uk/articles/Mar00p26.html.

Schevitz, Tanya (2003). 'Rich Uncle' bankrolls students - for a price Grads owe percentage of future paychecks. San Francisco Chronicle. San Francisco, California: Accessed 3/2/06 online at http://www.sfgate.com/cgi-bin/article.cgi?file=/c/a/2003/02/18/MN192687.DTL.

Schmidt, R.C. (1997). "Managing Delphi surveys using nonparametric statistical techniques." Decision Sciences **28**(3): 763-774.

Scholz, Christine (2005). <u>Responding to the challenges of cross-border higher education.</u> <u>ESIB Policy Paper on Transnational Education</u>. Sharing Quality Higher Education Across Borders: Role of Associations and Institutions. 15-16 November 2005, Alexandria, UNESCO.

Schultz, Theodore W. (1971). <u>Investment in Human Capital: The Role of Education and of Research</u>. New York, Collier-Macmillan.

Science chief in doctorate dispute to get new State job (2005). <u>The Irish Times</u>. Dublin: Accessed 18/11/05 online at

http://www.ireland.com/newspaper/front/2005/1116/1045458987HM1BARRYMCSWEENE Y.html.

Scrip-Safe (1995). Academic Misrepresentation Survey. Loveland, Ohio, Scrip-Safe Security Products Inc.: 1.

Second Govt adviser received PhD from US 'degree mill' (2005). <u>Online.ie</u>. Dublin: Accessed 19/11/05 online at http://www.online.ie/News/News.aspx?newsId=127165.

Secrest, L. B. (1985). "Specialization? Who needs it?" Clinical Psychologist 38(1): p.3.

Sharma, Yojana (2004). Fake university applications reach 1,000; UK admissions service uncovers record number using fraudulent qualifications. <u>South China Morning Post</u>. Hong Kong.

Sheehan, Paul (2006). Conduct questions: gold past returns to haunt Einfeld. Sydney Morning Herald. Sydney: Accessed 26/8/06 online at http://www.smh.com.au/news/national/conduct-questions-gold-past-returns-to-haunt-einfeld/2006/08/25/1156012745852.html.

Sheeran, Michael (2005). Testimony of Rev. Michael Sheeran, S.J. President, Regis University, Colorado. Washington D.C., Roundtable Discussion on Higher Education and Corporate Leaders: Working Together to Strengthen America's Workforce: Accessed 5/3/06 online at

http://www.washingtonwatchdog.org/nonprofits/documents/cong_hearings/senate/109/senate hearing109_21456.html.

Shepherd, Tory (2007). Bogus doctors to come under scrutiny. The Advertiser. Adelaide: 32.

Shutt, Bruce T. (1986). "Summary of Spoken Comments as Testimony on Fraudulent Records." <u>The Journal of the American Association of Collegiate Registrars</u> **Spring 1986**: 206-11.

Siderius, Christine (2005). The future lies with the fakers. <u>The University of Washington Daily</u>. Washington DC: Accessed 4/5/05 online at http://thedaily.washington.edu.

Sinks, James (2005). State targets bogus degrees. <u>The Bulletin</u>. Accessed 5/7/05 online at http://www.bendbulletin.com/news/story.cfm?story_no=16634.

Smith, Adam (1880). An inquiry into the nature and cause of the wealth of nations (Vol. I). Oxford, Clarendon Press.

Smith, Alexandra (2006). Man banned from selling fake exam certificates. <u>The Guardian</u>. London: Accessed 9/6/06 online at http://education.guardian.co.uk/schools/story/0,,1793137,00.html.

Smith, Russell G. (2005). "Identification processes in the higher education sector: risks and countermeasures." <u>Trends and Issues in Crime and Criminal Justice</u> **305**(December 2005): 6.

Snow, J (2001). Truth or consequences - Background checks save millions. <u>The Business Journal of Jacksonville</u>. Jacksonville: Accessed 30/9/2001 online at http://jacksonville.bcentral.com/jacksonville/stories/2001/05/14/smallb1.html.

Snyder, P (1974). "A classification of diploma mills in the United States." <u>College Student</u> Journal 8(1): 92-95.

Software to help check on fake degrees (2005). <u>Business Standard</u>. Mysore: Accessed 18/05/05 online at http://www.business-standard.com.

