

Maths Learning Service (MLS)

August 2010

Report on Maths Drop-In Centre Survey: Semester 1, 2010.

MATHS DROP-IN CENTRE SURVEY RESULTS SEMESTER 1 2010

By Dr David Butler, coordinator of the Maths Learning Service in the CLPD

Survey administration details

The survey was administered via Survey Monkey. Students who signed in to the Maths Drop-In Centre during Semester 1 2010 were sent an email link to the survey, and a reminder several weeks later.

Number of emails sent: 634

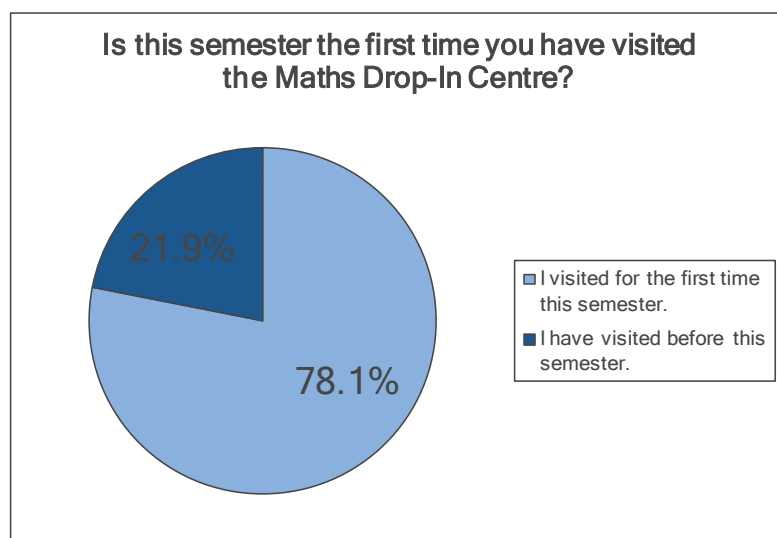
Number of survey responses: 242

Percentage response: 38%

Presentation and discussion of results for each question

Question 1: Is this semester the first time you visited the Maths Drop-In Centre?

As shown in the pie graph below, the majority of respondents to the survey were first-time visitors to the Maths Drop-In Centre. This is similar to the results from previous surveys.

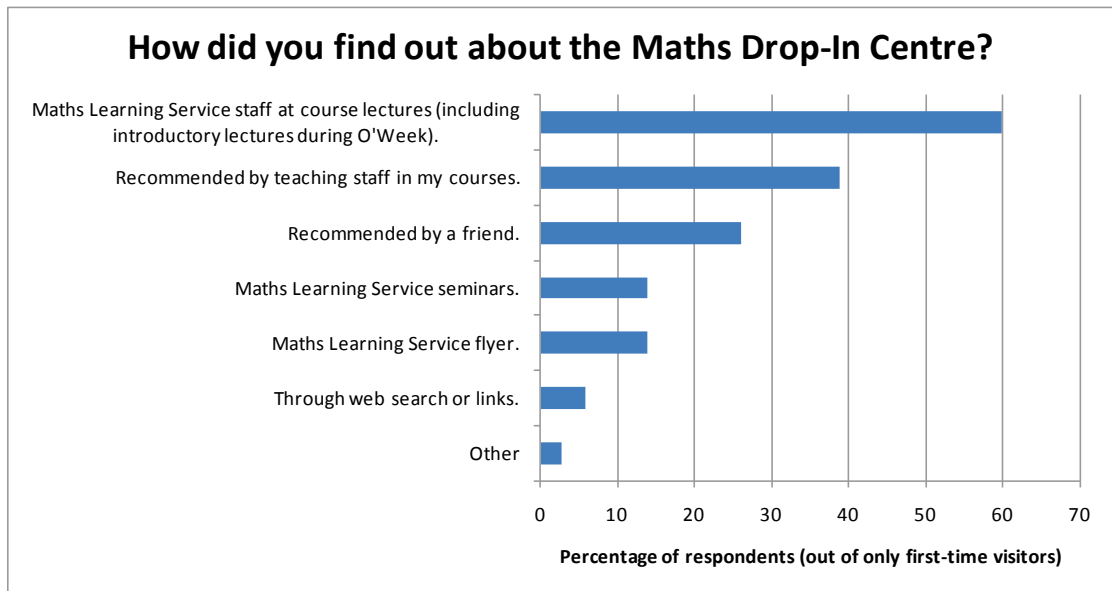


Question 2: How did you find out about the Maths Drop-In Centre?

