

**Learning in Lockdown:
Strategies for Success in Emergency Remote Instrumental Music Tuition**

*What is the best teaching and learning approach to optimise student engagement
for instrumental music tuition during emergency remote learning?*

Teaching Dissertation submitted in partial fulfilment of the requirements for the degree
of
Master of Teaching

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Declaration

This dissertation contains no material that has been accepted for the award of any other degree or diploma in any educational institution and, to the best of my knowledge and belief, it contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signed:

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Abstract

The past several years have seen large numbers of educational facilities across the world transition to emergency remote learning, in the wake of mandates imposed as a response to the outbreak of the novel coronavirus, SARS-CoV-2 (often referred to simply as ‘covid’ or ‘covid-19’). Since March 2020, more than 168 million students worldwide have been prevented from attending school in the classroom. Indeed, at the time of writing, there are eleven schools in South Australia, alone, which have resorted to remote learning—and this two years in from the onset of covid-19.

A consequence of transitioning to remote learning is that teachers of instrumental music, who typically rely on kinaesthetic models of learning, have been forced to move to a medium which, firstly, does not permit the use of traditional teaching techniques and, secondly, has the potential to negatively affect visual and audio perceptions, which are integral to learning in this subject. In asking the question, *what is the best teaching and learning approach to optimise student engagement for instrumental music tuition during emergency remote learning*, this study was able to confirm the hypotheses that a) the most effective way to teach during emergency remote learning is to translate key teaching qualities into the remote learning medium, and b) all students can learn remotely.

Using cognitive behavioural theory and Biesta’s three functions of education as a framework, this Literature Review analysed and synthesised data in the emerging research field of emergency remote learning, and translated the findings to instrumental music tuition. Six themes emerged from the literature: 1) Organisation, Planning and Preparation, with additional time being needed to gain familiarity with new technology and online learning platforms; 2) Family Involvement and the need for connection and communication with parents/guardians, which was amplified during periods of remote learning, as parents/guardians were responsible for providing the relational aspect of teaching and creating a positive learning environment; 3) Inequalities in Emergency Remote Learning were frequently highlighted, with students of higher socio-economic backgrounds placed at a clear advantage, having easier access to technology and support networks; 4) Teacher Wellbeing was found to be something often overlooked, due to teachers’ dedication to meet student needs; 5) Digital Issues meant it was necessary to redefine learning goals to accommodate the circumstances, as well as to make considerations for the videoconferencing learning platforms; and 6) Student Wellbeing was found to be the best focus for student learning during this time, accommodating student needs through showing sensitivity to the circumstances and balancing expectations with empathy.

Thus, the current literature found that thorough preparation, consideration of teacher/student wellbeing and communication with parents/guardians are the foundations from which successful learning can occur (measured in terms of student engagement), not only during periods of emergency remote learning but also in traditional, face-to-face learning.

The paper concludes with a number of practical applications, drawn from the themes in the literature (such as selecting easier repertoire for students, providing parents/guardians with tips on creating a positive learning environment and creating a new work-life balance that honours the teacher’s wellbeing, to name but a few), as well as suggestions for future research topics.

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1. INTRODUCTION

1.1 The Problem

Face-to-face learning is well-regarded as the preferred learning conditions for instrumental music tuition (Akarsu, 2021; Daugvilaite, 2021; de Bruin, 2021; Joseph, 2020; King et al., 2019; Salvador et al., 2021), due not only to the practical and physical nature of learning a musical instrument (Blackburn, 2017) but also because it meets humans' social and interactive needs (de Bruin, 2021). Conversely, remote learning creates a disconnect (Joseph, 2020), hindering the physical and mental connections students need (de Bruin, 2021) and disrupting those spontaneous interactions between teacher and student (Akarsu, 2021; Joseph & Lennox, 2021) that encourage and create empathetic social connections (de Bruin, 2021; Joseph, 2020). An increase in use of videoconferencing platforms can also lead to 'Zoom dysmorphia', which is especially damaging to wellbeing and self-esteem (Watson, 2021). However, in response to emergency situations, such as the outbreak of an infectious disease, remote learning, also known as distance learning, distance education or online learning, may sometimes be deemed a necessity.

Remote learning has existed for well over a century (Chin, 2019). There is, however, a key distinction between 'remote learning' and 'emergency remote learning'; the first infers the student has *chosen* to undertake studies via remote learning, whereas the second implies the student has been *mandated*, thus even if remote learning is not conducive to the learning of a particular subject, that subject must, nonetheless, be taught remotely. Whilst instrumental music has been taught through remote learning since the late 19th century (Martin, 1999), perusal of current literature surrounding the topic suggests that remote learning in instrumental music tends to be limited to emergency situations. There is, therefore, need for further research into this field, so that instrumental music teachers might be prepared for emergency remote learning, should the situation arise.

Replicating face-to-face teaching during online learning poses a number of challenges which can cause dissatisfaction amongst students (Joseph & Lennox, 2021) and impact their wellbeing and motivation (Joseph & Lennox, 2021; McCluskey et al., 2021). Indeed, lack of motivation and engagement (Akarsu, 2021; Daugvilaite, 2021; Gül, 2021; Joseph & Lennox, 2021; Okay, 2021; Sakin, 2021; Yates et al., 2021) are common issues experienced by students and teachers during emergency remote learning. The teacher's very presence assists student wellbeing (Daugvilaite, 2021), whilst the absence of this much-needed connection (de Bruin, 2021), combined with the teacher's physical distance (Johnson, 2017; Schiavio et al., 2021), causes feelings of increased isolation in both teacher and student (McCluskey et al., 2021).

This study proposes to find the most effective approach to instrumental music teaching in emergency remote learning, in terms of student engagement and fulfillment—academically, personally and socially. It poses the question: *What is the best teaching and learning approach to optimise student engagement for instrumental music tuition during emergency remote learning?* It also seeks to confirm the hypotheses that a) the most effective way to teach during emergency remote learning is to translate key teaching qualities into the remote learning medium, and b) all students can learn remotely.

1.2 Setting the Scene

Although school closures due to the outbreak of disease is, by no means, new (Braunack-Mayer et al., 2013; Pieret & Boivin, 2021), research indicates the novel coronavirus, SARS-

CoV-2, is less severe in children, compared to adults, with a minimal fatality rate (Ledford, 2021; Zimmerman & Curtis, 2020), and that school closures have had little impact on curbing transmission of this virus (Viner et al., 2021; White et al., 2021). Nonetheless, lockdown measures in Australia and globally over the past two years have continued to include school closures (Avanesian & Mishra, 2021; Storen & Corrigan, 2020). Since March 2020, more than 168 million students worldwide have been prevented from attending school in the classroom—some for almost a full year—due to government-mandated school closures in response to SARS-CoV-2 (Avanesian & Mishra, 2021). In Melbourne, Victoria, alone, some secondary school students were not permitted to receive in-person tuition for 108 days, or 54%, of the 2020 school year (Wright, 2021), followed by 87 days, or 43%, of the 2021 school year (Andrews, 2021a-h; Merlino, 2021a-b; Murray-Atfield, 2021). This has had a number of adverse consequences (Fuentes et al., 2020; McCluskey et al., 2021; Viner et al., 2021), including disruptions and complications to student learning (especially for students of lower socio-economic backgrounds), additional stress for teachers and an increase in student disengagement and school dropout rates (AIHW, 2021; UNESCO, 2020a).

Whilst many may hope that extended school closures never again occur in Australia or globally—or, if they do, that they are used as a short-term measure only—it is possible that widespread lockdowns, and by extension school closures, may again be mandated for extended periods in Australia (Hevesi, 2021; Morrison, 2021). As educators, being prepared to engage students and consider their wellbeing, whatever the circumstances, is especially needed in times of crisis.

1.3 Rationale

Student engagement and wellbeing, especially during the middle and secondary years, is crucial to student learning (Pendergast et al., 2017). For traditional learning settings, there is substantial research linking student engagement to improved social, personal and academic outcomes (Conner & Pope, 2013), while student disengagement results in hampered academic achievement and greater school dropout rates (Fall & Roberts, 2012; Lehr et al., 2004). Students who do drop out are often faced with fewer employment prospects and are at greater risk of unemployment and incarceration (Lehr et al., 2004). It is crucial, therefore, for teachers to feel prepared to manage the difficulties of emergency remote learning (Fuentes et al., 2020; Kast et al., 2021; McCluskey et al., 2021; UNESCO, 2020a; Viner et al., 2021), in order that student learning might not suffer.

While it may be tempting to cease instrumental music lessons during emergency remote learning, due to the practical and physical nature of learning a musical instrument (Blackburn, 2017), neuroscientific research highlights the numerous benefits of playing a musical instrument (Collins, 2014a). These include an improved ability to self-regulate and manage and navigate emotions (Collins, 2014b; Cross et al., 2012; Degé et al., 2011), as well as promoting motivation and self-autonomy (Davidson et al., 2009; McPherson & Davidson, 2009). Considering the concerning rise in self-harm, mental health issues and domestic abuse amongst school students during the lockdowns of 2020 and 2021 (ABC News, 2021; BBC News, 2021; Ganesan et al., 2021; Piovesan, 2021; Wordsworth, 2021), both in Australia and globally, continuation of instrumental music tuition during times of crisis seems not only highly desirable but necessary. For although face-to-face tuition is the ideal, virtual connections are better than no connection at all (Yates et al., 2021).

1.4 Outline

This project comprises six chapters. Chapter One provides an overview of the research

question, the hypotheses to be tested, the rationale for the project and the context in which this study is placed. Chapter Two relays the methodology for this project, which takes a qualitative approach and uses document analysis by means of a systematic review. Chapter Three, the Literature Review, evaluates and synthesises the currently available research on emergency remote learning, tempered by action research. To give context, it begins with a brief history of remote learning and emergency remote learning, before exploring key characteristics of quality teaching that lead to student engagement—providing a framework for the study. The remainder of the Literature Review explores thematic issues, including strategies and solutions for emergency remote learning in instrumental music, which emerged through analysis of current literature surrounding this field of study. An additional number of themes occur in the context of emergency remote learning during a lockdown. Although many of the studies appear in higher education, the findings seem easily transferable to schools. Key terms used in the Literature Review include “emergency remote learning”, “remote learning”, “instrumental music” and “instrumental music tuition”. Chapter Four discusses the implications of the reviewed literature, while Chapter Five details how the findings of this study might translate into strategies for student engagement during a period of emergency remote learning. The final chapter, Chapter 6, offers some concluding remarks.

2. METHODOLOGY

2.1 Theoretical and Analytical Frameworks

This study employed a qualitative methodology and adopted a systematic review approach. It surveyed existing sources of interviews and observations (Creswell & Creswell, 2018) that concern a particular field of research, after which content was analysed for patterns and themes (Creswell & Creswell, 2018). This framework is conducive to such research as it asks a primary question and explores, in-depth, the intricacies of its answer through extensive analysis of the most recent studies in that field.

The study posed the question: *what is the best teaching and learning approach to optimise student engagement for instrumental music tuition during emergency remote learning?* with a focus on determining key teaching strategies for effective teaching in emergency remote instrumental music tuition. The question was explored through analysis of sixty-two studies covering the three areas of: 1) Remote learning, 2) Emergency remote learning and 3) Instrumental music in remote learning.

In determining the elements of effective teaching, whether in a lesson that is face-to-face or through remote learning, the study applied the framework of quality teaching components, influenced by Biesta's (2016) three functions of good education and cognitive behavioural theory (Kaplan et al., 2017; Lyons et al., 2013), which combines psychoeducational and behavioural theories, asserting that teachers should engage students' critical thinking skills, thereby guiding them to academic, emotional and behavioural independence.

2.2 Method

Data for this study was collated by means of a Systematic Review. This method was chosen primarily because the framework reduces researcher bias through comprehensive analysis and synthesis of all existing knowledge. This was of significance to the researcher, who had a negative experience of emergency remote teaching in 2020 during lockdowns in Melbourne, Victoria. Examination of all available data permitted the researcher to present an unbiased, balanced summary of findings, covering a broad scope of studies which are currently available, and which could be measured against the researcher's own personal experience. Not only was this method personally beneficial, but it removed the possibility of bias, which could have the potential to mislead future research in this field.

A secondary reason for choosing this method was that it provided an opportunity to collate all available data in this emerging field of research into one study, with findings weighed up against one another. Data from various countries could be analysed and compared, determining whether findings were localised or could, reasonably, be considered applicable in a global context. For a study such as this, in the field of education, a systematic review can be invaluable to schools, who require research to build and amend school policies and teaching methods. Indeed, it is not uncommon for schools to request systematic reviews from a research institution, so that the most up-to-date data can be drawn upon in creating school policies and structures.

The main limitation for this method was that it did not allow for primary data collection. While all available data could be collated into one study, emergency remote learning is still an emerging field. Thus, findings were limited, making it more difficult to weigh up each finding against others, simply due to the smaller number of studies available.

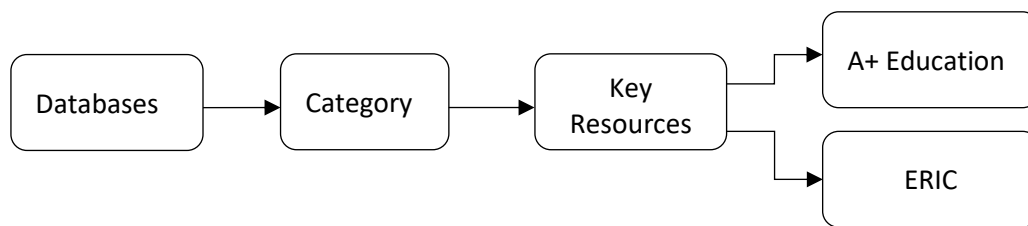
Nonetheless, a systematic review was deemed the most fitting method to answer the question of this study (*what is the best teaching and learning approach to optimise student engagement for instrumental music tuition during emergency remote learning*). This method eliminated researcher bias, collated and synthesised all available data into one study and provided a comprehensive, in-depth analysis of the data, leading to a discussion on strategies that might be implemented to optimise student engagement for instrumental music tuition during emergency remote learning.

2.3 Data Collection

The nature of emergency remote learning as a field of enquiry is that much of the available data is limited to recent years. However, given there is considerable available data on remote learning, the search was widened to include sources dated from 2010 onwards. Preference was given to studies undertaken in the context of emergency remote learning and secondary preference given to more recent studies.

Data was gathered through existing scholarly articles, accessed through the University of Adelaide Library in the following manner:

Flowchart 1:



A+ Education, the first database chosen, was selected as it named ‘distance education’ as a topic covered, while the second database, ERIC, had been recommended by the supervisor of this study. The University of Adelaide Library was also used to ensure no potential studies had been overlooked. Additionally, if information regarding a particular element of emergency remote learning (such as its history) was required, the University of Adelaide Library homepage and Google Scholar, accessed through the Library homepage, were also used.

The primary reason for accessing data through these sources was to ensure both the quality of the data and to safeguard against ethical malpractice—that is, that all studies included in the literature review had been undertaken ethically. In addition to this, prior to the commencement of research for this study, the researcher was granted approval from the University of Adelaide to conduct this research.