Sosdian, Carol P. and Sharp, Laure M. (1978). The External Degree as a Credential: Graduates' experiences in employment and further study. Washington, D.C., U.S. Department of Health, Education and Welfare, National Institute of Education.

Spears, Valarie Honeycutt and Mueller, Lee (2006). State medical board to investigate Arnett. <u>Lexington Herald-Leader</u>. Lexington KY: Accessed 18/11/06 online at http://www.kentucky.com/mld/kentucky/15680117.htm.

Spille, Henry A and Stewart, David W (1985). "The New Breed of Diploma Mills: Numerous, Tough, and Aggressive." Educational Record **66**(2): 16-22.

Stamper, John (2007). House Democrats back penalty for use of fake diplomas. <u>Lexington Herald-Leader</u>. Lexington: Accessed 10/2/07 online at http://www.kentucky.com/mld/kentucky/news/16658795.htm.

Standards Association of Australia. (2004). Risk Management (AS/ NZS 4360: 2004). North Sydney, Standards Australia.

Standards Association of Australia. (2006). Employment screening (AS 4811-2006). North Sydney, Standards Australia: Accessed 23/7/06 online at http://www.saiglobal.com/shop/Script/Details.asp?DocN=AS0733776078AT.

Stavisky, Leonard Price (1973). "Term Paper "Mills", Academic Plagiarism, and State Regulation." <u>Political Science Quarterly</u> **88**(3): 445-461.

Stensaker, B. and Harvey, L. (2006). "Old wine in new bottles? A comparison of public and private accreditation schemes in higher education." <u>Higher Education Policy</u> **19**(1): 65-85.

Stetar, J., Panych, O. and Cheng, B. (2005). "Confronting corruption: Ukrainian Private Higher Education." <u>International Higher Education</u> **38**(Winter 2005): 13-15.

Stewart, David W and Spille, Henry A (1988). <u>Diploma mills: degrees of fraud</u>. New York, Macmillan Publishing.

Stewart, David W and Spille, Henry A (1993). "Religious Exemptions Threaten Higher Education's Integrity." Educational Record **74**(2): 46-50.

Stockton, Geoff (2000). "Frantic recruitment opens doors to fraudsters." <u>HR Monthly</u>(June 2000): 28-29.

Stodt, M. M. and Thielens, W. (1985). "Credentialism among Graduate-Students." <u>Research in Higher Education</u> **22**(3): 251-272.

Stone, Diana L. (1990). "Private higher education in Australia." <u>Higher Education</u> **20**(2): 143-159.

Streiner, David L. (2003). "Unicorns *Do* Exist: A Tutorial on "Proving" the Null Hypothesis." <u>Canadian Journal of Psychiatry - Research Methods in Psychiatry</u> **48**(11): 756-761.

Sursock, Andrée (2001). Towards Accreditation Schemes for Higher Education in Europe? Prague, Committee on Prague 2001. CRE project, July 2000 - May 2001 co-funded by SOCRATES programme: Accessed 3/4/06 online at http://www.esib.org/BPC/docs/Archives/CoP011_cre_accreditation_lst_findings.pdf.

Swan, Norman (1998). Scientific Fraud and Defamation. <u>Radio National</u>. Canberra: Accessed 9/2/06 online at http://www.abc.net.au/rn/talks/8.30/helthrpt/stories/s11681.htm.

Tauch, Christian (2004). "Almost Half-time in the Bologna Process — Where Do We Stand?" <u>European Journal of Education</u> **39**(3): 275-288.

Taylor, Peter Shawn and McGugan, Ian (1995). "Devoured by degrees." <u>Canadian Business</u> **68**(9): 10.

Taylor, Susanne, Vorster, Johan and Wal, Ruurd Van Der (2002). <u>The Feasibility of Using the World Wide Web to Authenticate Higher Education Qualifications Issued by Universities and Technikons</u>. SAICSIT 2002; Enablement through Technology. Annual Conference of the South African Institute of Computer Scientists & Information Technologists, The Boardwalk, Port Elizabeth, South Africa.

Teigland, Robin and Wasko, Molly McLure (2004a). Extending Richness with Reach: Participation and Knowledge Exchange in Electronic Networks of Practice. <u>Knowledge Networks</u>. <u>Innovation Through Communities of Practice</u>. P. Hildreth and C. Kimble. Hershey, PA, Idea Group Publishing: 230-243.