This question required the respondent to choose from a list of responses, with the ability to choose more than one option. The graph below shows the distribution of responses to this question for just those students who visited the Drop-In Centre for the first time this semester.

One of the purposes of this question is to gauge the effectiveness of our promotion efforts. The graph indicates that our practice of visiting the students' lectures early in the year is effective and should continue, possibly also in second semester. The second most common response is that teaching staff in the students' courses recommended the Maths Drop-In Centre. Therefore it is important for us to continue to promote our services to the tutors and lecturers of the University. A number of students only found out about the Drop-In Centre through the flyer, so it is important to continue distributing these.

Finally, it is pleasing to see that 25% of the new-student respondents said that the Maths Drop-In Centre was recommended by a friend. This means that past students have valued the service enough to tell others about it.

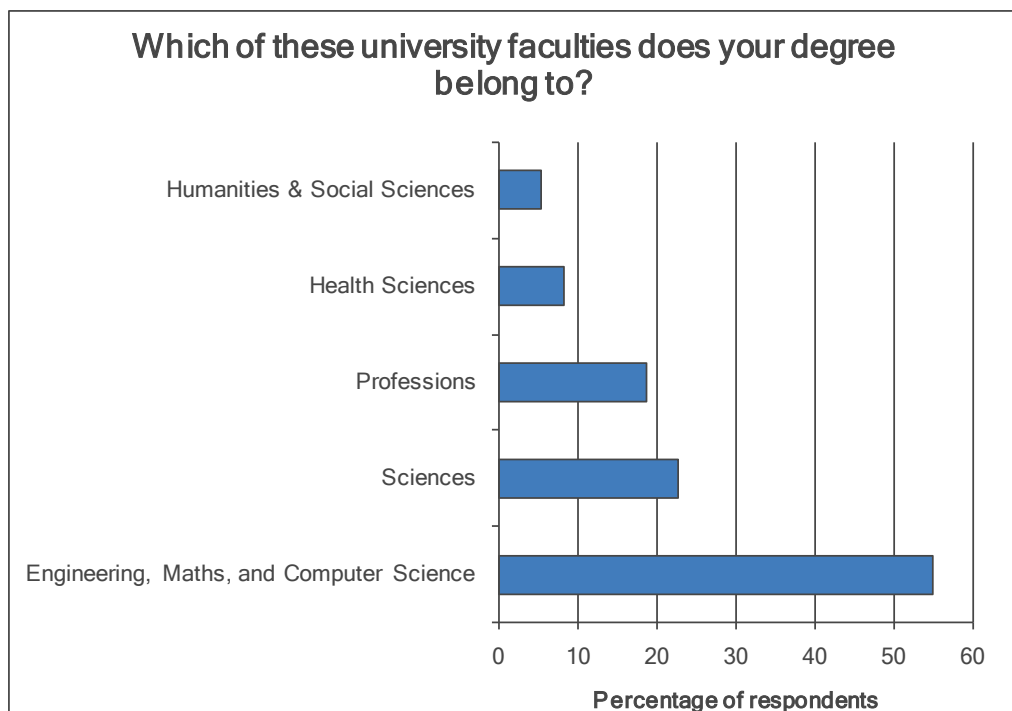


Question 3: Which of these University faculties does your degree belong to?

The graph below shows the distribution of responses to this question.