The flowchart below demonstrates the process by which articles were selected from search results, while the table below this records searches made, including key search terms and inclusion and exclusion criteria:

Flowchart 2:

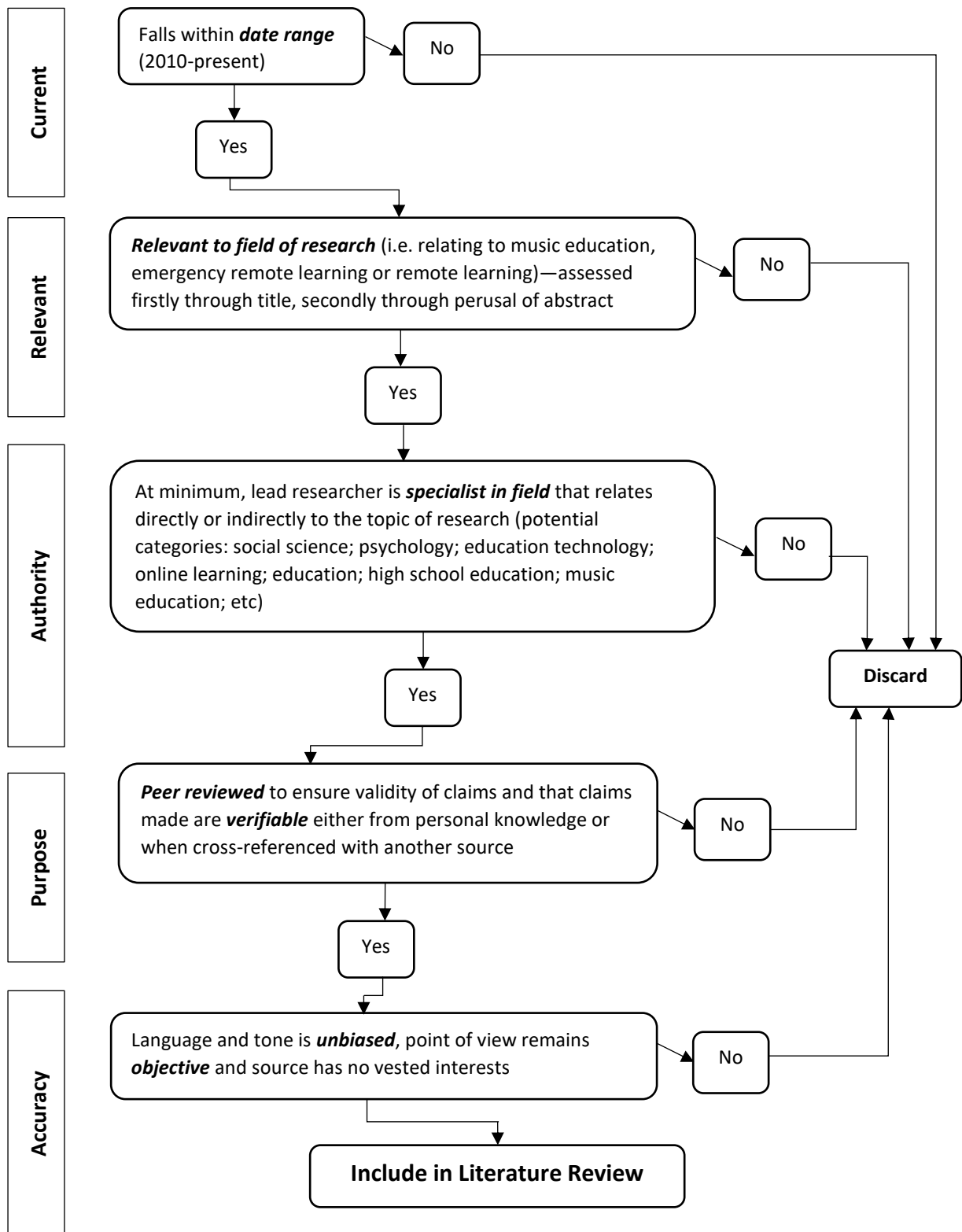


Table 1:

Database	Search Term	Limitations
ERIC	student engagement music	<ul style="list-style-type: none"> • Peer Reviewed • Scholarly Journals • 2012-2021 • Secondary Education • Exclude: Higher Education, Postsecondary Education, Early Childhood Education, Adult Education, Preschool Education, Kindergarten, Grade 1, Grade 2, Grade 3, Grade 4, Two Year Colleges
	subject("Distance Education")	<ul style="list-style-type: none"> • Peer Reviewed • Scholarly Journals • 2010-2029 > 2010-2019 • Secondary Education
	subject("Learner Engagement")	<ul style="list-style-type: none"> • Peer Reviewed • Scholarly Journals • 2010-2029 > 2010-2019; then 2020-2021 • Secondary Education
	subject("Learner Engagement") covid; then subject("Learner Engagement") distance	<ul style="list-style-type: none"> • Peer Reviewed • Scholarly Journals • 2010-2029 > 2010-2019; then 2020-2021 • Secondary Education
	online music education	<ul style="list-style-type: none"> • Peer Reviewed • Scholarly Journals • 2003-2009
	online music education	<ul style="list-style-type: none"> • Peer Reviewed • Scholarly Journals • 2010-2019 • Music Education • Include: online courses • Exclude: online surveys
	"remote learning" music	<ul style="list-style-type: none"> • Peer Reviewed • Scholarly Journals
	"online learning" music	<ul style="list-style-type: none"> • Peer Reviewed • Scholarly Journals
	learning in lockdown	<ul style="list-style-type: none"> • Peer Reviewed • Scholarly Journals
	innovations AND music	<ul style="list-style-type: none"> • Scholarly Journals • Peer Reviewed • March 2020-2022 • Include: covid-19 • Exclude: undergraduate students
	(asynchronous AND learning) AND music	<ul style="list-style-type: none"> • Peer Reviewed • 2012-2022 • ERIC journals only
	(synchronous AND learning) AND music	<ul style="list-style-type: none"> • Peer Reviewed • 2012-2022 • ERIC journals only

A+	student engagement music	<ul style="list-style-type: none"> Peer Reviewed January 2020-December 2021; then January 2012-December 2019
	student engagement “instrumental music”	<ul style="list-style-type: none"> Peer Reviewed January 2012-December 2019; then January 2020-December 2021
	online music education	<ul style="list-style-type: none"> Peer Reviewed January 2012-December 2021
	“Collins, Anita”	<ul style="list-style-type: none"> Peer Reviewed
	“remote learning”	<ul style="list-style-type: none"> Peer Reviewed Educational (with and without) 2012-2012
	synchronous learning AND online	<ul style="list-style-type: none"> Peer Reviewed January 2017-December 2019; then January 2020-December 2021
	innovations AND music	<ul style="list-style-type: none"> Peer Reviewed 2020-2021 Subject: covid19
	(asynchronous AND learning) AND music	<ul style="list-style-type: none"> Peer Reviewed 2012-2022
	(synchronous AND learning) AND music	<ul style="list-style-type: none"> Peer Reviewed 2012-2022
University Library	“emergency remote learning”	<ul style="list-style-type: none"> Peer Reviewed
	“emergency remote education”	<ul style="list-style-type: none"> Peer Reviewed
	school closure	<ul style="list-style-type: none"> Peer Reviewed January 1900-December 2019
	school closure disease	<ul style="list-style-type: none"> Peer Reviewed January 1900-December 2019
	black death education	<ul style="list-style-type: none"> Peer Reviewed
	plague education	<ul style="list-style-type: none"> Peer Reviewed
	bubonic plague education	<ul style="list-style-type: none"> Peer Reviewed
	remote learning spanish flu	<ul style="list-style-type: none"> Peer Reviewed Resource Type: Articles
University Library >> Google Scholar	SARS school closure	<ul style="list-style-type: none"> 1970-2019
	history of pandemics	<ul style="list-style-type: none"> Any time
	school closure justinian plague	<ul style="list-style-type: none"> Any time
	school closure bubonic plague	<ul style="list-style-type: none"> Any time
	Spanish flu school closures	<ul style="list-style-type: none"> Any time

It was anticipated that only a small number of studies would be appropriate for eventual inclusion in this research project. However, ultimately, twenty-five results pertained to emergency remote learning; fifteen to emergency remote music tuition (this included instrumental music, bands, ensembles and classroom music); and seven to remote learning in instrumental music, pre-2020. The remaining literature was sourced through references listed in already-selected studies or through prior knowledge of research discovered in

previous units within the Master of Teaching degree, resulting in a total of sixty-two scholarly articles being used.

Results pertaining to remote learning, with the parameter of pre-2020, were predominantly focussed on subjects conducive to online learning (such as adult education or subjects that do not necessarily require face-to-face interactions between teacher and student). Therefore, results from such searches were discarded unless relating specifically to instrumental music tuition, although consideration was given to remote learning in physical education, as it was determined there could be transferrable skills due to the physical nature of both subjects.

2.4 Data Analysis

Upon preliminary reading of the data, relevant sections were highlighted and findings placed into a table (see Table 2), with points colour-coded and transcribed into dot-points of the following six categories: student wellbeing, family involvement, teacher preparation, learning inequalities, online learning strategies and miscellaneous.

The data was analysed according to its effect on promoting quality teaching principles as measured by student engagement—academically, personally and socially.

Table 2

<p>Mohan et al., 2021</p> <ul style="list-style-type: none"> • Lockdowns exacerbated existing inequality between students from different family backgrounds (UNESCO 2020; European Commission 2020) • (OECD 2020; Mohan et al., 2020; Walsh et al., 2020) vulnerable students most affected (OECD 2020; Mohan et al., 2020; Walsh et al., 2020) • Successful distance education relies on access to requisite learning resources at home (technological and otherwise) • Successful distance education relies on students' capacity for self-regulated learning • Parents without a degree reported lower levels of confidence in managing home-education (Walsh, et al., 2020) • ERL induced reduced school attendance, but less so in areas with higher levels of education • Parental education was significantly associated with engagement amongst middle years learners • Acute and chronic stresses facing families also impacted on student engagement, such as parent/guardian financial and personal difficulties • Parental support paramount to engagement • ERL less effective even for engaged students • More cumbersome and less rewarding to engage with vulnerable students
<p>McCorkell & Lobo, 2021</p> <ul style="list-style-type: none"> • Inequalities in home-learning • Main issues: lost learning, wellbeing and 'disadvantage gap' (Black, 2020; Sharp et al., 2020) • Learning at home: mostly good; worries related to spread of the virus + progress at school; sleep patterns changed • Digital platforms: lead to digital fatigue; disliked disorganisation of the system; lead to headaches with restrictions/permissions • Remote digital learning at home relied on a level of independent working... in terms of their self-regulation and motivation • Control over daily routine considered a positive

- Adult support: students required to initiate support help; missed scaffolding
- Social isolation a problem

Palau et al., 2021

- For successful online learning, A.W. Bates (2020a) suggests: *get professional advice and help before starting, get the right technology, get organised, avoid long lectures, keep an eye on the student workload, avoid lectures altogether and do the best you can in the circumstances.*
- A successful pedagogical use of technology also depends on teachers' attitudes and acceptance of technology (Sutherland-Smith, 2002; Yuen & Ma, 2008).
- Teachers not properly equipped to be e-teachers (Crawford, et al., 2020), as have not been trained for this role
- Learning during a confinement is subject to a separation between teacher and student
- Adverse effects of the pandemic in education can also be caused by the loss of contact hours between students, due to the loss of interaction (Sintema, 2020)
- A good online teacher should promote dialogue by facilitating a variety of ways of interaction (X. Huang et al., 2016)
- Online learning must help students to process their emotions when faced with communication, technological and learning anxieties (Lowney, 2020)
- During covid, teachers must be sensitive to the reality
- Alternative strategies needed for students who won't be able to do online learning
- Findings:
 - Communicate with families essential, to better understand unique circumstances
 - Videoconferencing, although pure socialisation (face-to-face) needed, because students who are absentee a lot tend to lose knowledge (Sims, 2020)
 - Teachers must self-regulate their work
 - Teachers have tendency to place students' needs first (& Conrad, 2007), which can be negative during lockdown learning
 - Secondary school learners more autonomous, easier to manage, younger students need more family input
 - School closures negatively affected academic outcomes and disrupted mental health and wellbeing (Outhwaite & Guilford, 2020)
 - 'Digital divide'
 - Lack of digital competency amongst teachers (Burgess & Sievertsen, 2020; Crawford et al., 2020; Sintema, 2020; Zhang, et al., 2020)
 - Teachers should be trained in ICT more

Bubb & Jones, 2020

- During lockdowns, school leaders were faced with the task of handling crisis situations beyond any existing scope of their role
- ERL needs more attention to making learning creative experience, to make more motivating
- Well-resourced schools at clear advantage in providing beneficial learning experiences for remote learning, as have more devices (tablets, etc)
- Parental/Guardian involvement more crucial than ever
- Creative activities key to keeping students motivated
- Personalised learning helps motivate
- Teachers' feedback was seen as more useful during home-school than normal
- Maintaining contact with students also helps keep them motivated

Lauret, & Bayram-Jacobs, 2021

- The above should apply also to online learning
- Dividing content into smaller pieces and emphasising the teacher's voice is beneficial for providing online education (Bao, 2020)

<ul style="list-style-type: none"> • Teachers should be flexible towards students and with how material is delivered (Mahmood, 2021) • Gain clarification from school board, etc, on what is required of you as a teacher so you have clear idea on what you are doing • Goals should match the situation • Difficult to gauge student progress • Lack of structure the worst aspect of lockdown learning • Students value structure (including clear expectations) in online learning • Teacher must be familiar with the digital environment and tools • Practical examples through videos helpful • Checking in, asking how student is going at start of class, provides personal aspect • Students valued sharing opinions with classmates of their experience • Dramatic changes in teaching/pedagogical approach can negatively affect student academic outcomes, motivation and understanding • Teachers need structure from school board – including guidelines on expectations & how to use the technology
<p>Tobias et al., 2015</p> <ul style="list-style-type: none"> • <i>Real-life problems capture student interest and provoke critical thinking and developing skills (Project-Based Learning)</i> • <i>Consider how students' engagement changes when provided with questions that help them see connections between music as a discipline and their own lives</i>
<p>Fletcher, 2015</p> <ul style="list-style-type: none"> • <i>Sadowski (2003) suggested that student success (academic, social or personal) is related to identity development.</i> • <i>Music is significantly important and a highly influential factor in adolescents' identity work (O'Neill, 2005)</i> • <i>Through musical experiences, adolescents are able to construct a sense of their identity (Campbell, Connell & Beegle, 2007)</i> • <i>Playing a musical instrument provides sense of belonging</i> • <i>Creating music can fulfil adolescents' emotional needs and provides mechanism through which to self-regulate</i> • <i>Playing music allows adolescents to transcend their world by creating their own musical world</i> • <i>Music allows adolescents to creatively explore their feelings, emotions, ideas and passions</i>
<p>Johnson, 2017</p> <ul style="list-style-type: none"> • <i>The perceptions of teaching staff about what could be learned in the online environment influenced the learning approaches that they used</i> • <i>Not being able to physically touch student (kinaesthetic modelling) + latency an issue</i> • <i>Online learning is a different experience, this needs to be acknowledged</i> • <i>Need for pedagogical shift when moving to teaching music online</i> • <i>Online community building between students helpful as creates sense of belonging</i> • <i>Purposeful inclusion of tasks and tools (that is, the use of synchronous tools, such as video, and asynchronous tools, such as discussion forums) to develop a sense of individual belonging by the faculty members helped students with the means to establish social presence</i> • <i>The level of instructor understanding of online teaching and learning skills and strategies plays a part in encouraging or discouraging the successful transition to teaching in an online environment</i>
<p>Dye, 2015</p> <ul style="list-style-type: none"> • <i>Audio/visual interaction central to the achievement of instructional success.</i>