Teigland, Robin and Wasko, Molly McLure (2004b). Extending Richness with Reach: Participation and Knowledge Exchange in Electronic Networks of Practice. <u>Knowledge Networks</u>. <u>Innovation Through Communities of Practice</u>. C. Kimble. Hershey, PA, Idea Group Publishing.

Temple, Paul (2006). "Universities Without Corruption: A New Approach for Georgia's Higher Education." <u>International Higher Education</u>(42): 19-20.

Thomas, Hedley (2005). The deadly legacy of Dr Patel. <u>The Courier Mail</u>. Accessed online 23/4/05 at http://www.couriermail.news.com.au.

Thomas, Hedley and Papps, Nick (2005). How did Dr Death slip through net. <u>The Advertiser</u>. Adelaide: 20.

Thomas, Martin (1991). <u>The fraud: behind the mystery of John Friedrich, Australia's greatest conman</u>. Melbourne, Pagemasters.

Times Tech Staff. (2006). Dropout Gates says: Get degree. <u>The Seattle Times</u>. Seattle: Accessed 14/2/06 online at http://seattletimes.nwsource.com/html/businesstechnology/2002801844 btdownload13.html.

'Too many graduates', bosses say (2004). <u>BBC News</u>. London: Accessed 12/02/05 online at http://news.bbc.co.uk/go/pr/fr/-/hi/business/3412753.stm.

Training and Skills Commission. (2005). Overseas Qualifications Reference Group - Final Report. Adelaide, Training and Skills Commission: Accessed 9/3/06 online at http://www.training.sa.gov.au/tasc/files/links/OQRG_Final_Report.pdf.

Transparency International. (2006a). Corruption Perceptions Index 2006 - World Map. Paris, Transparency International: Accessed 03/01/07 online at http://www.transparency.org/content/download/10672/91340/version/1/file/elmundo_cpi_y-or-re.pdf.

Transparency International. (2006b). Report on the Transparency International Global Corruption Barometer 2006. Berlin, Germany, Transparency International: Accessed 3/01/07 online at http://www.transparency.org/policy_research/surveys_indices/gcb/2006.

Transparency International. (2006c). Transparency International Corruption Perceptions Index 2006. Berlin, Germany, Transparency International: Accessed 3/01/07 online at http://www.transparency.org/policy_research/surveys_indices/cpi/2006.

Trotter, Andrew (2004a). "Federal Investigators Target 'Diploma Mills'." <u>Education Week</u> **23**(37): 6.

Trotter, Andrew (2004b). "Investigation, Hearings Target Online 'Diploma Mills'." <u>Education Week</u> **23**(34): 18.

Trought, Brian (2005). Irish Educational System Undermined by Bogus Universities. <u>The Epoch Times</u>. London: Accessed 12/4/06 online at http://www.theepochtimes.com/news/5-11-14/34799.html.

Tryon, Warren W. (2001). "Evaluating Statistical Difference, Equivalence and Indeterminancy Using Inferential Confidence Intervals: An Integrated Alternative Method Of Conducting Null Hypothesis Statistical Tests." <u>Psychological Methods</u> **6**(4): 371-386.

Tuchman, Barbara W. (1979). A distant mirror: the calamitous 14th century. London, Macmillan.

Tufts, Robert B. (1987). "Fraudulent Records: The Congressional Hearings and Reports." College and University **62**(3): 223-235.

Turoff, Murray (1975). The Policy Delphi. <u>The Delphi Method: Techniques and Applications</u>. H. A. Linstone and M. Turoff. Reading, Mass, Addison-Wesley: Accessed 9/5/06 online at http://www.is.njit.edu/pubs/delphibook/.

TVET (2006). Strategic Industry Audit of Training in the Hospitality Industry - National Report. Melbourne, Technical and Vocational Education and Training: 64.

Twenge, Stephen (2003). Academic Fraud and Misrepresentation. Dallas, Fort Worth, Texas Association of Collegiate Registrars and Admissions Officers: Accessed 23/2/06 online at http://www.tacrao.org/docs/academic_fraud.doc.

Tyler, W. (1982). "Complexity and Control - the Organizational Background of Credentialism." <u>British Journal of Sociology of Education</u> 3(2): 161-172.

U.S. Department of Education. (2005). New Education Department Web Site Helps Combat Problem of Diploma Mills. Washington D.C., United States Department of Education: Accessed 16/1/06 online at http://www.ed.gov/news/pressreleases/2005/02/02012005.html.