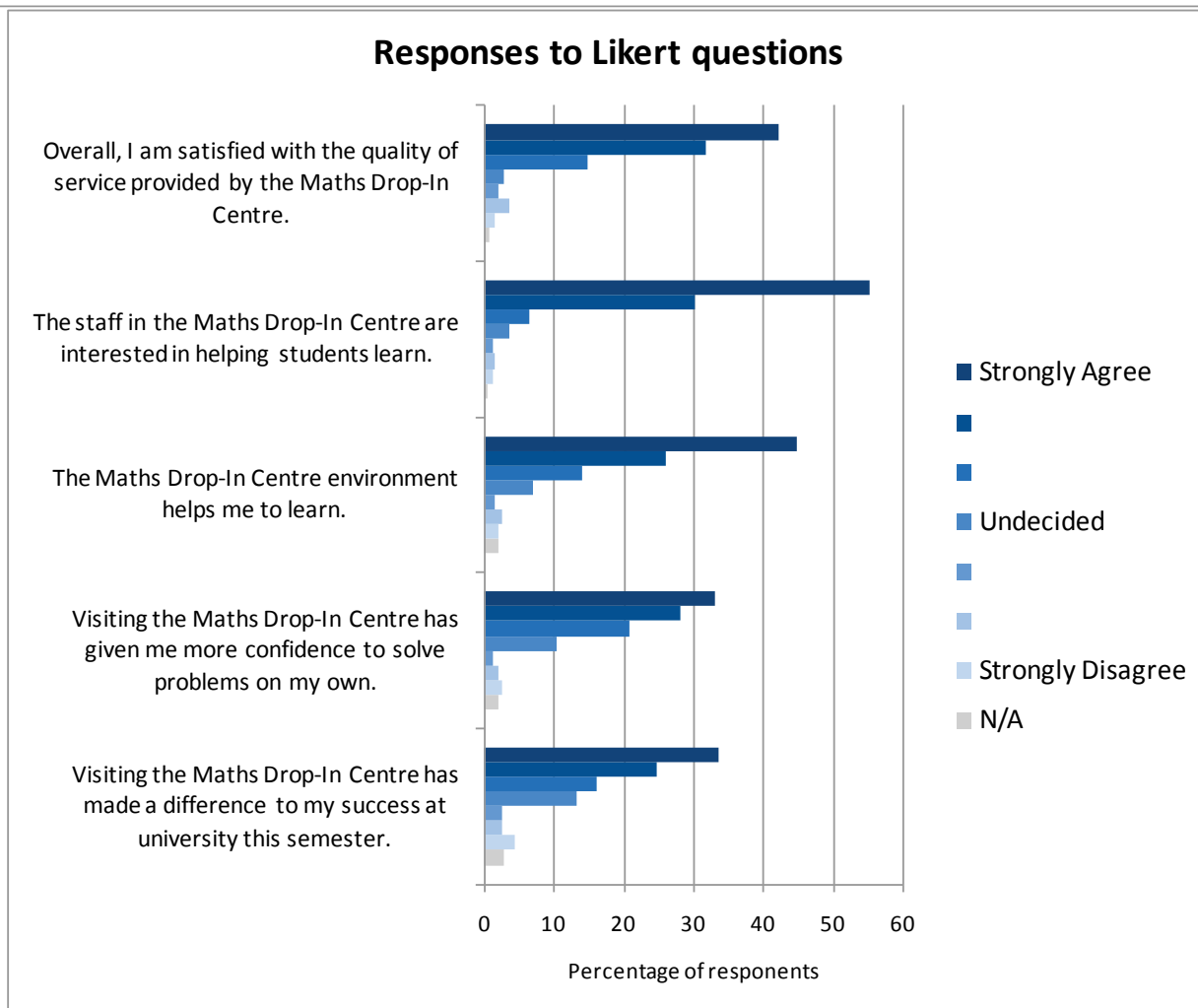
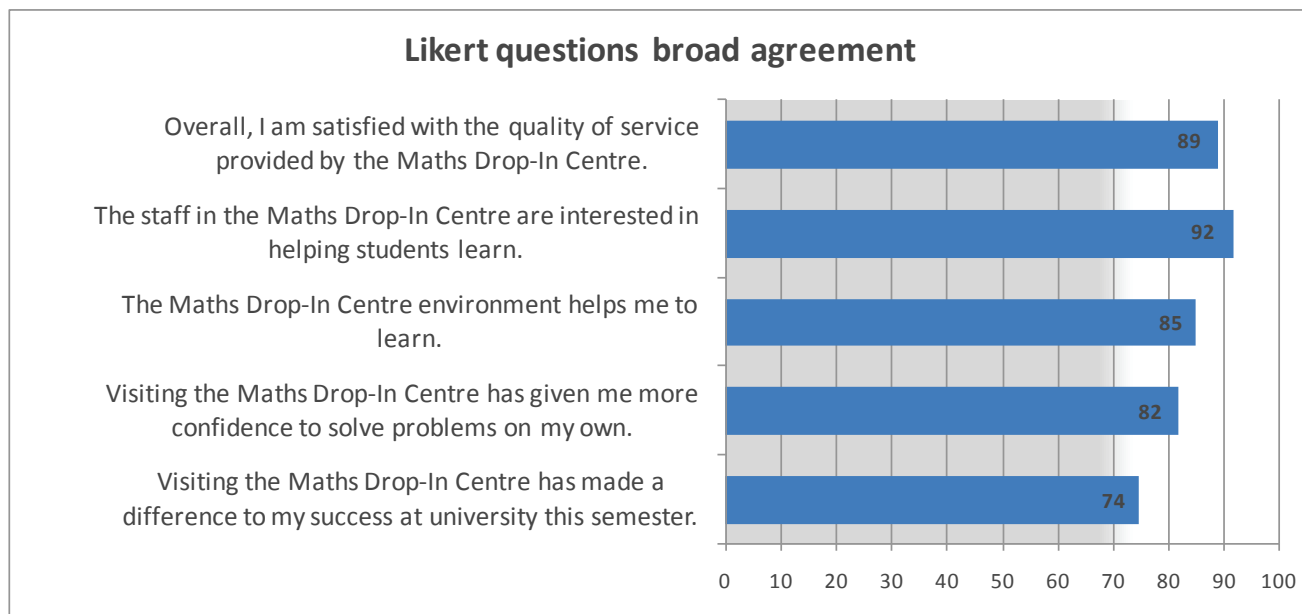
More than half of respondents said their degree belonged to the ECMS faculty. This is consistent with the weekly traffic in the Maths Drop-In Centre: the majority of students come asking about first year mathematics courses, the majority of whose students are in turn from the ECMS faculty.