<ul style="list-style-type: none"> • When appropriate preparation, design and facilitation are used in conjunction with adequate technology, reasonably successful online music instruction and learning can occur • Instructors slow to adjust to the challenges of the online environment might be easily frustrated and less effective • Instructors more secure with digital communication technology, as well as being highly flexible in their delivery of instruction, might find the online environment more conducive to greater instructional success
<p>Carli et al., 2021</p> <ul style="list-style-type: none"> • Distance learning meaningful if designed working backwards from desired learning outcome, creating clear goals and outcomes • 'Front-end' tasks
<p>Bray et al., 2021</p> <ul style="list-style-type: none"> • Main disruptors caused by lockdown: continuity of learning and school engagement – especially for students already at a disadvantage (Devitt, et al., 2020; Green 2020) • School closures have had a significant negative impact on attitudes to school (Flynn, et al., 2020) • Remote learning prompts student disengagement, primarily due to lack of interest from student and lack of home support • Providing feedback prompts student engagement • Parent involvement helps maintain student engagement (also Smyth, 2017); increase in parent engagement = increase in student engagement • Students from disadvantaged socio-economic communities disproportionately affected by lockdowns, further compounding existing inequalities with regards to material, social and cultural resources • Challenges of teaching in lockdown: material, pedagogical, relational • Quality technology increased engagement & vice versa • Student engagement increases with creative and student-centred approaches to teaching and learning (Gorard and See, 2011) • Where students experience student-centred, creative pedagogies, and when student-teacher connections are meaningful and positive, students are less likely to disengage • Student engagement feeds of meaningful student-teacher connections
<p>Kibici & Sarikaya, 2021</p> <ul style="list-style-type: none"> • Students agreed that attending online music lessons with their peers helped them maintain their mental health during the lockdown period. • Distance education provides flexibility • Higher discipline and planning are required to complete the teaching process of distance education more successfully • Music education synchronous in nature, therefore online learning can only play a complementary role • Readiness for online learning key to successful online learning experience – mentally, emotionally and physically prepared (Borotis & Poulymenakou, 2004); also includes ICT technologies, computer and internet self-efficacy (Tsai & Lin, 2004), online communication self-efficacy (Roper, 2007) and providing learner motivation and control (Wang & Beasley, 2002) and self-directed learning (Lin & Hsieh, 2001)
<p>Anderson et al., 2020</p> <ul style="list-style-type: none"> • Teacher team meetings invaluable for peer support; able to share what is/isn't working • Team meetings allow for 'practice runs' with teachers in what might work with teaching students • Team meetings allow teachers to share knowledge and experiments with the software • Team meetings provide emotional support

<ul style="list-style-type: none"> • <i>...transformative power of collegiality in uncertain times and in a new (online) environment is valuable.</i>
<p>Adams, 2020</p> <ul style="list-style-type: none"> • Get students to give feedback – creates sense of community, encourages engagement in the course and improves learning experience; can also help teacher to teach more effectively • Breakout rooms helpful for small groups • Shy students often talk more online • Providing psychologically safe space: model vulnerability – e.g. just be honest that it sucks you're learning online
<p>Assaf & Gan, 2021</p> <ul style="list-style-type: none"> • Continue with the planned learning material but adapt to circumstances • Guide students to engage in work at home
<p>Sever, 2021</p> <ul style="list-style-type: none"> • The Suzuki Early Childhood Education Program <i>seeks to enhance the child's natural taste in learning and lays the foundation for lifelong learning</i> • Suzuki tenets: <ol style="list-style-type: none"> 1) Every child can learn; talent is not innate (Suzuki, 1981) 2) The environment supports development (Suzuki, 2010) 3) Children learn from one another (Suzuki, 2010) 4) Supportive/positive environment breeds motivation (Suzuki, 2010) 5) Family involvement essential (Suzuki, 2010) 6) Encouragement is essential (Suzuki Early Childhood Chicago, 2019) • Listening to the music itself an important way to learn how to play musically (Suzuki, 2010; Hermann, 1981) • <i>In Suzuki method, all technological possibilities of the age were used most effectively for educational purposes. The use of this technology varies according to age groups.</i> • A support environment relies heavily on the families (during online learning) • Lack of social interaction major disadvantage to learning online • Start lessons by doing an audio/visual check • Seeing another face, even if on a screen, is better than nothing • Excess screen time is <i>said to cause psychological and physiological damages such as anxiety, depression, obesity, sleep loss, reduction of delay, satisfaction, deprivation from nature and human interactions (Ruston, 2016; Tromholt, 2016; Turkle, 2011)...and have harmful effects on attention, depth of information processing, memory, and daily cognitive functions and abilities (Carr, 2011; Ellison, 2012)</i> • Structure lessons to avoid children having to constantly be looking at the screen
<p>Kaleli, 2021</p> <ul style="list-style-type: none"> • <i>More than 191 countries around the world have had to end traditional face-to-face education (UNESCO, 2020b)</i> • 1.5 billions students have been affected; 91.3% worldwide student population (Drane, et al., 2020) • UNESCO 10 Recommendations for distance learning: https://en.unesco.org/news/covid-19-10-recommendations-plan-distance-learning-solutions • Teachers need to be both organised and flexible • Combination of synchronous and asynchronous learning effective in achieving learning goals • Make the learning meaningful
<p>Goodrich, 2021</p>

<ul style="list-style-type: none"> • “Music educators had to find ways of providing meaningful instruction in a subject that typically depends on students interacting throughout the learning process” (Hash, 2021, 384) • Teachers could not use familiar teaching techniques when transitioned to remote learning
<p>Cheng & Lam, 2021</p> <ul style="list-style-type: none"> • Key stressors: <i>overwhelming administrative duties and extracurricular music activities</i> • Administrative and peer support, esp. from experienced teachers, essential to teacher well-being (Krueger, 2000) • Unwelcome pressure from having parents able to sit in on/hear lessons—<i>holding teachers accountable to parents’ requests is more stressful than beneficial</i> • Socio-economic inequalities [this is brought up often, but no solutions provided yet] • Student progress much slower in virtual lesson when trying to teach instrumental techniques, causing more frustration and pressure on teachers
<p>Evans et al., 2020</p> <ul style="list-style-type: none"> • <i>At first, there was such a gulf between what good teaching looks like and what could be achieved via email and our VLE (virtual learning environment portal)</i> • Networking with other teachers helped provide solutions to issues • Creating video resources and sharing between colleagues useful • <i>Writing of any kind is something that could be nourishing for students during this time.</i> • Share materials through Google Docs • Inequalities – students accessing work on their phones or not at all; limited or no access to wifi or data • <i>Sharing creative works with family and asking for feedback because learning happens best in a dialogue</i> • Adjust curriculum to suit the situation; tailor the learning to the circumstances • Students who work best on their own thrived during lockdown • Balance expectations with empathy for the circumstances
<p>Ingram et al., 2021</p> <ul style="list-style-type: none"> • <i>There is growing evidence of the consequences of COVID-19-related social isolation, confinement, and loneliness on mood and physical health (Lippi et al., 2020; Zhang et al., 2020)</i> • <i>Prolonged time in a socially impoverished environment was detrimental to key aspects of cognitive function.</i> • Physical exercise improves brain function
<p>Ferraro et al., 2020</p> <ul style="list-style-type: none"> • Synchronous learning allows for stronger engagement and greater sense of community • <i>Teachers need to increase their interaction with students that promote the transition from synchronous to asynchronous learning</i> • Virtual collaboration and critical thinking important to lessen effects of social isolation • <i>The teaching environment should favour teacher-student and student-student relationships</i>
<p>Kim & Asbury, 2020</p> <ul style="list-style-type: none"> • Confusion and stress – adverse consequence of school closures (UNESCO, 2020b) • Important to identify what it is to be a teacher during emergency remote learning • <i>The teaching profession is inherently a caring one (Lavy & Naama-Ghanayim, 2020)</i> • <i>Positive teacher-student relationships are an important source of job satisfaction, providing meaning and purpose and an underpinning fidelity to the profession (Spilt, et al., 2011; Veldman, et al., 2013)</i> • Connections with students and parents key part of teaching (Hargreaves, 2001); remote education disrupts personal components of teaching • Welcome the uncertainty as a challenge

- Find a way that means students can still engage, rethink as needed
- Create a new work-life balance
- Pay extra-careful attention to students who are in vulnerable home-life situations
- Lockdown exacerbated social inequalities that already existed
- Online classrooms poor substitute for in-person environments
- Although sudden transition to remote learning stressful, finding a way to teach provides some relief
- Combine synchronous with asynchronous learning
- *Teachers also reported feeling emotionally overwhelmed by the changes they were experiencing. In response, they primarily used emotion-focused strategies, particularly seeking emotional support from colleagues and venting to teach other (Carver, et al., 1989).*
- Networking with other teachers, albeit remotely, to vent, bounce around ideas, etc, excellent way to support and feel supported – creates sense of belonging and camaraderie while teaching in isolation
- Remote teaching counterintuitive, as teaching is inherently embedded in human connection
- Structure and planning time very important
- Positive teacher-student relationships aids teacher well-being (Split, et al., 2011) as well as students' *self-esteem, wellbeing and engagement* (Lavy & Naama-Ghanayim, 2020)
- Positive teacher-parent relationships creates sense of 'we're all in this together'-ness, promoting wellbeing for teacher, parent and student
- Uncertainty causes stress for teachers especially, *because it threatens core facets of teacher identity, including a need for routine, structure and the capacity to plan*
- Policies are needed for vulnerable students
- *Teachers are the social fabric that holds the educational system together, and it is therefore important to protect their ability and capacity to fulfil their role (1079)*

Fontenelle-Tereshchuk, 2021

- *Parental support is an important factor in children's education, [enhancing] children's learning and [playing] an essential role in their academic success (Amaral, 2007; Sedibe & Fourie, 2018)*
- Teachers forced to quickly adapt
- Further research: child safety measures/considerations for learning online
- *One of the problems associated with remote learning during the lockdown was that the role of parents was not clearly defined and the communication between schools and parents was deficient. Clearly define for the parent their role??*
- Communication with parents crucial to learning esp. during lockdown

Sofianidis et al., 2021

- Challenge: internet connection; access to devices
- Students' familiarity with technology aided transition to online learning
- Challenge: adverse learning conditions – had to share digital devices with other family members; some had to share spaces
- Challenge: teachers unfamiliar with e-learning tools/technology
- Challenge: remote learning *less satisfactory, less meaningful, and less structured than face-to-face instruction*
- Challenge: *lack of visual contact* [with teacher/classmates – unable to read body language, for example]
- Challenge: social isolation impacted student well-being
- Challenge: lack of motivation
- Lockdown exacerbated existing socio-economic inequities

Kast et al., 2021

- *During the home learning period, teachers struggled with addressing students' specific needs (Letzl, Posas and Schneider, 2020). Individualised teaching and learning [is] a starting point for educational equity (Lindner and Schwab, 2020) so that sucks.*
- *A positive correlation was found between attitudes and teachers' self-efficacy beliefs for teaching at-risk-students during the home learning period.*
- *Teachers need to develop a feeling of preparedness or readiness for a special situation like unexpected school closures*
- *The need for external support, such as parents or older siblings, should be reflected critically as not every student has such a network*

Data of multiple studies was then synthesised into a cohesive review of the literature. During this process, data was further explored and considered so that initial themes evolved into ones which better addressed the concept of student engagement in instrumental music tuition during emergency remote learning:

2.5 Themes

Organisation, Planning and Preparation

The necessity for thorough planning and preparation by teachers was magnified during periods of emergency remote learning (Kibici & Sarikaya, 2021; Kim & Asbury, 2020), particularly as teaching within a new framework (Bubb & Jones, 2020; Palau et al., 2021) resulted in additional time required for teachers to learn new software and gain familiarity with technology and online learning platforms (Sofianidis et al., 2021). The uncertainty felt by some teachers during this period caused undue stress and anxiety, as it undermined both teachers' (and students') need for structure and routine (Kim & Asbury, 2020). Thus the demand for a detailed approach to planning and preparation.

Family Involvement

The need for connection and communication with parents/guardians was also amplified during emergency remote learning, as the student's learning space was now within the home (Joseph, 2020; Palau et al., 2021)—a space not directly within the teacher's control. In addition to being responsible for the “classroom”, or “lesson”, environment, parents gained another responsibility of providing the relational aspect of learning a musical instrument. As with face-to-face lessons, and especially for younger students, parental involvement was needed to maintain student engagement between lessons for home-practice (Sever, 2021). This element of successful emergency remote learning would, likely, transcend easily if the teacher had already established good communication with parents/guardians.

Inequalities in Emergency Remote Learning

The predominant inequalities amongst students during emergency remote learning were home learning environment (in relation to parental management of the learning situation) and access to quality technology and a stable of internet connection (Bubb & Jones, 2020; Evans et al., 2020; Mohan et al., 2021). While the likelihood of issues regarding technology and internet connection were reduced for students of instrumental music (as, in many schools, instrumental music is often an extra-curricular activity, placing students of higher socio-economic backgrounds at an advantage to learn a musical instrument), these students

might have faced inequalities in their home-learning environment—such as if both parents were working or if the student lived in an inner-city apartment, where noise pollution might have become an issue.

Teacher Wellbeing

The isolating effects of lockdown commonly affected teachers' mental and emotional health, which could subsequently affect their ability to teach (Bubb & Jones, 2020; Kim & Asbury, 2020). Lack of community during emergency remote learning also removed teachers' access to the human connection found in teaching (Ingram et al., 2021; McCorkell & Lobo, 2021; Sever, 2021), which is especially necessary in times of crisis. Two key factors requiring consideration were: creating work-life boundaries when working from home and maintaining communication with colleagues and school leadership (Anderson et al., 2020; Gül, 2021; Kim & Asbury, 2020; McCluskey et al., 2021).

Digital Issues in the Digital Classroom

Emergency remote learning created a different learning experience that was generally seen as less effective in reaching learning goals (Kim & Asbury, 2020; Mohan et al., 2021), thus it became necessary to redefine learning goals to accommodate the circumstances. Common issues faced in the digital classroom included: digital fatigue (Akarsu, 2021; McCorkell & Lobo, 2021; Salvador et al., 2021); audio/visual glitches (Anderson & Northcote, 2018; Brändström et al., 2012); and limited means of interacting with students (Daugvilaite, 2021; de Bruin, 2021; Sofianidis et al., 2021). This ran counterintuitive to instrumental music tuition techniques, a the subject that relies heavily on the kinaesthetic model of teaching (Johnson, 2017). However, redesigning lessons to include both synchronous and asynchronous learning was deemed an important step to countering these issues (Kaleli, 2021; Kim & Asbury, 2020).

Student Wellbeing & Meaningful Learning

Emergency remote learning was generally found to be less satisfactory and less meaningful than traditional, face-to-face teaching, often prompting students to disengage due to lack of social interaction and lack of motivation (Sofianidis et al., 2021). However, if teachers showed sensitivity to the reality of the circumstances and designed learning tasks accordingly, students would likely see positive changes in mental and emotional health and wellbeing (Palau et al., 2021; Tobias et al., 2015). Improvement in skill on their instruments would also add to students' overall wellbeing, which would, ideally, feed back into increased engagement during lessons.

3. LITERATURE REVIEW

This literature review begins with a brief history of emergency remote learning, followed by an exploration of key components of quality teaching, which provides a framework for the remainder of the review. The following themes, which occur frequently in the reviewed literature, are then synthesised for consideration in emergency remote learning for instrumental music tuition. These themes are: organisation, planning and preparation; family involvement; inequalities in emergency remote learning; teacher wellbeing; digital issues in the digital classroom; and student wellbeing and meaningful learning.

3.1 A Brief History of Emergency Remote Learning

Remote learning, also known as distance learning or distance education, has existed for well over a century (Chin, 2019), starting in the 19th century when courses were run via mail correspondence. This was followed by educational radio broadcasts in the 1920s, educational television broadcasts in the 1930s, email correspondence courses in the late 1970s, educational satellite communications and instructional video courses in the early 1980s and, lastly, online education, which began in the early 1990s (Casey, 2008)—consequently leading to the terms ‘remote learning’ and ‘online learning’ often now being used interchangeably. Musical tuition was first made available, also via mail correspondence, in the late 19th century (Martin, 1999), followed by instructional phonograph recordings in the early 1900s (Hash, 2016) and many of the media already mentioned.

Since 2020, much of the world has transitioned, at various times, to and from remote learning in response to the worldwide outbreak of the SARS-CoV-2 virus. As with remote learning, emergency remote learning due to widespread outbreak of a disease is also, by no means, new. Whilst not the first known pandemic of the modern world (that “honour” is usually bestowed on the first century Plague of Justinian (Pieret & Boivin, 2021)), the infamous Bubonic Plague of the Middle Ages saw both the closure of universities and evacuation of students to the country, to continue their education (Courtenay, 1980). Likewise, the influenza pandemic of 1918 also prompted school closures (Pieret & Boivin, 2021).

