

UNIVERSITY COLLEGE DUBLIN
MATHS SUPPORT CENTRE



Annual Report 2016/17

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1 Executive Summary

The 2016/17 academic year saw the Maths Support Centre (MSC) receive 5,252 visits from 1,380 distinct students studying 181 distinct modules representing all six colleges in the university. We increased our opening hours from 33 hours per week in 2015/16 to 39 hours to include late night openings from 5-7pm each night Monday to Thursday. This year we were open for drop-in support for a total of 25 weeks of the academic year. In addition we also provided 13 days of online maths support from May 5th to May 17th 2017. In August and September of 2016 the MSC ran 16 distinct maths support sessions for HEAR (Higher Education Access Route), DARE (Disability Access Route to Education), Access (Access to Science, Engineering and Agriculture) and Mature student cohorts, supporting over 300 students. In May and June 2017 the MSC supported 34 Leaving Certificate students from DEIS (Delivering Equality of Opportunity in Schools) designated schools with their impending mathematics examinations. Finally, the MSC facilitated 164 hours of one-to-one support to take place outside of the MSC with students registered to Access & Lifelong Learning Disability Support Service, and 24 weekly drop-in sessions for students from the Smurfit Business School on the Blackrock campus.

Opening hours for both semesters:

- Monday to Thursday 10am-7pm
- Friday 10am-1pm

This year was the first full academic year where the MSC assisted students from level 0, 1 or 2 modules only. This year we also closed for all four exam weeks for the first time. The total number of recorded drop-in visits is down 6% on the previous year's figure while the number of distinct students visiting the MSC is up by 37. From the academic years 2011/12 to 2013/14 postgraduate students or students registered to level 3 or level 4 modules accounted for 24% of all MSC visits. These operational changes have led to a dramatic decrease (from 29.2 minutes to 13.6 minutes) in the time a student waits to see a tutor and an increase from 16.2 minutes to 21.4 minutes in the time spent with a tutor. The significant decrease in first time visitors towards the end of term time suggests that the MSC opening hours (including late night openings and closing during examination weeks) has changed the behaviour among MSC visitors from one of last-minute cramming to a more sustained and consistent usage of the service throughout the teaching semester.

Seven MSC tutors were nominated for individual teaching awards in 2016/17 with one tutor receiving the Outstanding Contribution to Student Learning Award from the College of Health and Agricultural Science. The MSC tutor team won the same award from the College of Science and the wider University award. Nine MSC tutors were awarded Digital Badges based on their work at the MSC which included

offering online maths support over the May exam period. Eleven MSC tutors and six lecturers from the School of Mathematics and Statistics took part in a one-day event introducing participants to the open source mathematics e-assessment tool Numbas. This year also saw the introduction of the MSC-Module Coordinator (MSC-MC) Partnership Agreement. Designed to ensure an alignment between the support offered at school level and at the MSC this agreement keeps all stakeholders (students, teaching staff and management) informed of student learning.

We will extend the MSC service in 2017/18 by:

- increasing the opening hours from 39 hours to 41 by opening until 7.30pm each night of Monday through Thursday
- providing five dedicated 90-minute slots for HEAR, DARE, Mature, International and Access students
- extending the MSC-MC Partnership Agreement to other schools
- implementing a live feed on the MSC website to indicate the expected wait time for a student to be seen by a tutor based on the number of tutors and students currently logged in to the system
- hosting CPD events on statistics tutoring with SPSS software using the money received from T&L awards
- extending an invitation to a senior member of UCD Teaching and Learning to join the MSC Oversight Committee.

Going forward two primary issues facing the UCD MSC are (i) the recruitment and retention of quality tutors, particularly in the area of statistics and (ii) identifying and navigating the blurred lines between mathematics support and support offered from within schools. Issue (i) can be strengthened by offering improved conditions to MSC tutors including longer term fixed contracts for senior tutors and an increase in the maximum number of hours per week a (non-UCD student) tutor can work. The further roll out and successful implementation of the MSC-Module Coordinator Partnership to schools beyond the School of Mathematics and Statistics is vital to issue (ii) and remains a key objective for 2017/18.

The following sections describe the activities of the UCD MSC for 2016/17.