It is pleasing to see the increasing percentage of students from the Professions and Sciences, since there are many quantitative and algebraic courses taught in these faculties where students may need development of their mathematical skills. In past surveys some students have expressed the belief that the Maths Drop-In Centre only exists for ECMS students, and the results show that we have had some success in changing this belief.



Question 4: Likert-response opinion questions

Question 4 presented various statements and asked for a response on a seven point scale ranging from Strongly Disagree to Strongly Agree. These questions give insight into the quality and impact of the services provided by the Maths Drop-In Centre. The graphs below show the broad agreement for each question, and the distribution of responses. The implications will be discussed below.



The responses to the statement “Overall, I am satisfied with the quality of service provided by the Maths Drop-In Centre” are a measure of the quality of the student experience in the Centre, while the responses to the statement “Visiting the Maths Drop-In Centre has made a difference to my success at university this semester”

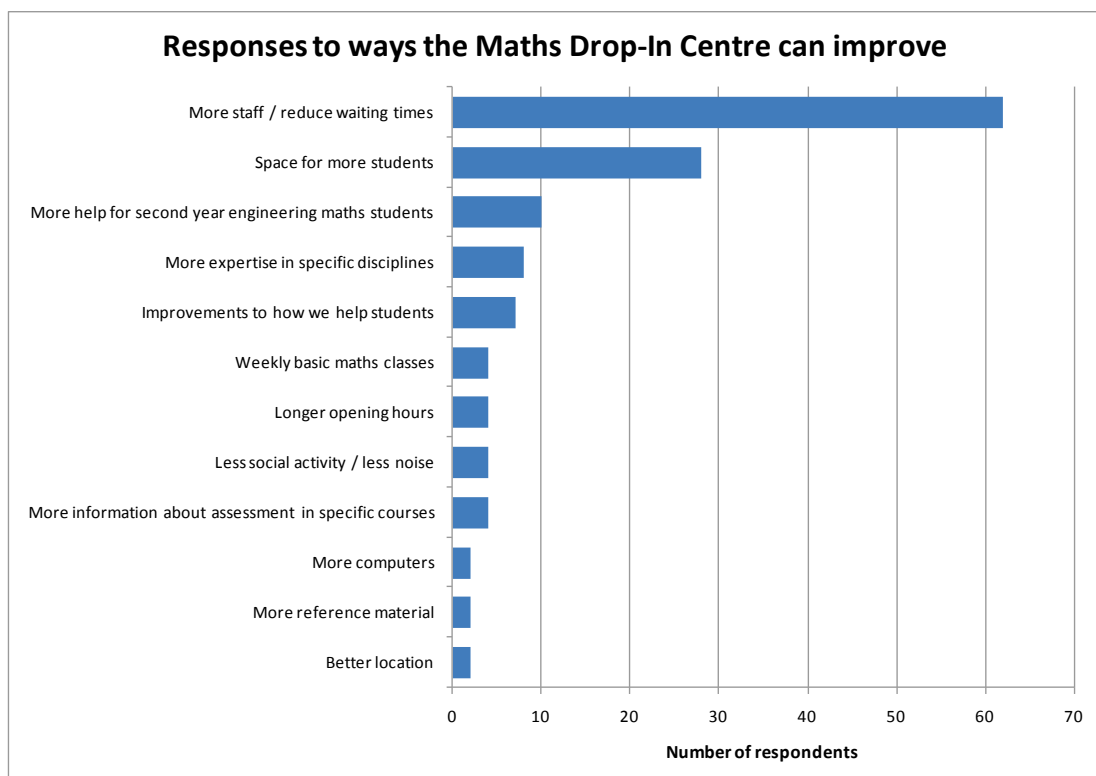
are a measure of the Centre’s impact. Together the responses indicate a high quality experience with impact on the students’ success. However, some students did not have the best experience and we will continue to strive to improve our service in future.