Although more recent pandemics of the 21st century, such as the 2009 swine flu, saw complete or partial school closures (Braunack-Mayer et al., 2013), there has never before been such widespread total school closure and transition to remote learning for such extended periods of time. Nonetheless, despite the less-than-optimal circumstances of emergency remote learning, recent technology has moved quickly in the past fifteen years, meaning teachers are now far better placed to successfully manage the challenges of emergency remote learning. (Virtual reality has risen greatly in popularity, especially since the beginning of 2020, and there are numerous websites and apps that provide virtual resources, including Scootle, ABC Education and the Australian Curriculum Assessment and Reporting Authority (ACARA) website. For music and instrumental music, popular apps and sites include Flashnote Derby, Staffwars and Chrome Music Lab, not to mention various tuning and metronome apps.) Thus, the first step in approaching education during periods of emergency remote learning, is to determine the key components of quality teaching. It is from this, that learning experiences can be adapted to suit the circumstances.

3.2 Key Components of Quality Teaching

Current research strongly highlights the need for *student engagement*, which is more likely

to occur when the learning is meaningful, addresses individual needs, and connects to the students' world outside the classroom (Pendergast et al., 2017; Wilhelm et al., 2019). Linked to engagement is *motivation*, fostered through creation of a positive, supportive learning environment (Ladwig & Gore, 2006) that considers students' overall wellbeing (Pendergast et al., 2017). This is especially the case for adolescent learners, who experience significant psychosocial, emotional and cognitive changes at this time (Pendergast et al., 2017). (Indeed, neuroscientific research shows the emotional and cognitive learning centres of the brain are so intrinsically linked that when a student experiences a distressing emotion, the cognitive areas of the brain required for learning are temporarily inhibited (Zins et al., 2004).)

In order to meet individual needs and appropriately address student wellbeing, teachers must know and understand each student so that the learning experiences might be tailored to the individual student's specific needs—a process known as *differentiation* (Pendergast et al., 2017). In order to sustain student engagement and lead students to behavioural independence, teachers must engage students' critical thinking skills (Kaplan et al., 2017; Ladwig & Gore, 2006). Biesta (2016) cites this as the crucial step in guiding students to becoming autonomous learners. Likewise, cognitive behavioural theory asserts students can be lead to behavioural independence and self-management through learning critical thinking skills (Kaplan et al., 2017; Lyons et al., 2013.)

As Lauret & Bayram-Jacobs (2021) observe, such principles of quality teaching should also apply to remote learning. One might suggest that these principles should apply *especially* to emergency remote learning, which, by its very nature, requires students work independently of their peers and teachers.

3.3 Organisation, Planning and Preparation

The first step to establishing teaching practices which address student needs during periods of emergency remote learning is to consider the 'remote' and the 'emergency' aspects—which are now elements of the students' world outside the classroom (Pendergast et al., 2017; Wilhelm et al., 2019). This is likely to require greater energy and commitment for teachers, as they enter an unfamiliar teaching framework.

Thorough planning and organisation are critical components of successful remote learning (Brändström et al., 2012; Dye, 2015), yet this is precisely what was lacking when students were mandated to learn remotely in many parts of the world in early 2020, with teachers given only a short timeframe within which to prepare (Hash, 2021; Yates et al., 2021). Nonetheless, teachers should plan as much as possible, as disorganisation and a lack of structure were seen by students as some of the most negative aspects of emergency remote learning during covid-19-related lockdowns (Lauret & Bayram-Jacobs, 2021; McCorkell & Lobo, 2021). Thus teachers require higher than normal levels of discipline and planning (Kibici & Sarikaya, 2021), including emotional preparation (Borotis & Poulymenakou, 2004), with structure and planning-time essential to a successful delivery of learning during this period (Kim & Asbury, 2020). A primary reason for this is perhaps the unfamiliarity of teaching remotely, combined with technological issues that would not arise in face-to-face learning (such as internet instability.)

Emergency remote learning requires teachers fulfill a role different to that for which they have been trained (Bubb & Jones, 2020; Palau et al., 2021). For while a teacher's role is primarily relational (Bray et al., 2021; Kim & Asbury, 2020) involving high levels of communication and social interaction with students and colleagues, the role of a teacher during emergency remote learning becomes more that of a mentor or supervisor, with less

opportunity to be intrinsically involved in the student's learning due to the distance between teacher and student. It is, therefore, critical to initially gain clarification from the school's governing bodies as to what is required of teachers during the emergency remote learning period (Lauret & Bayram-Jacobs, 2021). Uncertainty can cause stress for teachers (Kim & Asbury, 2020), as an integral part of teacher identity often includes a need for routine, structure and planning (Kim & Asbury, 2020). Thus, before remote learning commences, teachers should also seek advice and gain familiarity with the technology of which they will be required to use (Dye, 2015; Lauret & Bayram-Jacobs, 2021). These steps combined allow teachers to plan appropriately, while encouraging and facilitating a smoother transition to, and experience of, emergency remote learning (Johnson, 2017; Kibici & Sarikaya, 2021). Conversely, teachers who do not approach emergency remote learning proactively might become "*easily frustrated and less effective [in their teaching]*" (Dye, 2015, 169).

Although contemporary students' familiarity with some technology aided them in the transition to emergency remote learning (Sofianidis et al., 2021), many teachers initially lacked digital competency (Crawford et al., 2020; Sintema, 2020; Zhang et al., 2020) and were unfamiliar with online learning platforms and technologies (Sofianidis et al., 2021). This evidences a generational gap between 'digital natives' and 'digital immigrants' (Prensky, 2001), likely adding to feelings of being overwhelmed, underprepared and not in control of the situation—which is, in itself, something teachers may strive for in order to manage a class. It highlights the need for more ICT training for teachers (Palau et al., 2021), which would be beneficial regardless, as teachers might then stay as informed in technological advances as their students.

The nature of emergency remote learning can certainly mean teachers are given a shorter timeframe in which to prepare (Hash, 2021; Yates et al., 2021), and this sudden transition to remote learning can be stressful (Kim & Asbury, 2020), although "*a positive correlation was found between attitudes and teachers' self-efficacy beliefs for teaching at-risk students during the home learning period.*" (Kast et al., 2021, 121). In an emergency remote learning situation, therefore, before teaching commences, teachers should seek assistance in sourcing the correct technology, from the best that is available, and guidance on its correct use (Dye, 2015; Lauret & Bayram-Jacobs, 2021). Teachers in positions of school leadership may wish to source or create resources for teachers, such as guides, handbooks and tutorials, as well as to provide ongoing support for teachers throughout the period of emergency remote learning. If there is truly nothing else available for teachers, due to the suddenness of the remote learning period, an internet search may likely yield useful results. While not the topic of this study, this does raise the question of how school leadership and the school system might be supported during periods of emergency remote learning, and could be a topic for future research.

Overall, it would seem that self-efficacy (Tsai & Lin, 2004) (particularly in terms of ICT capability), planning and cultivation of a positive attitude towards the required use of unfamiliar technology (Dye, 2015; Yuen & Ma, 2008) are the first steps in teaching effectively during a period of emergency remote learning. This is, perhaps, unsurprising as it has been observed in behavioural analysis that learning flourishes in an orderly teaching environment (Lyons et al., 2013). Such a proactive approach would also likely ease feelings of apprehension from students, provide relief for the teacher, as was the case for the researcher, and better prepare teachers to navigate the uncertainties of transitioning to an unfamiliar teaching space (Kim & Asbury, 2020). Indeed, the literature seems to suggest that embracing the uncertainty makes a period of emergency remote learning a more positive experience for both teacher and student, which, in turn, creates a more positive learning environment, albeit a virtual one, which is a key component of effective teaching (Pendergast et al., 2017).

3.4 Family Involvement

N.B. The word 'parent' in this sub-chapter is used to denote both parents and guardians.

Linked to planning and preparation is communication with parents. In a typical private instrumental music lesson, the teacher is predominantly responsible for creating the positive learning environment. This would also be true within a traditional, in-person lesson—although the presence of multiple students within the one space would, of course, affect the environment. In a virtual setting, however, the learning environment is split between the teacher's teaching space and the student's learning space (Palau et al., 2021), with the computer screen creating “*a barrier between student and teacher*” (Joseph, 2020, 67). This is an important consideration for teachers who have been thrust into emergency remote learning, as it is not something that requires the same consideration for face-to-face learning (beyond, of course, recognising how individual students' homelife might affect their engagement in the classroom).

Connections and communication with parents is crucial to student learning, regardless of when or where the learning occurs (Fontenelle-Tereshchuk, 2021; Suzuki, 2010), but, in times of emergency remote learning, the onus of creating a much-needed supportive learning environment lies heavily with the student's family (Sever, 2021). Indeed, family-involvement during this time is a key component to student learning, being the instigator for cultivating or hampering an environment conducive to learning (Sever, 2021). Teachers should, therefore, establish communication with parents early on, to better understand the unique circumstances of each student's home-learning environment (Palau et al., 2021), which will allow teachers to tailor the learning to the circumstances (Evans et al., 2020). Not only does this mean teachers will be aware of individual student needs but it also allows them to be sensitive to students' learning environments—such as if parents are working from home and/or managing multiple children in different grades, perhaps even at different schools, or if the student can only play music at certain times of the day to accommodate the needs of other members of the household.

Early communication with families also provides teachers the opportunity to clarify and define the parent's role during the period of emergency remote learning (Fontenelle-Tereshchuk, 2021) before it commences, as well as discuss any points of consideration for the student's learning space, which will impact student engagement (Lyons et al., 2013). It was observed that parents sitting or listening in on lessons can cause unwelcome pressure for teachers (Cheng & Lam, 2021), however it is the researcher's personal experience that inviting parents to observe instrumental music lessons can often be beneficial to the student's learning, including in remote learning situations, as it provides the student with an additional 'set of ears' to take note of the teacher's instructions and strategies for improvement.

It is worth noting that lack of home support can be a factor behind prompting students to disengage during emergency remote learning (Bray et al., 2021). While teachers themselves cannot provide the same in-person support available as in a traditional setting, parental support, which has long been seen as an important contributor to student education (Fontenelle-Tereshchuk, 2021; Sedibe & Fourie, 2018; Suzuki, 2010) becomes instrumental to students during emergency remote learning (Sever, 2021). It has been cited as a catalyst for stimulating and helping maintain student engagement (Bray et al., 2021), which becomes particularly necessary during emergency remote learning (Bubb & Jones, 2020; Mohan et al., 2021). Thus, while the teacher can still offer expertise through teaching remotely, the literature suggests that it is the parent who must provide the relational aspect of learning

that the teacher cannot offer during this period. Younger students, especially, need this parental input, unlike secondary school students who are more autonomous in their learning (Palau et al., 2021). Family support offers a personal component to students' education, which has been disrupted due to the transition to emergency remote learning (Kim & Asbury, 2020), while opening the channel of communication with parents promotes a positive teacher-parent relationship, which creates a sense of unity and improves wellbeing for teacher, parent and student (Spilt et al., 2011). This then filters into the learning environment and fosters an increase in student engagement (Bray et al., 2021). Individual teachers would be well-advised, therefore, to speak with parents regarding the benefits of home-support. This is likely something that school leadership can bring focus to, but, in the event that this is not the case, teachers can, firstly, bring this to the school's attention and, if needed, communicate directly with families.

Fortunately for the instrumental music teacher, family support and involvement has long been regarded as a necessary aspect of instrumental musical tuition, providing motivation and engagement, as well as increasing the student's perceived value for music (Comeau et al., 2014; Creech, 2010; Suzuki, 2010), which, in turn, can encourage determination and autonomy for learning (Küpers et al., 2013). Communication with parents, therefore, is something that can likely be easily translated to emergency remote learning, as the style of home-support required for instrumental music tuition is unlikely to change. Thus, instrumental music teachers should already be well-placed in having established with parents the need for encouragement and incentives to practice, which will increase students' engagement and, consequently, skill in the instrument—although teachers should be mindful that too much family involvement, such as the parent attempting to take on the role of teacher during a lesson, can place undue pressure on the teacher (Cheng & Lam, 2021).

In essence, the process of creating a positive learning environment is split between teacher, student and parent during a period of emergency remote learning. While the teacher is responsible for the learning environment in the context of a traditional, in-person lesson, the student's learning still continues at home. Thus, the student's family carry some of the responsibility for creating the learning environment. Some parents may even choose to supervise home practice, depending on the age of the student—regardless of the context in which the student is undertaking lessons (that is, whether remotely or in-person). The researcher's personal experience as an instrumental music teacher in Melbourne, Victoria, during the 2020 lockdowns, was that increasing family communication throughout the second lockdown improved student engagement.

Sadly, not all students have access to such a support network (Kast et al., 2021), and this may have been especially so during covid-19-related lockdowns, with parents forced to balance remote learning with working from home—if permitted to continue to work at all.

3.5 Inequalities in Emergency Remote Learning

As evidenced by much of the current literature, existing socio-economic inequalities in student education are exacerbated during periods of emergency remote learning (Bray et al., 2021; Bubb & Jones, 2020; Cheng & Lam, 2021; Kast et al., 2021; Kim & Asbury, 2020; McCorkell & Lobo, 2021; Mohan et al., 2021; Sofianidis et al., 2021). Emergency remote learning reduced school attendance during covid-19-related lockdowns (Mohan et al., 2021), however this was less noticeable for students with parents of higher levels of education (Mohan et al., 2021)—especially those with a tertiary education, who felt better equipped to manage the home-learning environment (Walsh et al., 2020). Student engagement was also affected by parental difficulties, both financial and personal (Mohan et al., 2021). However,

this was not necessarily linked to socio-economic status, as evidenced by the researcher's personal experience, having a student at a private school forced to withdraw from instrumental music tuition due to parental job loss.

It was also found that quality technology increased student engagement, and vice versa (Bray et al., 2021). Thus, well-resourced schools were at a distinct advantage in this regard, being able to provide quality devices to students and teachers (Bubb & Jones, 2020). Indeed, the researcher, employed at two private schools in Melbourne, Victoria, in 2020, had the benefit of being provided a laptop, a tablet and a high quality microphone. This heavy reliance on technology during emergency remote learning (Bubb & Jones, 2020; Dye, 2015; Mohan et al., 2021; Sofianidis et al., 2021) means that some students are placed at a disadvantage, such as having no access to Wi-Fi or data (Evans et al., 2020), being forced to work from mobile phones (Evans et al., 2020), needing to share devices with other family members (McCorkell & Lobo, 2021; Sofianidis et al., 2021) or needing parental permissions to access devices during lesson times (McCorkell & Lobo, 2021).

Thus, not all students will be able to participate in synchronous emergency remote learning (Palau et al., 2021), with vulnerable students being the most affected during these periods (Mohan et al., 2021). Indeed, it was the researcher's personal experience that some students could not continue with synchronous instrumental music tuition due to auditory and/or visual impairments. Therefore, teachers should expect to adjust the curriculum to suit the situation (Evans et al., 2020) and be flexible towards modes of delivery (Mahmood, 2021). Much of the current literature surrounding innovative teaching strategies during this period is restricted to subjects that have neither the relational nor the physical considerations of instrumental music tuition, and often hinge primarily on quality technology (Keast & Sanchez, 2021). Thus, further research into this field is needed.

Given that instrumental music tuition is often an extra-curricular activity, however (at least, in Australia), it is likely that instrumental music students would predominantly come from families of higher socio-economic bearing. Thus, poor quality internet or technology would typically not be an issue. However, students such as those living in inner city apartment blocks could face inequality issues, such as limited or shared practice space. Regardless, for the teacher who has been directed to teach remotely in the event of an emergency, individual students' circumstances should be considered to as great an extent as possible, so that alternative strategies can be found for disadvantaged students.