MSC visitors and tutors at work in the Library Link

2 Introduction

The Maths Support Centre (MSC) at UCD, offers free non-judgmental academic support in mathematics and statistics for students registered to level 0, 1 or 2 modules exclusively. It is a drop-in service (not appointment based) and is staffed by 25 enthusiastic, skilled and welcoming tutors. The MSC, now in its 14th academic year of operation, is an established university-wide academic support unit offering 39 hours of drop-in support per week that is centrally and neutrally located in the James Joyce Library. The first three years of the UCD MSC saw an average of 480 visits per year while the last three years have experienced an average of 5,096 visits per year. The following sections present a summary of the MSC's 2016/17 activities.

3 How Data is Recorded

In January 2015 the MSC implemented a data management software system that links directly to the UCD central registry database so that an accurate record of each student's registration and MSC session details can be captured. This means the data collected at the MSC is robust and accurate allowing for detailed analysis. The visiting student enters his/her student number at a terminal upon log in and

then he/she is given a place in the queue by the automated process. The feedback from each student visit is then anonymously recorded (with the consent of the visiting student) by the attending tutor and uploaded in real time to the MSC database. Module Coordinators and lecturers have access to the (anonymous) MSC feedback for their respective module(s) and this feedback is also sent to them each Friday via an automated email. This process has proven an effective source of feedback for both teaching staff and MSC management. See [1] and [2] for further details.

4 The Year in Numbers

The number of recorded visits to the MSC in 2016/17 was 5,252. Semester one visits totalled 3,277, up from 3,237 last year, while our semester two visits were down from 2,341 in 2015/16 to 1,975 this year. As stated earlier this is due to the MSC's first full academic year of assisting students from level 0-2 modules only and the exam period closure. These visits equate to 1,380 distinct students receiving support – 1,024 students in semester one and 647 in semester two - with 291 students visiting during both semester 1 and 2. The annual number of recorded visits to the MSC for the past twelve years is given in Figure 1 below. In August and early September of 2016 the MSC supported 661 visits from over 300 distinct students on the HEAR (Higher Education Access Route), DARE (Disability Access Route to Education), Access (Access to Science, Engineering & Agriculture) and Mature route entries to UCD. These visits are not recorded on the MSC database as these students do not yet have their UCD student numbers at this time and so cannot log in to our system.

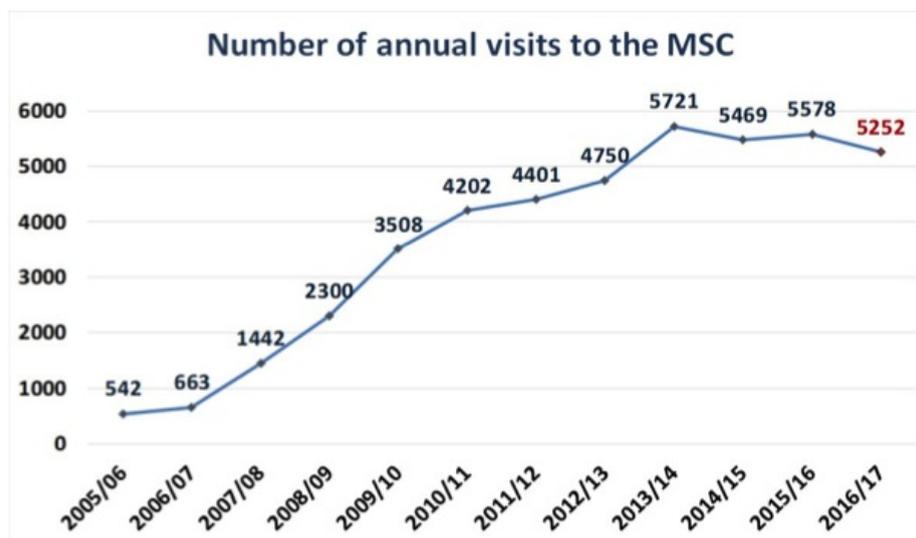


Figure 1: Annual number of visits to the MSC from 2005 to 2017

5 Wait Times, Student Session Lengths and Students per Session

By removing approximately one quarter of all MSC visits i.e. those visits from level 3, level 4 and postgraduate students which were accounting for a disproportionate amount of tutor time, the MSC has reduced the waiting time for visitors significantly. Year on year the average wait time to see a MSC tutor has improved from 29.2 minutes to 13.6 minutes. The *time spent with a tutor* statistic has greatly improved also, from 16.2 minutes in 2015/16 to 21.4 minutes this year. Figures 2 and 3 below show the quartile distribution for wait times and time spent with a tutor e.g. 50% of students waited 6 minutes or less to see a tutor and 75% of students spent 30 minutes or less with a tutor.