Our main aim for all students who visit the Maths Drop-In Centre is to help them develop the confidence to solve problems on their own. The responses to the statement “Visiting the Maths Drop-In Centre has given me more confidence to solve problems on my own” indicate that we are successful in this aim for the majority of students. Again, some students do not feel they have increased confidence, so there is always room to improve.

Finally, there are two main aspects that work together to provide the Maths Drop-In Centre’s service: the staff and the environment itself. The very positive responses to the statement “The staff in the Maths Drop-In Centre are interested in helping students learn” are a credit to the dedicated permanent and casual staff who work with students in the Centre each day. The responses to the statement “The Maths Drop-In Centre environment helps me to learn” are also very positive, indicating that the effort given to designing a positive and stimulating learning environment is not wasted because the majority of students perceive that the environment actually *helps* them to learn.

Question 5: In what ways could the Maths Drop-In Centre improve?

This question was a free-response question where the respondents could type in a text-box, or choose to type nothing. In total 146 out of the 242 respondents answered this question (60%). However, 23 of these respondents said they could not think of a way to improve, or commented that the Maths Drop-In Centre was good already, leaving 123 responses with suggestions on how to improve. The comments were analysed and placed into various categories and the graph below shows the number of responses in each category (note that some respondents made comments in more than one category).



The responses suggesting to have more staff or to reduce waiting times are combined because so many respondents said both. With 62 respondents making comments in this category, it is by far the most common response. (Even taken separately, each is still more common than any other response.) Since we are already using the full allocation of funds for casual staff time, our responses to this issue in the past have been to roster casual staff to work in the busiest times, and to train staff to manage their time better while they are tutoring in the Centre. We will continue to apply these measures, but as the survey indicated, they cannot fully address the problem.

The next most common response is that there needs to be more space so that more students can be accommodated. This is a legitimate concern for students, since on our busiest days we are turning students away because the Centre is full. The issue may be resolved to an extent when the Maths Drop-In Centre moves to the new Learning Hub, which has more seats and the ability to overflow into the Hub itself. However, no more space will be available at the moment. Given this restriction, one way we have dealt with this issue is to refer students to more appropriate assistance if it exists. For example, students asking specific questions about assignments are referred to their lecturers, tutors or in-faculty subject-specific help-rooms. This is especially true of students who are not meeting maths for the first time in their degrees.