3.6 Teacher Wellbeing

This is not to say that teachers should consider the student's needs at the expense of their own wellbeing. Due to the innately caring nature of the teaching profession (Lavy & Naama-Ghanayim, 2020), teachers have a tendency to place students' needs first (Conrad, 2007; Palau et al., 2021). Whilst this may be considered an admirable, even desirable, attribute, it can become detrimental to teacher wellbeing during periods of emergency remote learning (Palau et al., 2021), as emergency remote learning requires teachers have higher than normal levels of concentration and engagement (Joseph, 2020; Sakin, 2021). It can be overwhelming, both emotionally and professionally (Bubb & Jones, 2020; Kim & Asbury, 2020), while teaching during a lockdown, specifically, can be socially isolating (Ingram, et al., 2021; McCorkell & Lobo, 2021; Sever 2021) and has the potential to negatively affect the teacher's mental and emotional health—as was experienced by the researcher during the 2020 lockdown periods in Melbourne, Victoria. In addition to this, the increase in screentime can lead to deeper levels of anxiety and depression (Ruston, 2016; Tromholt, 2016). Therefore, in consideration of these disruptions to teachers' mental and emotional

health, it is imperative that teachers prioritise their own wellbeing and “*protect their ability and capacity to fulfil their role*” (Kim & Asbury, 2020, 1079) at this time. The researcher’s personal experience can attest to the benefits of prioritising mental wellbeing and emotional health, which are under attack during such an intense time of isolation, particularly if the teacher lives alone or is under a travel limit.

The inherently relational aspect of teaching (Bray et al., 2021; Kim & Asbury, 2020) means teachers in traditional settings are able to give support to, and rely on support from, their colleagues. Consistently connecting with colleagues, albeit virtually, through team meetings is invaluable for peer support during emergency remote learning (Anderson et al., 2020; Gül, 2021; Kim & Asbury, 2020; McCluskey, et al., 2021). It offers emotional support (Anderson et al., 2020) and an opportunity for teachers to debrief (Kim & Asbury, 2020), as well as providing a space to talk through and create solutions and strategies (Kim & Asbury, 2020), share knowledge and discoveries regarding software and technology (Anderson et al., 2020), and discuss and test-run emergency remote teaching practices (Anderson et al., 2020; Evans et al., 2020). It also provides a platform for teachers to create and share resources and materials with colleagues, something that is enormously beneficial for teaching during this time (Evans et al., 2020) as there is a dramatic increase in administrative duties for teachers (Cheng & Lam, 2021). Experienced teachers, especially, can provide much needed administrative and peer support (Krueger, 2000). Such collegiality in a time of crisis allows teachers to support, and be supported by, their colleagues (Anderson et al., 2020), creating a sense of belonging and camaraderie whilst teaching in isolation (Evans et al., 2020). The researcher’s personal experience can attest to finding strength through connections with colleagues during this time. The sudden removal of community that occurred during emergency remote learning, combined with the generally socially isolating effects of lockdown, could be truly harrowing—and they do not appear to be something given due consideration in implementing school closures as part of the response to the outbreak of SARS-CoV-2. Whilst further research is needed for this topic, teachers can, nonetheless, continue to prioritise their own wellbeing during this time, both for its own sake and for the sake of their students. This could be through connecting digitally with colleagues, seeking support from school leadership or contacting outside support (such as Beyond Blue, Lifeline or Hoody’s Helpers, to name but a few.)

Lastly, with the lines between “work life” and “home life” often becoming blurred during periods of working from home, teachers can also strive to maintain clear work-life boundaries (Joseph & Lennox, 2021), communicating this clearly to parents, colleagues and superiors (Cheng & Lam, 2021). Creating clear distinctions between “work life” and “home life” allows teachers to self-regulate their work (Palau et al., 2021) and create a new work-life balance (Kim & Asbury, 2020), as they redefine their role as a teacher for the purposes of emergency remote learning (Kim & Asbury, 2020.) Thus, the uncertainty of the situation and the role into which the teacher has been thrust are likely to become less overwhelming if actions are taken to address elements that are within the teacher’s control.

3.7 Digital Issues in the Digital Classroom

Despite even the most proactive approach to emergency remote learning, however, there is still the matter of running an instrumental music lesson within the digital space. Instrumental music tuition is a subject that typically depends on student interaction with the teacher throughout the learning process (Hash, 2021). During remote learning, however, traditional teaching techniques become unviable (Goodrich, 2021), thus teachers must adapt to the circumstances (Assaf & Gan, 2021; Fontenelle-Tereshchuk, 2021; Johnson, 2017), seeking to find a variety of ways for students to still engage through meaningful learning

experiences (Hash, 2021; Kim & Asbury, 2020).

Firstly, it is worth noting there is a tendency for digital fatigue during online learning, both for students and teachers (Akarsu, 2021; McCorkell & Lobo, 2021; Salvador, et al., 2021). Online learning requires greater concentration and causes the eyes and mind to strain (Joseph, 2020; Sakin, 2021). Research suggests that excess screen time can cause psychological and physiological harm (Tromholt, 2016), having the potential to trigger or increase anxiety, depression and sleep loss (Ruston, 2016; Tromholt, 2016), as well as damage cognitive and memory functions and abilities (Carr, 2011). Teachers should, therefore, structure lessons to avoid students constantly looking at the screen (Sever, 2021) as well as practice looking away from the screen periodically, themselves. Instrumental music students automatically look at the instrument or sheet music, thus direct screentime is already reduced. However, the student may need to look at the screen if reading music directly from it, so it would be best to share music with students prior to the lesson, to provide time for the music to be printed out at home (if possible).

The key point of consideration is that instrumental music tuition traditionally uses kinaesthetic modelling (Johnson, 2017), with audio and visual interactions crucial to successful instruction (Dye, 2015). Although not a perfect replacement for in-person tuition, videoconferencing seems the obvious medium to ensure this interaction can still occur (Palau et al., 2021), albeit in a limited capacity. However, visual and audio quality can be problematic (Akarsu, 2021; Daugvilaite, 2021; Gül, 2021; Hash, 2021; Sakin, 2021), with distortion, poor acoustics, audio glitches (Anderson & Northcote, 2018) and echoes (Brändström et al., 2012) causing unwanted interference, while delay between sound and pitch (Brändström et al., 2012; Okay, 2021; Sakin, 2021), and poor internet connectivity, can cause disruptions to students' learning (Akarsu, 2021; Anderson & Northcote, 2018; Daugvilaite, 2021; Joseph, 2020; Okay, 2021; Sakin, 2021). There is also currently no videoconferencing platform that allows for ensemble-playing or live accompaniment, due to issues in synchronisation and latency (Akarsu, 2021; Brändström et al., 2012; Daugvilaite, 2021; Gül, 2021; Hash, 2021; Johnson, 2017; Joseph & Lennox, 2021; King et al., 2019; Okay, 2021; Sakin, 2021; Salvador et al., 2021)—however this *does* mean there is little opportunity for students to be forgotten about or left behind, as they might in traditional ensemble rehearsals, for ensemble-playing cannot translate directly to the online learning platform. Finally, there is the obvious issue of difficulty in providing demonstrations (Daugvilaite, 2021; de Bruin, 2021; Gül, 2021), teaching technical skill (Blackburn, 2017) and correcting aspects such as posture and technique (Sakin, 2021). Whilst this removal of kinaesthetic learning strategies could be deemed a way to empower students in their own learning (Pike, 2016), it does mean students who find auditory or visual comprehension difficult and rely primarily on kinaesthetic learning are left at a disadvantage. (The researcher can personally attest to having spent ten to fifteen minutes verbally assisting a student to find the correct starting hand position on the piano, during a lesson in a period of emergency remote learning—something that would have taken mere seconds in a face-to-face lesson!)

Therefore, in consideration of the numerous technical challenges and the damaging effects of excess screentime, teachers can explore combinations of synchronous and asynchronous learning, in order to achieve student learning goals (Kaleli, 2021; Kim & Asbury, 2020). While some research suggests that the synchronous nature of music education means "*online learning can only play a complementary role*" (Kibici & Sarikaya, 2021, 503), the nature of emergency remote learning does not accommodate for this. Thus, it is the researcher's personal experience that emergency remote learning can be considered as a way to 'manage' learning rather than 'progress' it. This accepts the synchronous nature of music education while providing encouragement and guidance for students during the emergency remote learning period, supplementing the learning with asynchronous tools. For although remote

learning cannot replace face-to-face learning (Blackburn, 2017), teachers can provide practical examples of a particular aspect to be taught through supplementary videos and audio files, which are especially useful tools for online learning (Anderson & Northcote, 2018; Daugvilaite, 2021; Sakin, 2021; Schiavio et al., 2021; Yates et al., 2021; Lauret & Bayram-Jacobs, 2021). Listening to music is, in itself, an important way to learn how to play musically (Suzuki, 2010), whether in a remote learning situation or otherwise, while sending students files prior to lessons can assist in providing clear instruction and minimise questions (Joseph & Lennox, 2021). Pre-recorded accompaniments may also provide a solution to latency issues (Brändström et al., 2012), while teachers should do visual and sound checks at the start of each lesson (Anderson & Northcote, 2018; Sever, 2021), and use good quality microphones and cameras (Anderson & Northcote, 2018; Brändström et al., 2012; Sakin, 2021)—although this does depend on what is available to the school, student and teacher. For students who cannot learn synchronously, the limited research available suggests creation of video lessons or focussing on music theory (Calderón-Garrido & Gustems-Carnicer, 2021; Koutsoupidou, 2014; Lauret & Bayram-Jacobs, 2021). However, the former would likely be time-consuming for the teacher (as was personally experienced by the researcher), especially over extended periods of time, and the latter could become tedious for the student. Further research into this field will allow for development of much-needed policies and teaching innovations (Kim & Asbury, 2020).

Beyond delivery of the curriculum, students rely on non-verbal behaviours and responses in their learning (Daugvilaite, 2021; Sakin, 2021). However, this can be challenging during remote learning (Sofianidis et al., 2021), which has a heavy reliance on verbal communication (de Bruin, 2021; Daugvilaite, 2021). So that the onus is not on students to initiate support from teachers (McCorkell & Lobo, 2021), teachers can invite students to ask clarifying questions, model desired behaviour (de Bruin, 2021), slow down the pace of the learning (Hash, 2021), show consistency (McCluskey et al., 2021), divide lesson content into smaller portions (Bao, 2020) and provide concise feedback (Brändström et al., 2012). Indeed, this last strategy was found to have higher value than usual during emergency remote learning (Bubb & Jones, 2020).

Lastly, it must be observed that remote learning is a vastly different learning experience to the learning that takes place face-to-face (Johnson, 2017); it is counterintuitive to teachers, whose profession is inherently embedded in human connection (Kim & Asbury, 2020), and less effective for students, even those who are usually engaged (Kim & Asbury, 2020; Mohan et al., 2021). Thus, teachers should aim to avoid frustration and undue pressure, accepting students will likely make slower progress during this time (de Bruin, 2021), especially in regards to aspects of musical tuition, such as technique (Cheng & Lam, 2021), and, for this reason, select easier repertoire (Sakin, 2021).

3.8 Student Wellbeing & Meaningful Learning

Despite these challenges, effort can still be made to provide meaningful learning experiences, as emergency remote learning was found to be less satisfactory, less meaningful and less structured than learning held in traditional settings (Sofianidis et al., 2021), with some teachers daunted by the task of instructing students in instrumental music, now that use of traditional instruction techniques were inhibited (Goodrich, 2021; Johnson, 2017). Additionally, the dramatic and sudden change of emergency remote learning was found to negatively affect student academic outcomes and motivation (Lauret & Bayram-Jacobs, 2021), with school closures disrupting not only student learning, but mental health and wellbeing (Green, 2020; Outhwaite & Guilford, 2020), primarily due to lack of social interaction (McCorkell & Lobo, 2021; Sever, 2021; Sintema, 2020; Sofianidis et al., 2021)—

something that adolescents, especially, need for cognitive development (de Bruin, 2021; Yates et al., 2021). There is also growing evidence to suggest that mood, physical health and cognitive function were negatively affected by the social isolation, confinement and loneliness caused by SARS CoV-2-related lockdowns (Ingram et al., 2021; Zhang et al., 2020).

Whilst not replacing in-person interactions, seeing another face, albeit through a screen, is valuable to students during emergency remote learning, as it provides a personal connection (Sever, 2021). Indeed, individual lessons in instrumental music are likely to have the added benefit of students receiving the teacher's undivided attention. Although an online community lacks interpersonal interactions, asking students to provide feedback and creating learning tasks that require virtual collaboration and critical thinking can also create a sense of community, encourage engagement and improve the learning experience (Adams, 2020; Ferraro et al., 2020; Johnson, 2017), as well as assist students in becoming self-motivated in their own learning, as observed in cognitive behavioural theory (Lyons et al., 2013). Although traditional instrumental music ensembles are not possible in online learning (Johnson, 2017), the researcher's personal experience is that ensembles can still learn collaboratively through group analysis of professional performances or exploration of the ensemble's instrument(s). More advanced groups could even attempt a virtual ensemble, as was popularised throughout periods of lockdown across the world in 2020 and 2021 and first popularised by conductor and composer, Eric Whitacre (2010).

It may not be possible for the teacher to create the same learning experience as if the student were learning in person. However, research suggests that creating meaningful learning through personalised learning tasks, which consider all aspects of the individual, is an effective means to engage with and motivate students (Biesta, 2016; Pendergast, et al., 2017; Wilhelm, et al., 2019). Although perhaps more challenging, due to the emergency remote learning setting, teachers can still strive to imagine meaningful learning experiences for their students (Bubb & Jones, 2020; Kaleli, 2021) through consideration of students' needs. Thus, teachers should, first and foremost, be sensitive to the reality (Palau et al., 2021) and model behaviour that recognises the challenges and frustrations of the situation (Adams, 2020). From this standpoint, teachers can cultivate student motivation and, consequently, engagement, through attention to creative learning experiences, a student-centred pedagogical approach and positive student-teacher connections (Bray et al., 2021; Bubb & Jones, 2020) that encourage students to process their emotions, both circumstantial and otherwise (Palau et al., 2021). Addressing student wellbeing was one of the main challenges faced by teachers in emergency remote learning during a lockdown setting (McCorkell & Lobo, 2021; Sharp et al., 2020). Learning experiences, therefore, should balance student expectations with empathy for the circumstances (Evans et al., 2020), with the teacher creating student goals accordingly (Lauret & Bayram-Jacobs, 2021), working backwards from the desired learning outcome to create these goals (Carli et al., 2021)—a process known as 'front-ending' (Pendergast et al., 2017). In this way, teachers can ensure students still receive meaningful learning experiences (Carli et al., 2021).

Considering student wellbeing, motivation and engagement during emergency remote learning is valuable, not only in a general sense, but especially so for instrumental music tuition. Playing music allows adolescents to transcend their world and creatively explore their feelings and emotions (Fletcher, 2015), while the physical exertion improves brain function (Ingram et al., 2021). Thus, teachers of instrumental music should create learning tasks that prompt students to see connections between the psychological effects of playing music (Collins, 2014a) and the reality of their circumstances (Tobias et al., 2015), which will further promote student engagement (Tobias et al., 2015). Thus, if students can repeatedly experience the positive effects playing a musical instrument has on their wellbeing, this

should promote better engagement in lessons and increased interaction with their instruments outside lessons. By guiding students to engage in learning at home (Assaf & Gan, 2021), there is an increased likelihood that students will build their capacity and ability for autonomous learning, which is not only the overarching component of quality teaching (Biesta, 2016), but also the cornerstone of effective remote learning (Mohan et al., 2021).

4. DISCUSSION

This study sought to determine the most effective approach to instrumental music tuition in emergency remote learning, measured by terms of student engagement and fulfillment—academically, personally and socially. It posed the question: *what is the best teaching and learning approach to optimise student engagement for instrumental music tuition during emergency remote learning?* It also sought to confirm the hypotheses that a) the most effective way to teach during emergency remote learning is to establish and then translate the core of key teaching qualities into the remote learning medium, and b) all students can learn remotely.

The reality of emergency remote learning is that, despite great advances in technology over the last fifteen years, there are only limited resources available. However, while not necessarily the preferred method of learning, especially for students undertaking studies in instrumental music (Akarsu, 2021; Blackburn, 2017; Daugvilaite, 2021; de Bruin, 2021; Joseph, 2020; King et al., 2019; Salvador et al., 2021), current literature would suggest that many of the general principles around student learning are applicable in instrumental music teaching—perhaps even more so during times of remote learning. The best teaching and learning approach, therefore, in emergency remote learning, is to optimise student engagement, despite the overarching material, pedagogical and relational challenges (Bray et al., 2021). While the specifics of student engagement may differ between remote learning and in-person learning, many of the principles of quality teaching should be generally applicable. In times of emergency remote learning, the best approach seems to be to identify the key components of quality teaching, find solutions to any common issues and apply broadly all available knowledge and research on student engagement. By these means, all students, to at least some extent, should be able to continue to learn throughout periods of emergency remote learning.