The addition of the *expected time to see next tutor* display on the large projector screen in the MSC space has also helped MSC visitors. From September 2017 we plan to implement a live feed on the MSC website which displays (i) the number of students in the MSC, (ii) the number of tutors on duty and (iii) the expected wait time in minutes, so a student not located in the library can check online if they are likely to get sufficient time with a tutor.

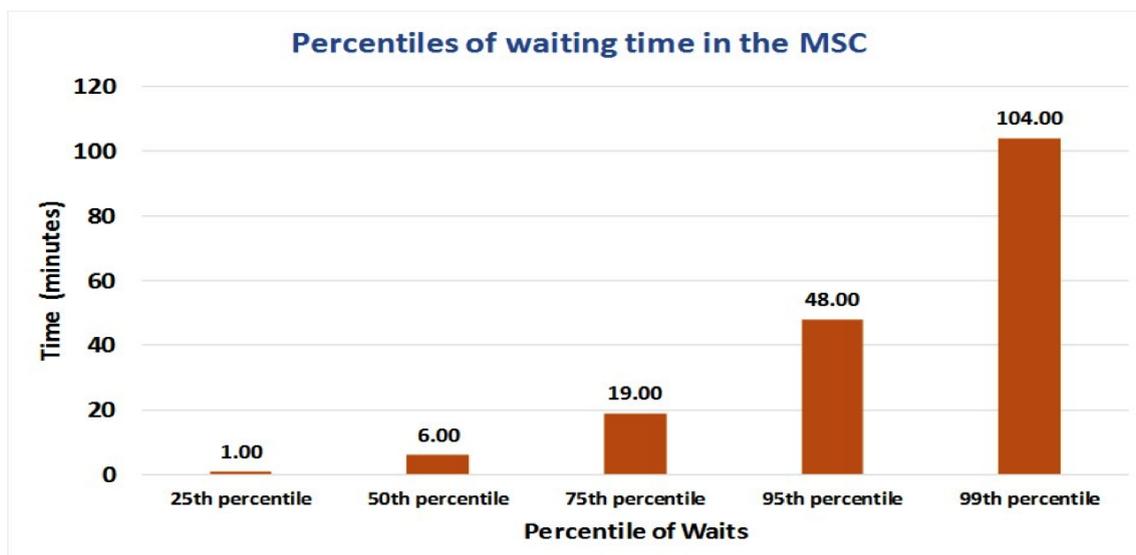


Figure 2: Wait time to see MSC tutor in percentiles

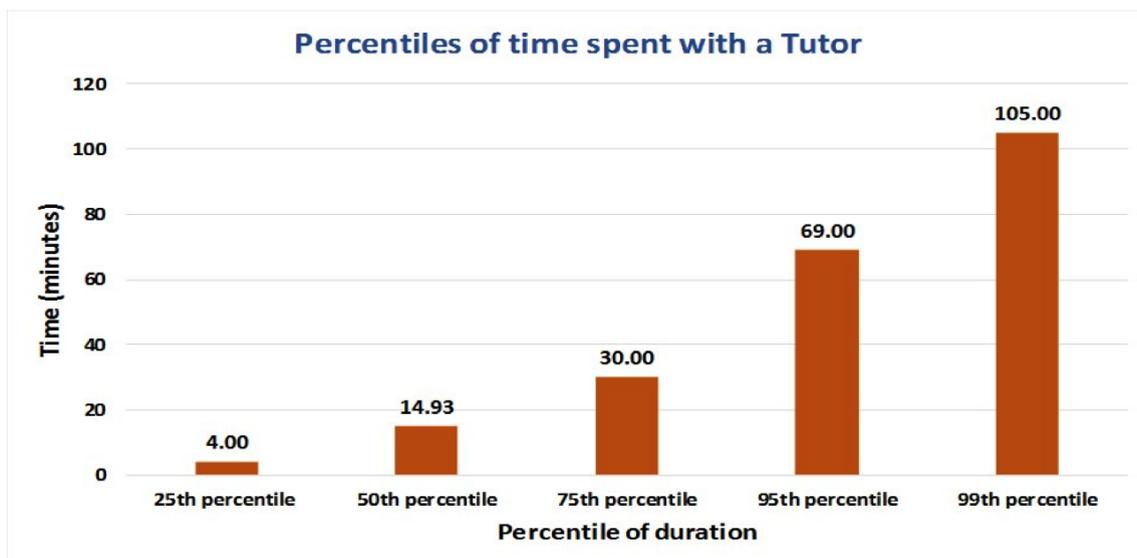


Figure 3: Time spent with an MSC tutor in percentiles

6 Student Return Rate & Peer Support

Some 4,710 of MSC visits were return visits with the median number of visits per student being nine and the mean number of visits per student being 3.8 - see Figure 4 below. The majority (84%) of MSC sessions are one-on-one sessions where we define a session to be an interaction between a tutor and a student or students. The MSC encourages visitors to come with classmates to promote peer learning. The 541 support sessions with two or more students demonstrates the popularity of this small-group peer support approach to learning. The 22 sessions with 8 or more students were Hot Topics and not held during regular drop-in hours - see Figure 5 below. The average number of students a tutor saw per session was 1.27.