Ugbah, S.D. and Majors, R.E. (1992). "Influential communication factors in employment interviews." Journal of Business Communication **29**: 145-159.

UNESCO (2003). Higher Education in a Globalized Society - UNESCO Education Position Paper. Paris, United Nations Educational, Scientific and Cultural Organization: Accessed 21/5/04 online at http://portal.unesco.org/education/en/ev.php-urll-10=28033&URL_DO=DO_TOPIC&URL_SECTION=201.html.

UNESCO (2004). Proposal on an international database on recognised higher education institutions; Initiatives of listing recognised higher education institutions. Paris, United Nations Educational, Scientific and Cultural Organization: Accessed 23/4/06 online at http://portal.unesco.org/education/en/file_download.php/0e711ffe322eb2bfe9ee61ea0636a7ed annex_revised_intl_info_tool.pdf.

UNESCO (2005a). Guidelines for Quality Provision in Cross-border Higher Education. Paris, United Nations Educational, Scientific and Cultural Organization: Accessed 28/3/06 online at http://www.unesco.org/education/guidelines_E.indd.pdf.

UNESCO (2005b). Sharing Quality Higher Education Across Borders: A Statement on Behalf of Higher Education Institutions Worldwide. Paris, International Association of Universities: Accessed 7/12/05 online at http://www.unesco.org/iau/p_statements/index.html#_ftn1.

UNESCO (2006a). Experts to discuss new portal on higher education institutions. Paris, United Nations Educational, Scientific and Cultural Organisation: Accessed 22/2/07 online at http://portal.unesco.org/education/en.

UNESCO (2006b). Global Education Digest 2006. Paris, United Nations Educational, Scientific and Cultural Organization: Accessed 12/6/06 online at http://www.uis.unesco.org/ev_en.php?ID=6513_201&ID2=DO_TOPIC.

United States of America, plaintiff vs. Blake Alan Carlson, Defendant (2006). U.S. District Court, Eastern District of Washington: Accessed 14/3/06 online at http://www.hep.uiuc.edu/home/g-gollin/pigeons/#BACPleaAgreement.

Universities on alert for fake degrees after arrest for fraud (2004). <u>Stuff.co.nz</u>; <u>Fairfax New Zealand Limited</u>. Accessed 28/6/04 online at http://www.stuff.co.nz.

Universities regulation (2003). <u>NSW Legislative Assembly Hansard</u>. Sydney, Parliament of New South Wales: 1160.

Universities UK (2004). Universities UK welcomes 12 month sentence for fake degree seller. London, Universities UK: Accessed 15/4/06 online at http://www.universitiesuk.ac.uk/mediareleases/show.asp?MR=398.

University of Central Florida. (2003). Administrative and Professional Employment Application. Miami, University of Central Florida: Accessed 4/5/06 online at http://www.hr.ucf.edu/web/forms/employment/A&P_app.pdf.

University of Newlands vs Nationwide News Ltd (2006). Supreme Court of New Zealand: Accessed 30/4/06 online at http://www.justice.govt.nz/judgments/SC%2012%202006%20The%20University%20of%20

Newlands%20Ltd%2029Mar06.pdf.

University of Wales. (2004). Approval of Qualifications for Admission of Persons to Candidatures for Higher Degrees, Diplomas and Certificates of the University - Standing Order 19. Cardiff, University of Wales: Accessed 24/12/05 online at http://www.wales.ac.uk/DOCUMENTS/EXTERNAL/ACADEMIC/VALIDATION/VALREG/Standing%20Order%2019.PDF.

University Secure From External Security Breaches (2002). <u>Media Release - The University of Newcastle, Australia</u>. Accessed 29/4/02 online at http://www.newcastle.edu.au/news/media-releases/2002/Holmessecurity2002.html.

Upadhayay, Surabhi (2004). Micro chips to help curb fake degree racked. <u>The Times of India</u>. Bombay: Accessed 8/1/2004 online at http://timesofindia.indiatimes.com/articleshow/403246.cms.

Urdan, Trace A. and Lee, Jeff S. (2006). Education Services; Higher Education Survey Report. Atlanta, Baird US Equity Research: Accessed 28/8/06 online at http://institute.thejournal.com/classnotes/newsletters/ED020606HigherEdSurveyReport.pdf.