Teachers who dedicate time to mentally and emotionally prepare (Borotis & Poulymenakou, 2004) and who possess or quickly develop strong self-efficacy, particularly in terms of ICT (Tsai & Lin, 2004) are better-positioned for successful teaching during the emergency remote learning period. Indeed, embracing technologies during this time appears to create a healthier mindset, which prompts greater engagement on the part of the teacher and, by extension, the students. Philosopher and music educator, Shinichi Suzuki, utilised whatever technology was available at the time throughout his career (Sever, 2021), seeking to find what was most effective for the student to learn under the circumstances. Teachers in emergency remote learning, therefore, may wish to consider what is most effective for the student to learn with the tools that are available (Sever, 2021), while recognising this may likely be very different to what is most effective for students during traditional, face-to-face settings (Evans et al., 2020). As with face-to-face learning, however, the literature suggests that time spent planning, preparing and organising, prior and during emergency remote learning, is time well-spent. For it removes much of the uncertainty of teaching in unfamiliar circumstances and encourages a proactive approach that allows educators to address that which is still in the teacher's control.

In what is likely to be an unsettling or frustrating time for students, the literature indicates that stronger student engagement stems primarily from greater consideration for student wellbeing. Teachers who establish communication with students' parents/guardians (Fontenelle-Tereshchuk, 2021; Palau et al., 2021; Sever, 2021; Suzuki, 2010) can provide families reassurance regarding the emergency remote learning period and tips on creating a positive learning environment in the home. Teachers can also use this channel of communication to discern any limitations or inequalities that students may be facing during the emergency remote learning period, paying extra-careful attention to students who are in vulnerable home-life situations (Kim & Asbury, 2020). Beyond this, showing genuine

concern for students through providing (digital) social and emotional well-being activities can improve students' motivation (Yates et al., 2021). Likewise, reminding students that the learning conditions are temporary (Sakin, 2021) and validating students' feelings through openness to discussing the reasons for the emergency remote learning, within reason, can also be beneficial (Sakin, 2021; Yates et al., 2021). This empathy from the teacher creates a feeling of belonging for the student (Yates et al., 2021) which increases motivation, engagement and achievement (McCluskey et al., 2021), boosts morale (Sakin, et al., 2021) and allows learning to be meaningful and relevant (de Bruin, 2021).

Thus, the literature would seem to suggest that the role of the teacher during periods of emergency remote learning leans more strongly towards that of a mentor or supervisor. In face-to-face instrumental music tuition, the teacher works kinaesthetically with students (Johnson, 2017), sharing a physical space and forming mental connections with the student (de Bruin, 2021). This encourages and allows for spontaneous interactions (Akarsu, 2021; Joseph & Lennox, 2021) as student and teacher listen and respond to one another, both musically-speaking and within the instructional format. During remote learning, both in emergency situations and otherwise, the learning environment removes the teacher from the student's physical learning space (Palau et al., 2021), thus the now mentor-teacher guides the student from afar, offering suggestions and demonstrations. This approach is, therefore, more akin to a workshop, in which students perform repertoire and receive tips for improvement from the teacher, or masterclass, in which students listen and consider how the information they are receiving might personally apply to them.

5. RECOMMENDATIONS

Whilst the exact circumstances of future emergencies may vary, teachers should, regardless, “develop a feeling of preparedness or readiness for a special situation like unexpected school closures” (Kast et al., 2021, 121), so that student learning may continue despite the circumstances. To clarify, the researcher is not suggesting teachers live in a constant state of preparedness for emergency remote learning. Rather, that the teacher develop a personalised ‘handbook’, which can be accessed if needed.

As a relatively new field of research, there are still a number of areas in emergency remote learning that require further research (see 5.7). Thus, the strategies for periods of emergency remote learning discussed in this chapter, although drawn from the literature, should, by no means, be considered exhaustive.

5.1 Prepare

In the event that emergency remote teaching is announced, the first step to successful emergency remote teaching is to dedicate time to planning and structuring learning for the online medium (Brändström et al., 2012; Dye, 2015; Lauret & Bayram-Jacobs, 2021; McCorkell & Lobo, 2021). Teachers can choose to seek clarification from school leadership on their role during this period (Lauret & Bayram-Jacobs, 2021) and help in sourcing appropriate technology from what is available, in order to gain familiarity with it (Dye, 2015; Lauret & Bayram-Jacobs, 2021). By so doing, teachers are better placed to embrace this new mode of teaching (Bubb & Jones, 2020; Dye, 2015; Palau et al., 2021; Yuen & Ma, 2008) and be better prepared to create a positive learning environment, which is a cornerstone of effective quality teaching (Ladwig & Gore, 2006).

Practical Applications:

- Prepare mentally – validate feelings and acknowledge the reality of the situation by journaling or speaking with colleagues, family/friends about any concerns or trepidations regarding the remote teaching period
- Source the best available equipment – make enquires with school leadership about being given access to a good quality microphone, camera and speakers, as well as a school laptop or tablet (these can be useful as additional tools during the lesson); ensure internet connection is stable
- Consult school leadership on protocols – for example, the school may have decided that lessons must be recorded
- Research the videoconferencing system to be used (e.g. Zoom, Google Meet, Skype, etc) – the school may have created a tutorial, otherwise a quick online search for a tutorial will likely yield plentiful results; alternatively, spend some time experimenting with the video-conferencing platform to understand its intricacies; the important part is to feel prepared using the system
 - N.B. Mirror image is the default video for Zoom; the researcher found that, for the purposes of instrumental music tuition, unticking this box simplified giving instruction
- Share any worksheets or sheet music with either the student or parents/guardians, to be printed out prior to the lesson, so that the student is not required to look constantly at the screen (as this can cause digital fatigue (Sever, 2021))

5.2 Communicate with Parents/Guardians

To further meet student needs through creating a positive learning environment (Ladwig & Gore, 2006; Pendergast et al., 2017), teachers can influence the learning environment through communication with parents/guardians—it now being divided between the teacher’s teaching space and the student’s learning space (Joseph, 2020; Palau et al., 2021). Not only is parental involvement crucial to student learning (Bray et al., 2021; Fontenelle-Tereshchuk, 2021; Sedibe & Fourie, 2018; Suzuki, 2010), but, in the event of emergency remote learning, teachers can make suggestions on how to create a positive learning environment, as well as discern the unique circumstances of each student’s home-learning conditions (Palau et al., 2021).

Practical Applications:

- Clarify protocols for instrumental music lessons (as per consultation with school leadership)
- Discern any foreseeable difficulties for student (e.g. lesson timing, reliability of internet, permissions for use of devices, etc)
- Post guidelines on considerations for creating a positive learning environment; e.g. proper lighting, ventilation and heating/cooling, area away from ‘high traffic area’, etc
- Continue communication with parents, to ensure parents can provide student with mental connection that is otherwise absent

5.3 Prioritise Personal Wellbeing

Prioritising student needs is second nature to teachers (Conrad, 2007; Palau et al., 2021), however this trait can be detrimental to teacher wellbeing during emergency remote learning (Palau et al., 2021). Teachers are at greater risk of being professionally and emotionally overwhelmed (Bubb & Jones, 2020; Kim & Asbury, 2020), experiencing higher levels of anxiety and depression from increased screentime (Ruston, 2016; Tromholt, 2016) and potentially being socially isolated (in the event of a lockdown) (Ingram et al., 2021; McCorkell & Lobo, 2021; Sever 2021). Prioritisation of personal wellbeing, through collegial support and collaboration (Anderson et al., 2020; Gül, 2021; Kim & Asbury, 2020; McCluskey et al., 2021; Evans et al., 2020), delegation of administrative tasks (Krueger, 2000) and maintenance of clear work-life boundaries (Joseph & Lennox, 2021) means teachers are better placed to protect their ability and capacity to teach (Kim & Asbury, 2020).

Practical Applications:

- Schedule regular team meetings with colleagues, to promote collegiality and ameliorate feelings of isolation
- Debrief with trusted colleagues and/or friends and family
- Use team meetings as opportunity to brainstorm strategies and test-run remote teaching practices
- Delegate or seek assistance with administrative tasks
- Maintain clear work-life boundaries and communicate this clearly with parents/guardians and superiors
- Seek professional support or consider contacting a support agency (e.g. Beyond Blue, Lifeline, Hoody’s Helpers, etc)

- Exercise, outside the house if possible, and spend significant time away from the computer screen, so that eyes have a chance to relax; consider over-the-counter eye drops for dry eyes
- During lessons, take breaks from looking at the screen

5.4 Focus Lesson on Student Wellbeing

At the heart of quality teaching is creating learning tasks that consider individual students' overall wellbeing and connect with students' world outside the classroom (Pendergast et al., 2017; Wilhelm et al., 2019). There is a growing body of research to suggest that lack of social interaction and general confinement, combined with a dramatic shift to emergency remote learning, disrupts and damages student learning, mental and physical health, cognitive function and overall wellbeing (Green, 2020; McCorkell et al., 2021; Outhwaite & Guilford, 2020; Ingram et al., 2021; Sever, 2021; Sintema, 2020; Sofianidis et al., 2021; Zhang et al., 2020). All humans, and adolescent students, especially, require interpersonal connections (Lyons et al., 2013) for cognitive development and processing (de Bruin, 2021; Pendergast et al., 2017; Yates et al., 2021; Zins et al., 2004). Thus, in a period of emergency remote learning, students require strategies and tools to self-regulate their own wellbeing. Therefore, teachers can show sensitivity to the circumstances (Adams, 2020; Lauret & Bayram-Jacobs, 2021; Palau et al., 2021), balancing expectations with empathy (Evans et al., 2020) and encouraging students to process their emotions through playing music (Collins, 2014a; Fletcher, 2015; Palau et al., 2021)—which has the added benefit of including physical exertion that will improve brain function (Ingram et al., 2021).

Practical Applications:

- Encourage student to vocalise feelings of wellbeing (or lack thereof) at the beginning of each lesson
 - for students who respond despondently, remind them these learning conditions are temporary; some may simply wish to have their feelings validated regarding the reasons for the emergency remote learning
- Spend as much of the lesson as possible with student playing instrument, in order to maximise physical activity which will improve cognitive ability and overall wellbeing
- Mute microphone when student plays so student is not disrupted by, for example, mouse-clicks, typing, etc
- Utilise eye contact by looking into the camera rather than at the student's video during lessons to decrease students' feelings of isolation
- Adjust learning outcomes to a slower pace and allow student extra time to grasp different concepts and/or divide lesson content into more manageable portions
- Have student mute own microphone and play with teacher (teacher playing same part, accompaniment or duet, for example) to simulate ensemble-playing
- Provide concise feedback to the student
- Select easier repertoire
- Should live performance not be permitted during emergency remote learning, encourage students to utilise their families' presence and present a live performance to them
- Maintain contact with students throughout the week by checking in on them between lessons; a simple email to wish encouragement provides an element of personal connection

- Source repertoire that the student finds particularly engaging—discuss the type of music student would like to play (for example, soundtracks, classical, pop, etc) in lesson
- Ask student to give feedback on own playing—this engages critical thinking skills and encourages student to seek out solutions to improve performance
- Send feedback to the student or parent or both (determine which is more effective for the student’s learning through trial and error)—keep overall tone light and positive

5.5 Make Logistical Considerations for the Digital Space

Remote learning is a different learning experience to face-to-face learning (Johnson, 2017), thus teachers must adapt traditional teaching techniques to the circumstances (Assaf & Gan, 2021; Fontenelle-Tereshchuk, 2021; Goodrich, 2021; Johnson, 2017), whilst being mindful of the risk of digital fatigue (Akarsu, 2021; McCorkell & Lobo, 2021; Salvador et al., 2021) and the required increase in concentration (Joseph, 2020; Sakin, 2021). There are also audio and visual quality issues to consider, including distortion, glitches, echoes, latency and poor internet connectivity (Akarsu, 2021; Anderson & Northcote, 2018; Brändström et al., 2012; Daugvilaite, 2021; Joseph, 2020; Okay, 2021; Sakin, 2021). Teachers should, therefore, regularly test equipment (Anderson & Northcote, 2018; Sever, 2021), adjust pace of lesson (Bao, 2020) and consider a range of supplementary asynchronous learning strategies (Anderson & Northcote, 2018; Brändström et al., 2012; Calderón-Garrido & Gustems-Carnicer, 2021; Daugvilaite, 2021; Joseph & Lennox, 2021; Koutsoupidou, 2014; Kaleli, 2021; Kim & Asbury, 2020; Lauret & Bayram-Jacobs, 2021; Sakin, 2021; Schiavio et al., 2021; Suzuki, 2010; Yates et al., 2021)

Practical Applications:

- Do visual/audio sound check at the beginning of each lesson (the initial lesson(s) may require the student or teacher adjusting position of or settings on the device being used; make these adjustments to ensure the best available audio and visual quality under the circumstances)
- If there is an internet drop-out, and enough mobile data available, use data to finish lesson; alternatively, notify student via email and reschedule lesson for another time
- Use high quality microphones and camera
 - Set the student listening tasks during the week (such as listening to recordings of the student’s current repertoire)
- Ask the student for feedback, either verbally at the end of the lesson or in a follow-up email – students may not make the teacher aware of a technological issue during the lesson, but asking for feedback provides a platform to raise awareness of this
- Send repertoire to student prior to next lesson
- Consider asynchronous learning strategies (see 5.6)

5.6 Consider Asynchronous Learners

The reality is that synchronous emergency remote learning will not be a viable option for all students (Palau et al., 2021), such as vulnerable students (Mohan et al., 2021), including those with auditory/visual impairments. Although there is limited research addressing these students’ needs during a period of emergency remote learning, the research suggests a number of asynchronous learning tools (Anderson & Northcote, 2018; Brändström et al., 2012; Calderón-Garrido & Gustems-Carnicer, 2021; Daugvilaite, 2021; Joseph & Lennox, 2021; Koutsoupidou, 2014; Kaleli, 2021; Kim & Asbury, 2020; Lauret & Bayram-Jacobs,

2021; Sakin, 2021; Schiavio et al., 2021; Suzuki, 2010; Yates et al., 2021) that can be used as primary or supplementary (Kaleli, 2021) learning strategies.

Practical Applications:

- Record a short video or create a series of videos on a given topic, such as posture or technique, and discuss with student
- Set research tasks on topics such as correct posture/instrument hold, the ‘world’ in which repertoire selection was composed
- Set music theory tasks
- Provide practical demonstrations through video and audio files
- Set listening tasks of various performers playing selected repertoire and/or of other music from the same period
- Provide pre-recorded accompaniments
- Create video lessons (in the style of, for example, a masterclass series)
- Set music theory tasks
- Have student record practice session and send to teacher for feedback; teacher creates video-response feedback
- Share video performances, either ones created by self or sourced through sites such as YouTube
- Utilise platforms such as Blackboard, Moodle and Google Drive for uploading materials and discussion forums

5.7 Suggested Future Research

Although some resources have been developed for transitioning to emergency remote learning (UNESCO, 2020b; EEF, 2020), review of the current literature found a number of areas requiring further research:

- Support for school leadership during periods of emergency remote learning
- Support for teachers’ mental health
- Innovations for remote learning/emergency remote learning in instrumental music
- Solutions to inequalities exacerbated in emergency remote learning
- Child safety measures under duty of care umbrella for emergency remote learning (such as for vulnerable or at-risk students)
- Learning strategies for vulnerable students, e.g. auditory/visually impaired
- How to increase training in ICT for teachers
- Sustainable asynchronous learning strategies

6. CONCLUSION

In the simplest of terms, key teaching considerations for emergency remote learning are no different than for face-to-face learning. Successful emergency remote learning (in terms of student engagement and fulfilment—academically, socially and personally) requires that teachers: prepare and plan (Kim & Asbury, 2020) to as great an extent as possible; communicate with the student's family (Suzuki, 2010); make considerations for inequalities and wellbeing amongst students; and provide meaningful learning experiences (Pendergast et al., 2017; Wilhelm et al., 2019) that engage students' critical thinking skills (Biesta, 2016; Kaplan et al., 2017), so they might become autonomous learners (Biesta, 2016)—which is the overarching necessity for students during this time (Kibici & Sarikaya, 2021).