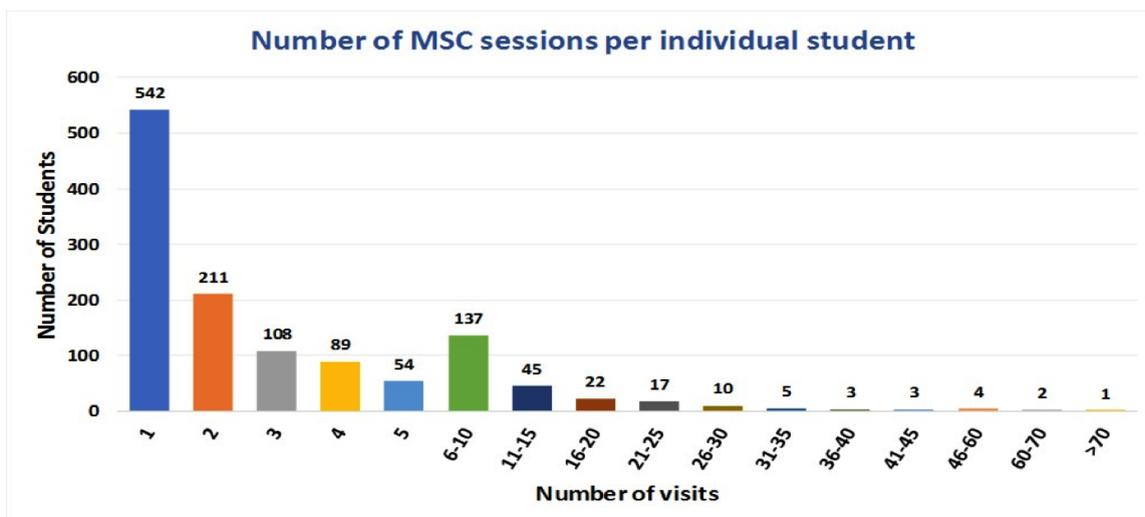


Figure 4: Number of MSC visits per student

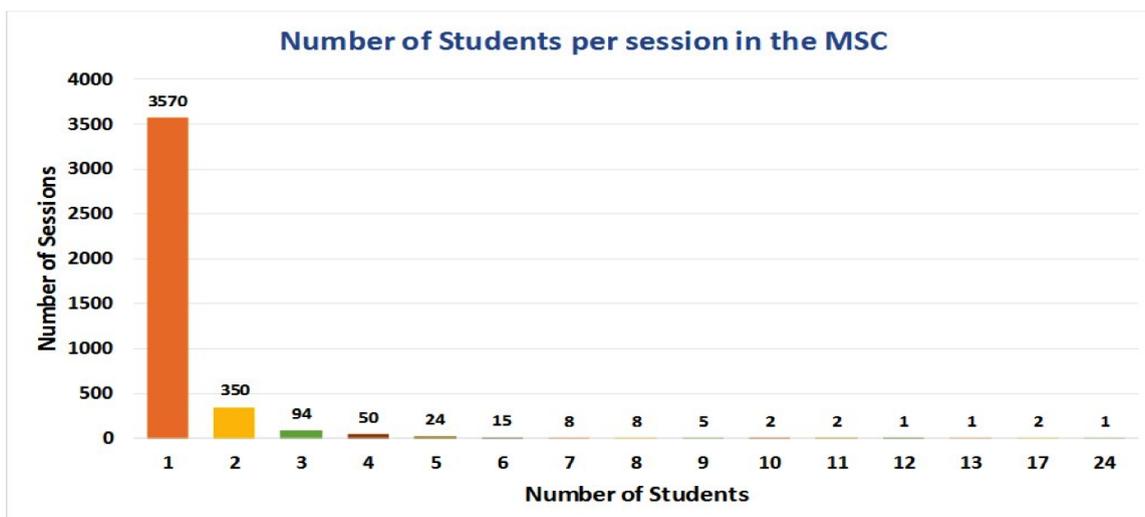


Figure 5: Number of students per MSC session

7 MSC Visits by the Week

The number of MSC visits by week is given in Figures 6 and 7. This year the number of visits during revision weeks was 522 (331 in semester one and 191 in semester two), accounting for 9.9% of all visits. As usual there are peaks in week 7 of both semesters