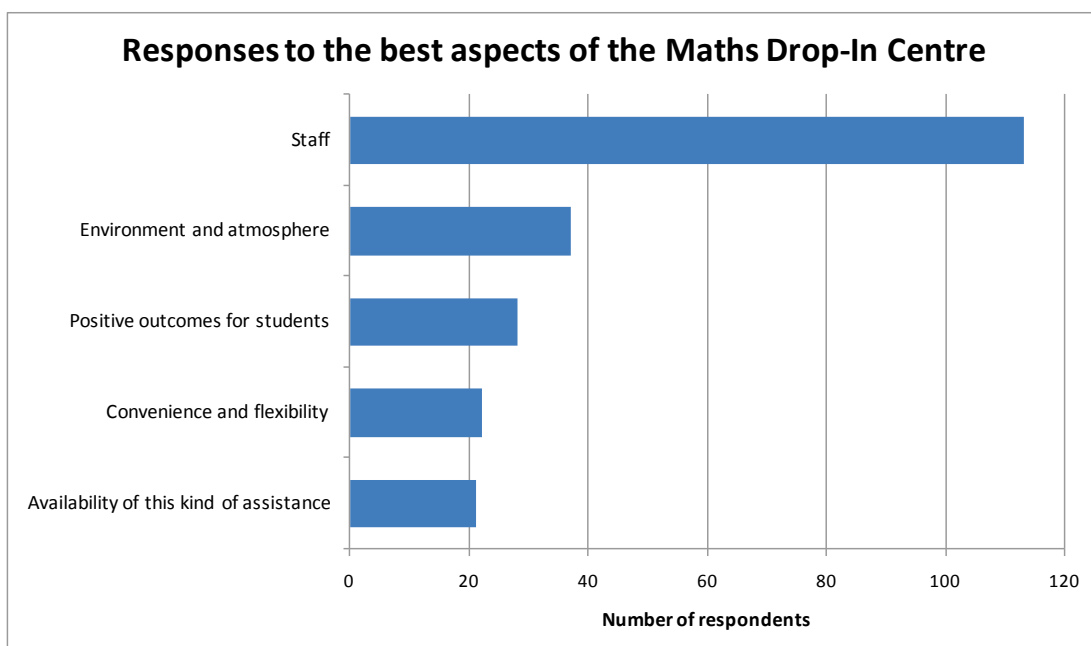
An unfortunate result of the above policy is that students who had received our help in previous years now feel they are turned away. This seems particularly strongly felt by students in second-year engineering mathematics courses, 10 of whom have made a comment under this question. In future we will attempt to give such students important advice on how to learn independently before referring them to other assistance, so that they do not feel they are just being “sent away”. We will also focus more strongly on the aim of independent problem-solving while the students are in first year, which will hopefully be a preventative measure.

The next most common theme is students wanting staff to have more expertise in particular areas, mainly statistics. The wording of some responses indicates a desire for assistance that the Maths Drop-In Centre is not supposed to provide, such as advice on using statistics in a postgraduate research project. However, a significant proportion of our visitors are indeed coming with concerns related to their undergraduate statistics courses. So, we are seeking more casual staff with statistical expertise, and the lecturers are both sitting in on statistics courses in order to increase their own knowledge in this area.

Finally, there are a number of other suggestions that were made that we will work to accommodate. While we do believe the social conversation that students engage in is important to our friendly atmosphere, we will make sure the noise does not reach a level that disturbs others. We will also continue to discuss with staff how they can give assistance to all students and not just those that are most insistent, as well as judge the level of assistance that particular students require.

Question 6: What are the best aspects of the Maths Drop-In Centre?

This question was free-response question where the respondents could type in a text-box, or choose to type nothing. In total 158 of the 242 respondents answered this question (65%). The written responses were analysed and the comments placed into various categories. The graph below shows the broad response categories, which are discussed in more detail afterwards. Note that many responses made comments in several categories.



Under “The availability of this kind of assistance” are grouped those responses stating that the best aspect was the existence of the types of assistance available at the Maths Drop-In Centre. The most common mentioned was the one-on-one assistance, but also mentioned were the ability to ask questions and get help with problem-solving.