Despite the challenges, there can be positives to come from learning in lockdown during emergency remote teaching. Surprising to the researcher is that some strategies which are recommend for emergency remote learning are conducive to learning in traditional teaching settings also. These include taking initiative in seeking guidance from school leadership, exploring new technology as it emerges and, perhaps the strongest point for consideration, communicating and engaging more frequently with parents/guardians. Remote learning also provides flexibility (Kibici & Sarikaya, 2021), with some students preferring to have control over their daily routine (McCorkell & Lobo, 2021). Shy students often tend to engage more during online learning (Adams, 2020) and those students who work best on their own thrive (Evans et al., 2020). The researcher's own personal experience can confirm that although emergency remote learning was a difficult and often thankless task, there were students who benefited from it and were able to return to face-to-face lessons more advanced and more confident in their skills on their chosen musical instrument.

Teachers of instrumental music can be motivated by the significant contribution this learning makes towards students' wellbeing (Collins, 2014b), for creating music can fulfill adolescents' emotional needs, providing a sense of belonging (Fletcher, 2015), which is likely to have been disrupted in the transition to remote learning (Green, 2020; Outhwaite & Guilford, 2020). Thus striving to engage students in their instrumental music lessons is always a meaningful goal, particularly in times of crisis.

7. REFERENCES

- ABC News. (2021, April 5). SA Police data shows rise in domestic violence assaults amid COVID-19 pandemic. *ABC News*. <https://www.abc.net.au/news/2021-04-05/sa-covid-domestic-violence-statistics/100048794>
- Adams, K. (2020). Research to Resource: Developing a Sense of Community in Online Learning Environments. *Update: Applications of Research in Music Education*, 39(2), 5–9. <https://doi.org/10.1177/8755123320943985>
- AIHW (Australia Institute of Health and Welfare). (2021, September 16). *School student engagement and performance*. <https://www.aihw.gov.au/reports/australias-welfare/school-student-engagement-and-performance>
- Akarsu, S. (2021). Investigating Secondary School Music Teachers' Views about Online Music Lessons during the COVID-19 Pandemic. *Educational Policy Analysis and Strategic Research*, 16(2), 160–178. <https://doi.org/10.29329/epasr.2020.345.8>
- Anderson, A., & Northcote, M. (2018). Australian studies of videoconference and video-assisted instrumental music teaching: What have we learned? *Australian Journal of Music Education*, 52(1), 3–18. <https://search.informit.org/doi/10.3316/aeipt.222800>
- Anderson, T., Moir, T., Nates, R., Hooper, P., Whittington, C., Protheroe, M., Hadrup, M., & Beckerleg, M. (2020). Trying-out technologies in trying times: A collection of observations from a collegial adventure during Covid-19. *31st Annual Conference of the Australasian Association for Engineering Education (AAEE 2020): Disrupting Business as Usual in Engineering Education*, 330–336. <https://doi.org/10.3316/informit.725586551926357>
- Andrews, D. (2021a, February 12). *Statement From The Premier | Premier of Victoria* [Press release]. <https://www.premier.vic.gov.au/statement-premier-85>
- Andrews, D. (2021b, July 15). *Statement From The Premier | Premier of Victoria* [Press release]. <https://www.premier.vic.gov.au/statement-premier-92>
- Andrews, D. (2021c, July 20). *Extended Lockdown And Stronger Borders To Keep Us Safe | Premier of Victoria* [Press release]. <https://www.premier.vic.gov.au/extended-lockdown-and-stronger-borders-keep-us-safe>
- Andrews, D. (2021d, August 5). *Seven Day Lockdown To Keep Victorians Safe | Premier of Victoria* [Press release]. <https://www.premier.vic.gov.au/seven-day-lockdown-keep-victorians-safe>
- Andrews, D. (2021e, August 11). *Statement From The Premier | Premier of Victoria* [Press release]. <https://www.premier.vic.gov.au/statement-premier-92>
- Andrews, D. (2021f, August 16). *Extended Melbourne Lockdown to Keep Victorians Safe | Premier of Victoria* [Press release]. <https://www.premier.vic.gov.au/extended-melbourne-lockdown-keep-victorians-safe-o>
- Andrews, D. (2021g, September 1). *Slowing The Spread And Keeping Our State Safe | Premier of Victoria* [Press release]. <https://www.premier.vic.gov.au/slowing-spread-and-keeping-our-state-safe>
- Andrews, D. (2021h, September 30). *Getting Regional Students Safely Back In The Classroom | Premier of Victoria* [Press release]. <https://www.premier.vic.gov.au/getting-regional-students-safely-back-classroom>
- Assaf, N., & Gan, D. (2021). Environmental education using distance learning during COVID-19 lockdown in Israel. *Perspectives in Education*, 39(1), 257–276. <https://doi.org/10.18820/2519593x/pie.v39.i1.16>
- Avanesian, G., & Mishra, S. (2021, March). *COVID-19 and School Closures*.

- <https://data.unicef.org/resources/one-year-of-covid-19-and-school-closures/>
- Bao, W. (2020). COVID -19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*, 2(2), 113–115.
<https://doi.org/10.1002/hbe2.191>
- BBC News. (2021, March 16). Covid lockdown: Children as young as eight self-harming, doctor says. *BBC News*. <https://www.bbc.com/news/uk-england-leeds-56417014>
- Biesta, G. (2016). *Good education in an age of measurement : ethics, politics, democracy*. Routledge.
- Blackburn, A. (2017). Performing online: Approaches to teaching performance studies in higher education within a fully online environment. *Australian Journal of Music Education*, 51(1), 63–72.
- Borotis, S. & Poulymenakou, A. (2004). *E-learning readiness components: Key issues to consider before adopting e-learning interventions*. Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2004. 1622-1629.
- Brändström, S., Wiklund, C., & Lundström, E. (2012). Developing distance music education in Arctic Scandinavia: electric guitar teaching and master classes. *Music Education Research*, 14(4), 448–456. <https://doi.org/10.1080/14613808.2012.703173>
- Braunack-Mayer, Tooher, R., Collins, J. E., Street, J. M., & Marshall, H. (2013). Understanding the school community’s response to school closures during the H1N1 2009 influenza pandemic. *BMC Public Health*, 13(1), 344–344.
<https://doi.org/10.1186/1471-2458-13-344>
- Bray, A., Banks, J., Devitt, A., & Ní Chorcora, E. (2021). Connection before content: using multiple perspectives to examine student engagement during Covid-19 school closures in Ireland. *Irish Educational Studies*, 40(2), 431–441.
<https://doi.org/10.1080/03323315.2021.1917444>
- Bubb, S., & Jones, M. A. (2020). Learning from the COVID-19 home-schooling experience: Listening to pupils, parents/carers and teachers. *Improving Schools*, 23(3), 209–222. <https://doi.org/10.1177/1365480220958797>
- Calderón-Garrido, D., & Gustems-Carnicer, J. (2021). Adaptations of music education in primary and secondary school due to COVID-19: the experience in Spain. *Music Education Research*, 23(2), 139–150.
<https://doi.org/10.1080/14613808.2021.1902488>
- Carli, M., Fontolan, M. R., & Pantano, O. (2021). Teaching optics as inquiry under lockdown: how we transformed a teaching-learning sequence from face-to-face to distance teaching. *Physics Education*, 56(2), 025010. <https://doi.org/10.1088/1361-6552/abcca7>
- Carr, N. (2011). *The Shallows: What the Internet is doing to our brains*. Norton.
- Casey, D. M. (2008). A Journey to Legitimacy: The historical development of distance education through technology. *TechTrends*, 52(2), 45-51.
<https://doi.org/10.1007/s11528-008-0135-z>
- Cheng, L., & Lam, C. Y. (2021). The worst is yet to come: the psychological impact of COVID-19 on Hong Kong music teachers. *Music Education Research*, 23(2), 211–224.
<https://doi.org/10.1080/14613808.2021.1906215>
- Chin, P. G. D. (2019). Distance education: Definition and glossary of terms, 4th ed. *Quarterly Review of Distance Education*, 20(1), 47-50.
- Collins, A. (2014a, July 1). *How playing an instrument benefits your brain* [Video]. TED

Talks.

https://www.ted.com/talks/anita_collins_how_playing_an_instrument_benefits_our_brain/transcript

- Collins, A. (2014b, October 1). *The benefits of music education* [Video]. TED Talks. https://www.ted.com/talks/anita_collins_the_benefits_of_music_education/transcript?language=en
- Comeau, G., Huta, V., & Liu, Y. (2014). Work ethic, motivation, and parental influences in Chinese and North American children learning to play the piano. *International Journal of Music Education, 33*(2), 181–194. <https://doi.org/10.1177/0255761413516062>
- Conner, J. O., & Pope, D. C. (2013). Not Just Robo-Students: Why Full Engagement Matters and How Schools Can Promote It. *Journal of Youth and Adolescence, 42*(9), 1426–1442. <https://doi.org/10.1007/s10964-013-9948-y>.
- Conrad, D. (2007). The Plain Hard Work of Teaching Online. *Making the Transition to E-Learning, 191–207*. <https://doi.org/10.4018/978-1-59140-950-2.ch012>
- Courtenay, W. J. (1980). The Effect of the Black Death on English Higher Education. *Speculum, 55*(4), 696–714. <https://doi.org/10.2307/2847661>
- Crawford, J., Butler-Henderson, K., Rudolph, J., & Glowatz, M. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Teaching and Learning, 3*(1), 9–28. <https://doi.org/10.37074/jalt.2020.3.1.7>
- Creech, A. (2010). Learning a musical instrument: the case for parental support. *Music Education Research, 12*(1), 13–32. <https://doi.org/10.1080/14613800903569237>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design : qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications, Inc.
- Cross, I., Laurence, F., & Rabinowitch, T. C. (2012). Empathy and Creativity in Group Musical Practices: Towards a Concept of Empathic Creativity. *The Oxford Handbook of Music Education, 2*, 336–353. <https://doi.org/10.1093/oxfordhb/9780199928019.013.0023>
- Daugvilaite, D. (2021). Exploring perceptions and experiences of students, parents and teachers on their online instrumental lessons. *Music Education Research, 23*(2), 179–193. <https://doi.org/10.1080/14613808.2021.1898576>
- Davidson, J. W., Faulkner, R., and McPherson, G. E. (2009). Motivating musical learning. *Psychologist, 22*, 1026–1029.
- de Bruin, L. R. (2020). Instrumental Music Educators in a COVID Landscape: A Reassertion of Relationality and Connection in Teaching Practice. *Frontiers in Psychology, 11*, 624717–624717. <https://doi.org/10.3389/fpsyg.2020.624717>
- Degé, F., Kubicek, C., & Schwarzer, G. (2011). Music Lessons and Intelligence: A Relation Mediated by Executive Functions. *Music Perception, 29*(2), 195–201. <https://doi.org/10.1525/mp.2011.29.2.195>
- Dye, K. (2015). Student and instructor behaviors in online music lessons: An exploratory study. *International Journal of Music Education, 34*(2), 161–170. <https://doi.org/10.1177/0255761415584290>
- EEF (Education Endowment Foundation). (2020). *Remote learning rapid evidence assessment*. Education Endowment Foundation. <https://www.evidenceforlearning.org.au/research-and-evaluation/evidence-reviews/covid-19-evidence-reviews/remote-learning-rapid-evidence-assessment/>
- Evans, C., O'Connor, C., Graves, T., Kemp, F., Kennedy, A., Allen, P., Bonnar, G., Reza, A., & Aya, U. (2020). Teaching under Lockdown: the experiences of London English

- teachers. *Changing English*, 27(3), 244–254.
<https://doi.org/10.1080/1358684x.2020.1779030>
- Fall, A. M., & Roberts, G. (2012). High school dropouts: Interactions between social context, self-perceptions, school engagement, and student dropout. *Journal of Adolescence*, 35(4), 787–798. <https://doi.org/10.1016/j.adolescence.2011.11.004>
- Ferraro, F. V., Ambra, F. I., Aruta, L., & Iavarone, M. L. (2020). Distance Learning in the COVID-19 Era: Perceptions in Southern Italy. *Education Sciences*, 10(12), 355.
<https://doi.org/10.3390/educsci10120355>
- Fletcher, J. C. (2015). Creative engagement with music and adolescent identity work. *Music: Educating for life*. ASME XXth National Conference Proceedings, 1, 1, 2015, 37-43. Australian Society for Music Education.
<https://search.informit.org/doi/10.3316/informit.650089864643071>
- Fontenelle-Tereshchuk, D. (2021). ‘Homeschooling’ and the COVID-19 Crisis: The Insights of Parents on Curriculum and Remote Learning. *Interchange*, 52(2), 167–191.
<https://doi.org/10.1007/s10780-021-09420-w>
- Fuentes, B. C., Lowney, B. M., Jennifer Ng, B., & Paras-Mangrobang, B. M. (2020, October 8). Zoom fatigue and all-nighters: Online learning takes a toll on students’ mental health. *The Beacon*. <https://www.upbeacon.com/article/2020/10/zoom-fatigue-and-all-nighters-online-learning-takes-a-toll-on-students-mental-health>
- Ganesan, B., Al-Jumaily, A., Fong, K. N. K., Prasad, P., Meena, S. K., & Tong, R. K. Y. (2021). Impact of Coronavirus Disease 2019 (COVID-19) Outbreak Quarantine, Isolation, and Lockdown Policies on Mental Health and Suicide. *Frontiers in Psychiatry*, 12.
<https://doi.org/10.3389/fpsy.2021.565190>
- Goodrich, A. (2021). Online peer mentoring and remote learning. *Music Education Research*, 23(2), 256–269. <https://doi.org/10.1080/14613808.2021.1898575>
- Green, F. (2020). Schoolwork in Lockdown: New Evidence on the Epidemic of Educational Poverty. *Centre for Learning and Life Chances in Knowledge Economies and Societies*, 67.
- Gül, G. (2021). Teachers’ Views on Music Education Practices in Secondary Education in Distance Education During the COVID-19 Pandemic Process. *Journal of Education in Black Sea Region*, 6(2), 95–111. <https://doi.org/10.31578/jrebs.v6i2.235>
- Hash, P. M. (2016). The Conn Conservatory of Music at Elkhart, Indiana: 1896-1903. *Journal of Historical Research in Music Education*, 38(1), 25–44.
<https://doi.org/10.1177/1536600616663840>
- Hash, P. M. (2021). Remote Learning in School Bands During the COVID-19 Shutdown. *Journal of Research in Music Education*, 68(4), 381–397.
<https://doi.org/10.1177/0022429420967008>
- Hevesi, B. (2021, August 16). *WA the ‘freest, most successful society in the world’: Mark McGowan* [Video]. Skynews. <https://www.skynews.com.au/australia-news/politics/mark-mcgowan-defends-covid19-stance-says-wa-is-the-worlds-freest-most-successful-society/news-story/10888f1b187460213c6dfc7063ac7d2a>
- Huremović, D. (2019). Brief History of Pandemics (Pandemics Throughout History). *Psychiatry of Pandemics*, 7–35. https://doi.org/10.1007/978-3-030-15346-5_2
- Ingram, J., Hand, C. J., & Maciejewski, G. (2021). Social isolation during COVID -19 lockdown impairs cognitive function. *Applied Cognitive Psychology*, 935–947.
<https://doi.org/10.1002/acp.3821>
- Johnson, C. (2017). Teaching music online: Changing pedagogical approach when moving to