Uwadia, Charles O., Ifinedo, Princely E., Nwamarah, Goodluck M., Eseyin, Emmanuel G. and Sawyerr, Akin (2006). "Risk factors in the collaborative development of management information systems for Nigerian universities." <u>Information Technology for Development</u> **12**(2): 91-111.

Validation or Invalidation of claim to possess an academic degree (2005). <u>Division 50 OAR 583-050-0011(11)</u>: Accessed 29/12/05 online at http://arcweb.sos.state.or.us/rules/OARS_500/OAR_583/583_050.html.

van Zolingen, Simone J. and Klaassen, Cees A. (2003). "Selection processes in a Delphi study about key qualifications in Senior Secondary Vocational Education." <u>Technological</u> Forecasting and <u>Social Change</u> **70**(4): 317-340.

Veblen, T. (1899). A Theory of the Leisure Class. New York.

Venables, John (2000). BA without the honours-bogus degrees online. London, BBC News: Accessed 14/9/01 online at http://news.bbc.co.uk/hi/english/uk/newsid 607000/607173.stm.

VETASSESS (2006). Improved resources for qualifications assessment. <u>Vetassessnews - Vocational Education and Training Assessment Services</u>: Accessed 15/3/06 online at http://www.vetassess.com.au/newsletter/pdf/VetassessNews2006_02.pdf.

Vibhute, Kranti (2005). It's not easy to get fake college degrees. <u>Mumbai on the Web.</u> Mumbai: Accessed 13/12/05 online at http://web.mid-day.com/news/city/2005/december/125780.htm.

Vignoli, Gabriel (2004). What is Transnational Education? Rome, CIMEA - Italian Information Centre on Academic Mobility: Accessed 19/4/06 online at http://www.cimea.it/servlets/resources?contentId=2831&resourceName=Inserisci%20allegato

Vincent-Lancrin, Stephan (2004). <u>Building Capacity through Cross-border Tertiary</u> <u>Education</u>. UNESCO/ OECD Australia Forum on Trade in Educational Services, Sydney Australia, OECD Centre for Education Research and Innovation.

Vine, Phil (2006a). Re: Your recent statement. G. Brown. London, Department For Education and Skills.

Vine, Phillip (2006b). Offender Providers in UK Higher Education. AACRAO 92nd Annual Meeting, 17th-20th April 2006. Breakout session presented under the theme "Fighting Diploma Mill Fraud: What YOU Can Do", Monday 17th April 2006, San Diego, California, American Association of Collegiate Registrars and Admissions Officers.

Vinik, Frank (2005). "Why Background Checks Matter in Academe." <u>Chronicle of Higher</u> Education **51**(38): B13.

Voon, Derby and Miller, Paul W. (2005). "Undereducation and overeducation in the Australian labour market." <u>The Economic Record</u> **81**(Special Issue): S22-S33.

Wachter, Bernd (2004). "The Bologna Process: developments and prospects." <u>European</u> Journal of Education **39**(3): 265-273.

Wager, J. James (2006). "Safe and secure: why secure electronic transcript delivery will become the norm." <u>University Business(March 2006)</u>: Accessed 4/5/06 online at http://www.findarticles.com/p/articles/mi_m0LSH/is_3_9/ai_n16110241.

Wait, Patience and Dizard, Wilson (2004). Roadblock for bogus degrees. <u>Washington Technology</u>. Washington DC: Accessed 2/5/06 online at http://www.washingtontechnology.com/news/18 20/federal/22610-1.html.

Waite, Duncan and Allen, David (2003). "Corruption and Abuse of Power in Educational Administration." The Urban Review 35(4): 281-296.

Wallace-Hadrill, J. M. (1967). <u>The barbarian West, 400-1000</u>. London, Hutchinson University Library.

Waller, S.K. and Waller, L. (2004). "Higher education doctoral degrees of certain American clergy: Ethics and antics." <u>Christian Higher Education</u> **3**(2): 171-183.

Walley, Liz and Smith, Mike (1998). <u>Deception in Selection</u>. Chichester, John Wiley and Sons.

Walshe, John (2005). Revealed: another top adviser has dodgy degree. Financial guru got PhD from the same place as science chief. <u>The Irish Independent</u>. Dublin: Accessed online 19/11/05 online at

http://www.unison.ie/irish_independent/stories.php3?ca=9&si=1509790&issue_id=13299.