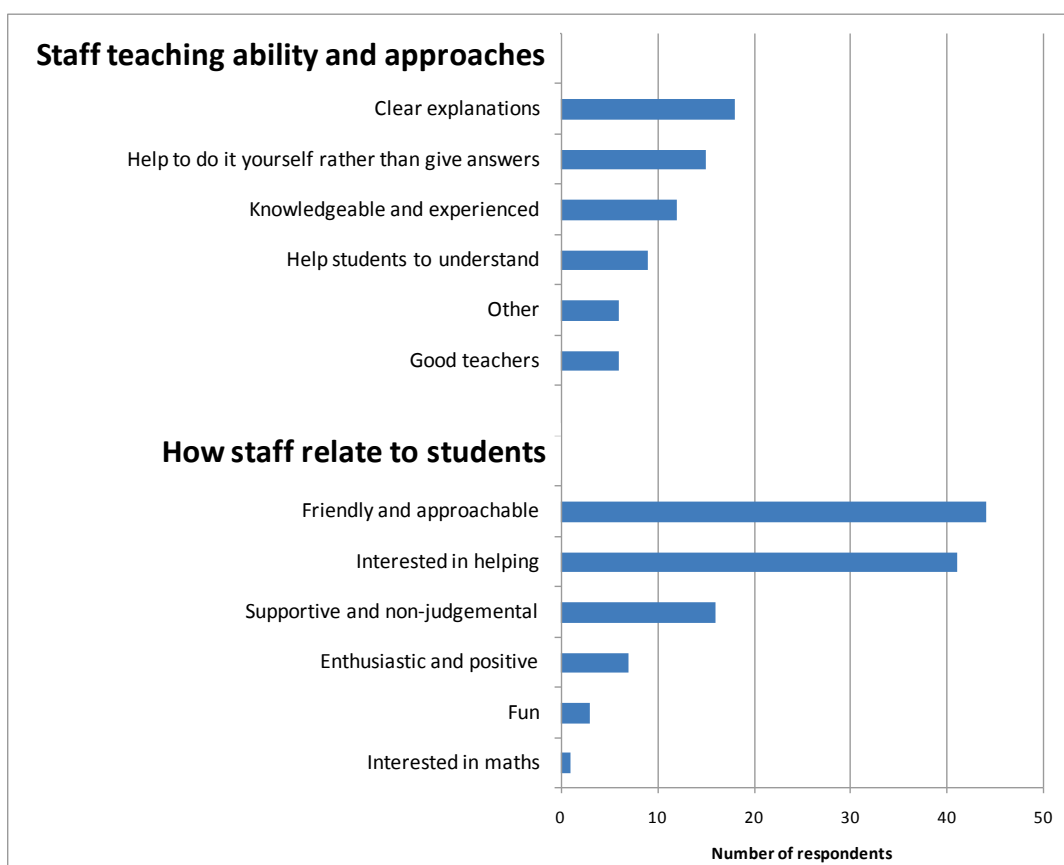
Under “Convenience and flexibility” are grouped aspects of the Centre such as having a place to study, the long opening hours and the ability to receive help without having to make an appointment. This last aspect is the most important to students in this category with 11 responses.

The aspects of the Drop-In Centre grouped under the “Positive outcomes for students” category include the ability to solve problems on your own, students understanding concepts better, an increase in confidence and meeting other students in the same situation.

The aspects of the Drop-In Centre grouped under the “Environment and atmosphere” category include the availability of resources, the availability of tea and coffee, a quiet place to study and the relaxed atmosphere, this final aspect being the most common with 13 responses under this heading.

Finally, a total of 113 students mentioned some quality of the staff as a best aspect of the Maths Drop-In Centre. This is 72% of the respondents to this question, making it by far the most common type of response. This is to be expected, since the Maths Drop-In Centre is mainly a place where students seek one-on-one assistance from a tutor.

The different responses to this question can be further divided into two broad categories: the teaching ability or teaching approaches of the staff (79 responses), and the way the staff relate to the students (53 responses). The following graph describes more detail in each of the two categories. As shown, the most common quality of the staff mentioned was their friendliness and their interest in helping the students. Also mentioned were the clear explanations given by staff, the supportive and non-judgemental approach where students do not feel they are stupid, and the fact that staff help students learn to solve problems on their own, rather than just telling students the answer. These are all qualities that we strive to maintain, and it is pleasing to know that the students appreciate them. It is a credit to the dedicated staff that the students see them as the best aspect of the Maths Drop-In Centre.



It should be noted that four respondents said “none” for the response to this question. This is disappointing, especially considering the positive impact the Drop-In Centre has had for other students. It is a reminder that we must always strive to give the best quality service to *all* students.

To complete the report, a few comments are reproduced here:

“Friendly approachable staff which make learning something really boring tolerable!”

“The setting is perfect for study of Mathematics. Thanks heaps.”

“Very easygoing, pressure free environment. Very helpful providing computer access to enter computer assignments. Staff are always very positive, cheerful, and helpful. Everything is explained clearly and if you don't understand the first time they don't get mad or make you feel stupid!”

“The best aspect is the friendly staff who were always eager to help me, understood my needs, were supportive and helped my find the tools and courage to succeed in problem solving.”

“Not just going ahead and telling students the answers to their questions. Making sure students understood exactly what they were doing when they were solving problems. This really helped me during the exam.”

“They don't think you're stupid.”

“[I am] always able to understand the concepts after visiting the centre.”