- the online environment. *London Review of Education*, 15(3).
<https://doi.org/10.18546/lre.15.3.08>
- Joseph, A. (2020). What is the Future of Arts Education in the Midst of a Pandemic? It's Essential, Virtual, and Hybrid for Now. *International Dialogues on Education*, 7(1/2). <https://doi.org/10.53308/ide.v7i1/2.26>
- Joseph, D., & Lennox, L. (2021). Twists, turns and thrills during COVID-19: music teaching and practice in Australia. *Music Education Research*, 23(2), 241–255.
<https://doi.org/10.1080/14613808.2021.1906852>
- Kaleli, Y. S. (2021). The Effect of Individualized Online Instruction on TPACK Skills and Achievement in Piano Lessons. *International Journal of Technology in Education*, 4(3), 399–412. <https://doi.org/10.46328/ijte.143>
- Kaplan, J. S., Idol, L., & Nelson, K. (2017). *Beyond Behavior Modification: A Cognitive-behavioral Approach to Behavior Management in the School* (4th ed.). Pro Ed.
- Kast, J., Lindner, K. T., Gutschik, A., & Schwab, S. (2021). Austrian teachers' attitudes and self-efficacy beliefs regarding at-risk students during home learning due to COVID-19. *European Journal of Special Needs Education*, 36(1), 114–126.
<https://doi.org/10.1080/08856257.2021.1872849>
- Keast, D. A., & Sanchez, P. (2021). The application of sound technology for teaching applied music lessons online: A case study. *Australian Journal of Music Education*, 54(1), 27–47. <https://search.informit.org/doi/10.3316/informit.206466286948432>
- Kibici, V. B., & Sarıkaya, M. (2021). Readiness Levels of Music Teachers for Online Learning during the COVID 19 Pandemic. *International Journal of Technology in Education*, 4(3), 501–515. <https://doi.org/10.46328/ijte.192>
- Kim, L. E., & Asbury, K. (2020). 'Like a rug had been pulled from under you': The impact of COVID-19 on teachers in England during the first six weeks of the UK lockdown. *British Journal of Educational Psychology*, 90(4), 1062–1083.
<https://doi.org/10.1111/bjep.12381>
- King, A., Prior, H., & Waddington-Jones, C. (2019). Exploring teachers' and pupils' behaviour in online and face-to-face instrumental lessons. *Music Education Research*, 21(2), 197–209. <https://doi.org/10.1080/14613808.2019.1585791>
- Koutsoupidou, T. (2014). Online distance learning and music training: benefits, drawbacks and challenges. *Open Learning: The Journal of Open, Distance and e-Learning*, 29(3), 243–255. <https://doi.org/10.1080/02680513.2015.1011112>
- Krueger, P. J. 2000. "Beginning Music Teachers: Will They Leave the Profession?" *Update: Applications of Research in Music Education* 19(1): 22–26.
 doi:10.1177/875512330001900105.
- Küpers, E., van Dijk, M., McPherson, G., & van Geert, P. (2013). A dynamic model that links skill acquisition with self-determination in instrumental music lessons. *Musicae Scientiae*, 18(1), 17–34. <https://doi.org/10.1177/1029864913499181>
- Ladwig, J., & Gore, J. (2006). *A classroom practice guide 2nd edn*. [Quality teaching in NSW public schools]. State of NSW, Department of Education and Training Professional Learning and Leadership Development Directorate. https://ap01-a.alma.exlibrisgroup.com/leganto/public/61ADELAIDE_INST/citation/2226865264640001811?auth=SAML
- Lauret, D., & Bayram-Jacobs, D. (2021). COVID-19 Lockdown Education: The Importance of Structure in a Suddenly Changed Learning Environment. *Education Sciences*, 11(5),

221. <https://doi.org/10.3390/educsci11050221>

- Lavy, S., & Naama-Ghanayim, E. (2020). Why care about caring? Linking teachers' caring and sense of meaning at work with students' self-esteem, well-being, and school engagement. *Teaching and Teacher Education*, 91, 103046. <http://dx.doi.org/10.1016/j.tate.2020.103046>
- Ledford, H. (2021). Deaths from COVID "incredibly rare" among children. *Nature (London)*, 595(7869), 639. <https://doi.org/10.1038/d41586-021-01897-w>
- Lehr, C. A., Sinclair, M. F., & Christenson, S. L. (2004). Addressing Student Engagement and Truancy Prevention During the Elementary School Years: A Replication Study of the Check & Connect Model. *Journal of Education for Students Placed at Risk (JESPAR)*, 9(3), 279–301. https://doi.org/10.1207/s15327671espro903_4
- Lyons, G., Ford, M., & Slee, J. (2013). *Classroom management : Creating positive learning environment*. Cengage Learning Australia.
- Mahmood, S. (2021). Instructional strategies for online teaching in COVID-19 pandemic. *Human Behaviour and Emergency Technologies*. 2021, 3, 199–203.
- Martin, M. D. (1999). Band Schools of the United States: A Historical Overview. *Journal of Historical Research in Music Education*, 21(1), 41–61. <https://doi.org/10.1177/153660069902100108>
- McCluskey, G., Fry, D., Hamilton, S., King, A., Laurie, M., McAra, L., & Stewart, T. M. (2021). School closures, exam cancellations and isolation: the impact of Covid-19 on young people's mental health. *Emotional and Behavioural Difficulties*, 26(1), 46–59. <https://doi.org/10.1080/13632752.2021.1903182>
- McCorkell, L., & Lobo, L. (2021). Learning in Lockdown: A Small-Scale Qualitative Study Exploring the Experiences of Autistic Young People in Scotland. *Educational & Child Psychology*, 38(3), 75–89. <http://proxy.library.adelaide.edu.au/login?url=https://www.proquest.com/scholarly-journals/learning-lockdown-small-scale-qualitative-study/docview/2595761066/se-2?accountid=8203>
- McPherson, G. E., & Davidson, J. W. (2006). Playing an Instrument. *The Child as Musician*, 331–352. <https://doi.org/10.1093/acprof:oso/9780198530329.003.0017>
- Merlino, J. (2021a, May 27). *Statement From The Acting Premier | Premier of Victoria* [Press release]. <https://www.premier.vic.gov.au/statement-acting-premier-1>
- Merlino, J. (2021b, June 2). *Statement From The Acting Premier | Premier of Victoria* [Press release]. <https://www.premier.vic.gov.au/statement-acting-premier-2>
- Mohan, G., Carroll, E., McCoy, S., Mac Domhnaill, C., & Mihut, G. (2021). Magnifying inequality? Home learning environments and social reproduction during school closures in Ireland. *Irish Educational Studies*, 40(2), 265–274. <https://doi.org/10.1080/03323315.2021.1915841>
- Morrison, S. (2021, July 2). *National Cabinet Statement | Prime Minister of Australia* [Press release]. <https://www.pm.gov.au/media/national-cabinet-statement-6>
- Murray-Atfield, Y. (2021, September 1). Victoria will be in some form of lockdown until October. Here's what that means for the weeks ahead. *ABC News*. <https://www.abc.net.au/news/2021-09-01/victorias-new-covid-lockdown-and-restrictions-approach/100425020>
- Okay, H. H. (2021). Turkish instrument educators' distance education experiences related to instrument training during the COVID-19 pandemic. *World Journal on Educational Technology: Current Issues*, 13(2), 201–222. <https://doi.org/10.18844/wjet.v13i2.5690>

- Outhwaite, L., & Gulliford, A. (2020). Academic and social and emotional interventions in response to COVID-19 school closures. *Centre for Education Policy and Equalising Opportunities*, UCL Institute of Education.
- Palau, R., Fuentes, M., Mogas, J., & Cebrián, G. (2021). Analysis of the implementation of teaching and learning processes at Catalan schools during the Covid-19 lockdown. *Technology, Pedagogy and Education*, 30(1), 183–199. <https://doi.org/10.1080/1475939x.2020.1863855>
- Pendergast, D., Main, K., & Bahr, N. (2017). *Teaching middle years : rethinking curriculum, pedagogy and assessment*. Allen & Unwin.
- Pieret, J., & Boivin, G. (2021). Pandemics Throughout History. *Frontiers in Microbiology*, 11. <https://doi.org/10.3389/fmicb.2020.631736>
- Pike, P. D. (2016). Improving music teaching and learning through online service: A case study of a synchronous online teaching internship. *International Journal of Music Education*, 35(1), 107–117. <https://doi.org/10.1177/0255761415613534>
- Piovesan, A. (2021, June 9). Attempted suicide rates among Victorian teenagers soar by 184 per cent in past six months, Kids Helpline reveals. *NewsComAu*. <https://amp.news.com.au/lifestyle/health/mental-health/attempted-suicide-rates-among-victorian-teenagers-soar-by-184-per-cent-in-past-six-months-kids-helpline-reveals/news-story/db9d5136075a7c7edf4750a0391b0653>
- Prensky. (2001). Digital Natives, Digital Immigrants Part 1. *On the Horizon*, 9(5), 1–6. <https://doi.org/10.1108/10748120110424816>
- Ruston, D. (2016). *Screenagers*. Indieflix.
- Sakin, A. E. (2021). Flute Education in Turkey in the Process of COVID-19 Pandemic. *Journal of Education in Black Sea Region*, 6(2), 3–28. <https://doi.org/10.31578/jeps.v6i2.230>
- Salvador, K., Knapp, E. J., & Mayo, W. (2021). Reflecting on the ‘Community’ in Community Music School after a transition to all-online instruction. *Music Education Research*, 23(2), 194–210. <https://doi.org/10.1080/14613808.2021.1905623>
- Schiavio, A., Biasutti, M., & Antonini Philippe, R. (2021). Creative pedagogies in the time of pandemic: a case study with conservatory students. *Music Education Research*, 23(2), 167–178. <https://doi.org/10.1080/14613808.2021.1881054>
- Sedibe, M., & Fourie, J. (2018). Exploring Opportunities and challenges in parent-school partnerships in special needs schools in the Gauteng Province, South Africa. *Interchange*, 49, 433–444. <https://doi.org/10.1007/s10780-018-9334-5>
- Sever, G. (2021). Online course adaptation process of Suzuki Early Childhood Education Program. *Turkish Journal of Education*, 10(3), 195–210. <https://doi.org/10.19128/turje.871025>
- Sharp, C., Nelson, J., Lucas, M. et al. (2020). Schools’ responses to Covid-19: The challenges facing schools and pupils in September 2020. National Foundation for Educational Research and Nuffield Foundation. https://www.nfer.ac.uk/media/4119/schools_responses_to_covid_19_the_challenges_facing_schools_and_pupils_in_september_2020.pdf
- Sintema, E. J. (2020). Effect of COVID-19 on the performance of grade 12 students: Implications for STEM education. *EURASIA Journal of Mathematics, Science and Technology Education*, 16(7), 1851. <https://doi.org/10.29333/ejmste/7893>
- Sofianidis, A., Meletiou-Mavrotheris, M., Konstantinou, P., Stylianidou, N., & Katzis, K.

- (2021). Let Students Talk about Emergency Remote Teaching Experience: Secondary Students' Perceptions on Their Experience during the COVID-19 Pandemic. *Education Sciences*, 11(6), 268. <https://doi.org/10.3390/educsci11060268>
- Spilt, J. L., Koomen, H. M. Y., & Thijs, J. T. (2011). Teacher wellbeing: The importance of teacher–student relationships. *Educational Psychology Review*, 23, 457–477. <http://dx.doi.org/10.1007/s10648-011-9170-y>
- Storen, R., & Corrigan, N. (2021, October). *COVID-19: a chronology of state and territory government announcements (up until 30 June 2020)*. The Parliament of Australia Parliamentary Library. https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp2021/Chronologies/COVID-19StateTerritoryGovernmentAnnouncements#_Toc52275801
- Suzuki, S. (2010). *Nurtured by love: an excellent approach to talent education* (Dittgen, J., Trans.). Courtesy of Alfred Publishing, Porte Music.
- Tobias, E. S., Campbell, M. R., & Greco, P. (2015). Bringing Curriculum to Life. *Music Educators Journal*, 102(2), 39–47. <https://doi.org/10.1177/0027432115607602>
- Tromholt, M. (2016). The Facebook experiment: quitting Facebook leads to higher levels of wellbeing. *Cyberpsychology, Behaviour and Social Networking*, 19(11), 661–666. <https://doi.org/10.1089/cyber.2016.0259>
- Tsai, C.C., & Lin, C.C. (2004). Taiwanese adolescents' perceptions and attitudes regarding the Internet: Exploring gender differences. *Adolescence*, 39, 725–734.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2020a, May 13). *Adverse consequences of school closures*. Retrieved November 1, 2021, from <https://en.unesco.org/covid19/educationresponse/consequences>
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2020b, April 28). *COVID-19 : 10 Recommendations to plan distance learning solutions*. UNESCO. <https://en.unesco.org/news/covid-19-10-recommendations-plan-distance-learning-solutions>
- Viner, R. M., Bonell, C., Drake, L., Jourdan, D., Davies, N., Baltag, V., Jerrim, J., Proimos, J., & Darzi, A. (2021). Reopening schools during the COVID-19 pandemic: Governments must balance the uncertainty and risks of reopening schools against the clear harms associated with prolonged closure. *Archives of Disease in Childhood*, 106(2), 111–113. <https://dx.doi.org/10.1136/archdischild-2020-319963>
- Walsh, G., N. Purdy, J. Dunn, S. Jones, J. Harris, and M. Ballentine. 2020. *Homeschooling in Northern Ireland During the COVID-19 Crisis: the Experiences of Parents and Carers*. Belfast: Centre for Research in Educational Underachievement/Stranmillis University College
- Watson, M. (2021, 6 October). Hate looking at yourself on video calls? You might have “Zoom dysmorphia”. *ABC Everyday*. <https://www.abc.net.au/everyday/zoom-dysmorphia-how-to-deal-with-it/100517100>
- Whitacre, E. (2010, April 16). *A choir as big as the Internet* [Video]. TED Talks. https://www.ted.com/talks/eric_whitacre_a_choir_as_big_as_the_internet
- White, P., Ceannt, R., Kennedy, E., O'Sullivan, M. ., Ward, M., & Collins, A. (2021). Children are safe in schools: a review of the Irish experience of reopening schools during the COVID-19 pandemic. *Public Health (London)*, 195, 158–160. <https://doi.org/10.1016/j.puhe.2021.04.001>
- Wilhelm, J. D., Bear, R. E., & Fachler, A. (2019). *Planning Powerful Instruction, Grades 6–12: 7 Must-Make Moves to Transform How We Teach--and How Students Learn*

(*Corwin Literacy*) (1st ed.). Corwin.

- Wordsworth, M. (2021, December 2). The rise of domestic violence under the cover of the COVID-19 pandemic. *ABC News*. <https://www.abc.net.au/news/2021-12-02/qld-coronavirus-covid-domestic-violence-coercive-control-report/100666744>
- Wright, A. (2021, April). *Primary and secondary school closures in Victoria due to COVID-19: chronology*, 3. Parliamentary Library and Information Service (Vic). <https://apo.org.au/node/311812>
- Yates, A., Starkey, L., Egerton, B., & Flueggen, F. (2021). High school students' experience of online learning during Covid-19: the influence of technology and pedagogy. *Technology, Pedagogy and Education*, 30(1), 59–73. <https://doi.org/10.1080/1475939X.2020.1854337>
- Yuen, A., & Ma, W. K. (2008). Exploring teacher acceptance of e-learning technology. *Asia-Pacific Journal of Teacher Education*, 36(3), 229–243. <https://doi.org/10.1080/13598660802232779>
- Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending Classes Without Stopping Learning: China's Education Emergency Management Policy in the COVID-19 Outbreak. *Journal of Risk and Financial Management*, 13(3), 55. <https://doi.org/10.3390/jrfm13030055>
- Zimmermann, P., & Curtis, N. (2020). Coronavirus Infections in Children Including COVID-19: An Overview of the Epidemiology, Clinical Features, Diagnosis, Treatment and Prevention Options in Children. *The Pediatric infectious disease journal*, 39(5), 355–368. <https://doi.org/10.1097/INF.0000000000002660>
- Zins, J.E., Weissberg, R.P., Wang, M.C. & Walberg, H.J. (eds) (2004). *Building academic success on social and emotional learning: what does the research say?* New York: Teachers College Press.