Walshe, John (2006). Irish firms face action. <u>Times Higher Education Supplement</u>. London: p.10.

Walshe, John and Lyons, Tom (2005). Exposed: scandal of the bogus degrees. <u>The Irish Independent</u>. Dublin: Accessed online 15/11/05 at http://www.unison.ie/irish_independent/stories.php3?ca=9&si=1505977&issue_id=13271.

Walton, L. Reed (2006). Md. Officials Seek Crackdown on 'Diploma Mills'. <u>Capital News Service</u>. Washington DC: Accessed 24/9/06 online at http://www.wtopnews.com/index.php?nid=316&sid=915992#.

Ward, Elaine (2005). RE: Diploma Supplement update. G. Brown. Canberra, Department of Education Science and Training.

Warner, Brad (2002). <u>Equivalence Testing</u>. Test & Evaluation, Modelling & Simulation and VV&A: Quantifying the Relationship Between Testing and Simulation, Energy Training Complex (ETC) Kirtland AFB, Albuquerque, New Mexico, Military Operations Research Society.

Warren, Jonathan R. (1978). Current Practices in Awarding Credits and Degrees.

<u>Credentialing Educational Accomplishment.</u> Report and Recommendations of The Task

<u>Force on Educational Credit and Credentials.</u> J. W. Miller and O. Mills. Washington D.C.,

American Council on Education.

Warren, M. E. (2001). <u>Democracy and Association</u>. Princeton, Princeton University Press.

Wasson, Erik and Thul, Prak Chan (2006). Psst. Want a Western University Degree Without Studying? <u>Asia Sentinel</u>. Hong Kong: Accessed 14/12/06 online at http://asiasentinel.com/index.php?option=com content&task=view&id=299&Itemid=32.

Watt, I and Gregory, H (2002). <u>The Diploma Supplement in Australia</u>. New Times New Approaches: Conference Proceedings. 16th Australian International Education Conference, Hotel Grand Chancellor, Hobart, Tasmania 30 September - 4 October 2002, Accessed 8/11/05 online at http://www.idp.com/16aiecpapers/program/thursday/issues9/Watt_p.pdf.

"Web Site Promotes Free College Education in Sweden; Nepal Cracks Down on Fake Degrees." (2003). The Chronicle of Higher Education **49**(22): A.33.

Weber, Elke U., Blais, Ann-Renée and Betz, Nancy E. (2002). "A domain-specific risk-attitude scale: measuring risk perceptions and risk behaviors." <u>Journal of Behavioral Decision</u> Making **15**(4): 263-290.

Weber, Lauren (2002). Resume fibs reveal complacent exec hiring. <u>Forbes.com</u>. New York: Accessed online 9/11/2002 at http://www.forbes.com.

Weber, Max (1968). Economy and society. New York, Bedminster Press.

Webler, Thomas, Levine, Debra, Rakel, Horst and Renn, Ortwin (1991). "A novel approach to reducing uncertainty: The group Delphi." <u>Technological Forecasting and Social Change</u> **39**(3): 253-263.

Webster, Penny (2002). Was Maori TV Set Up to Fail? Auckland, ACT Broadcasting: Accessed 31/5/02 online at http://www.act.org.nz/item.jsp?id=22402.

Weiss, A. (1995). "Human capital and sorting models." <u>Journal of Economic Perspectives</u> 9: 133-154.

Wellek, Stefan (2002). <u>Testing Statistical Hypotheses of Equivalence</u>. Boca Raton, Fla., Chapman & Hall.

Wende, Marijk C. Van Der (2000). "The Bologna Declaration: Enhancing the Transparency and Competitiveness of European Higher Education." Higher Education in Europe XXV(3).

Wenger, Etienne (1998a). "Communities of Practice: Learning as a Social System." <u>The Systems Thinker</u> **9**(5).

Wenger, Etienne (1998b). <u>Communities of Practice: Learning, Meaning and Identity</u>. New York, Cambridge University Press.

Wenger, Etienne (2000). Communities of Practice: Stewarding Knowledge. <u>Knowledge Horizons: the Present and the Promise of Knowledge Management</u>. C. Despres and D. Chauvel. Boston, Butterworth-Heinemann.

Wenger, Etienne (2002). "Communities of Practice." <u>Encyclopaedia of the Social Sciences</u> **1.5**(5): 2339-2342.

Wenger, Etienne (2004). "Knowledge management is a doughnut: Shaping your knowledge strategy through communities of practice." <u>Ivey Business Journal</u>(January/ February 2004): Accessed 5/9/05 online at

http://www.iveybusinessjournal.com/view_article.asp?intArticle_ID=465.

Wenger, Etienne, McDermott, Richard A. and Snyder, William (2002). <u>Cultivating communities of practice: a guide to managing knowledge</u>. Boston, Mass., Harvard Business School Press.

Wenger, Etienne and Snyder, William (2000). "Communities of Practice: The Organizational Frontier." Harvard Business Review **78**(1): 139-145.

Where is the Wealth of Nations? Measuring Capital for the 21st Century (2006). Washington D.C., The World Bank: Accessed 27/11/2005 online at http://siteresources.worldbank.org/INTEEI/214578-1110886258964/20748034/All.pdf.

Whitman, Nancy I. (1990). "The Delphi Technique as an Alternative for Committee Meetings." <u>Journal of Nursing Education</u> **29**(8): 377-79.

Whittaker, Paul (1996). Lecturer quits in PhD row. The Courier Mail. Sydney: pp1-2.

Whittaker, Paul (1999). Law prof admits a degree of error. <u>The Courier Mail</u>. Sydney: pp1 & 2.

Whittaker, Paul and Horan, Matthew (1996). Unis battle degree scams. <u>The Courier Mail</u>. Sydney: p.13.

Wiener, Rose (1968). Credentials and Common Sense, US Department of Labor.

Wilson, T.D. (2002). "The nonsense of 'knowledge management'." <u>Information Research</u> **8**(1, paper no. 144): Accessed 11/09/05 online at http://informationr.net/ir/8-1/paper144.html.

Winchester, D. and Lacey, D, Ed. (2003). <u>Identity Fraud in Australia: Implications for Tertiary Sector Integrity</u>. Educational Integrity: Plagiarism and Other Perplexities. Adelaide, University of South Australia.

Wolf, Alison (2002). <u>Does Education Matter? Myths about Education and Economic Growth</u>. London, Penguin Books.

Wooden, Mark and Harding, Don, Eds. (1997). <u>Trends in Staff Selection and Recruitment</u>. Melbourne, Melbourne Institute of Applied Economic and Social Research.

Woodhouse, David (2006). "Big Picture Big Questions." Campus Review 16(2): 10-13.

Woody, Robert Henley (1997). "Dubious and Bogus Credentials in Mental Health Practice." Ethics & Behavior 7(4): 337-345.

Wooton, Edwin (1883). <u>A Guide to Degrees in Arts, Science, Literature, Law, Music, and Divinity, in the United Kingdom, the Colonies, the Continent, and the United States</u>. London, L.U.Gill.

Wright, Peter WG (2001). "Markers of 'Authentic Place'? The Significance of Degrees, Awards and Qualifications in the Analysis of Higher Education Systems." <u>Higher Education Quarterly</u> **55**(2): 109-130.

Wriston, Henry M (1960). "The Futility of Accrediting." <u>The Journal of Higher Education</u> **31**(6): 327-329.

Xuequan, Mu (2006). Chinese Education Ministry warns against fake overseas diplomas. Xinhua Online. Beijing: Accessed 24/9/06 online at http://news.xinhuanet.com/english/2006-09/21/content 5122099.htm.

Yablokova, Oksana (2006). 7,000 Buys Dissertation and Flashy Degree. <u>Moscow Times</u>. Moscow: Accessed 4/4/06 online at http://www.themoscowtimes.com/stories/2006/04/04/002.html.

Young, Michael Dunlop (1958). <u>The Rise of the Meritocracy 1870-2033</u>. <u>An Essay on</u> Education and Equality. London, Thames & Hudson.

Zahn, Paula (2005). Fake Diploma Rings and Potential Terrorists. <u>CNN News</u>: Accessed online 9/12/05 at http://edition.cnn.com/TRANSCRIPTS/0512/07/pzn.01.html.

Zang, X. W. (2001). "Educational credentials, elite dualism, and elite stratification in China." <u>Sociological Perspectives</u> **44**(2): 189-205.

Zeleza, Paul Tiyambe (2005). "Transnational Education and African Universities." <u>Journal of Higher Education in Africa</u> **3**(1): 1-28.