coinciding with midterm examinations and continuous assessments, with a lull the following week (for both terms) before picking up again to peak attendances in weeks 12 and 13 of both terms. The 33 visits figure from the end of semester two refers

to an online maths support service piloted in May 2017 - see Section 10 below for more details on this.

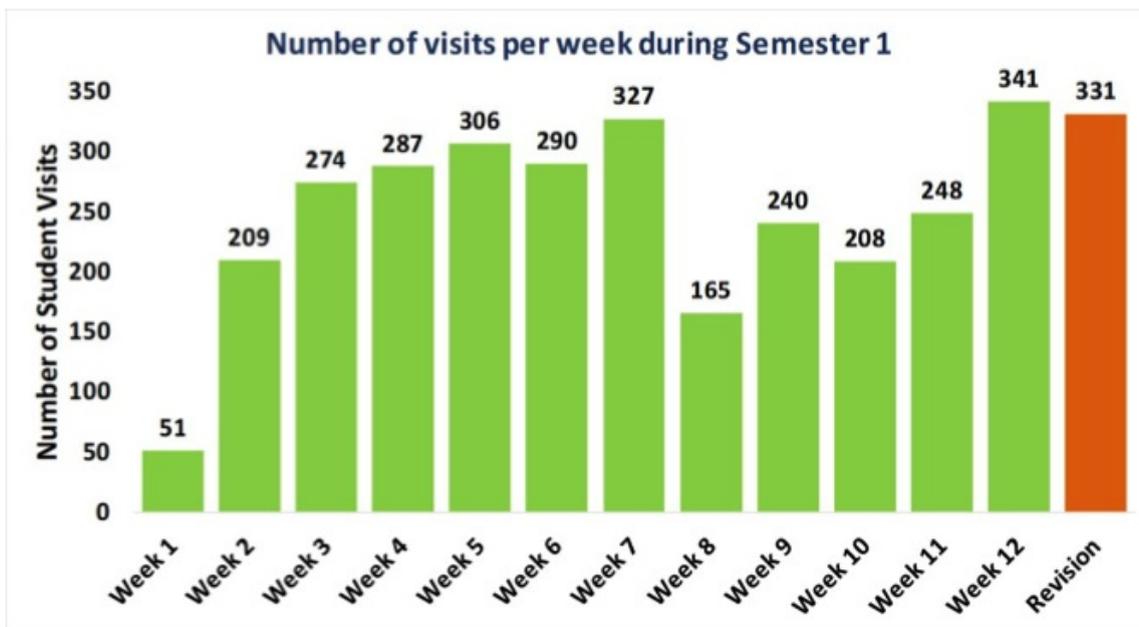


Figure 6: Number of visits per week to MSC for semester one of 2016/17

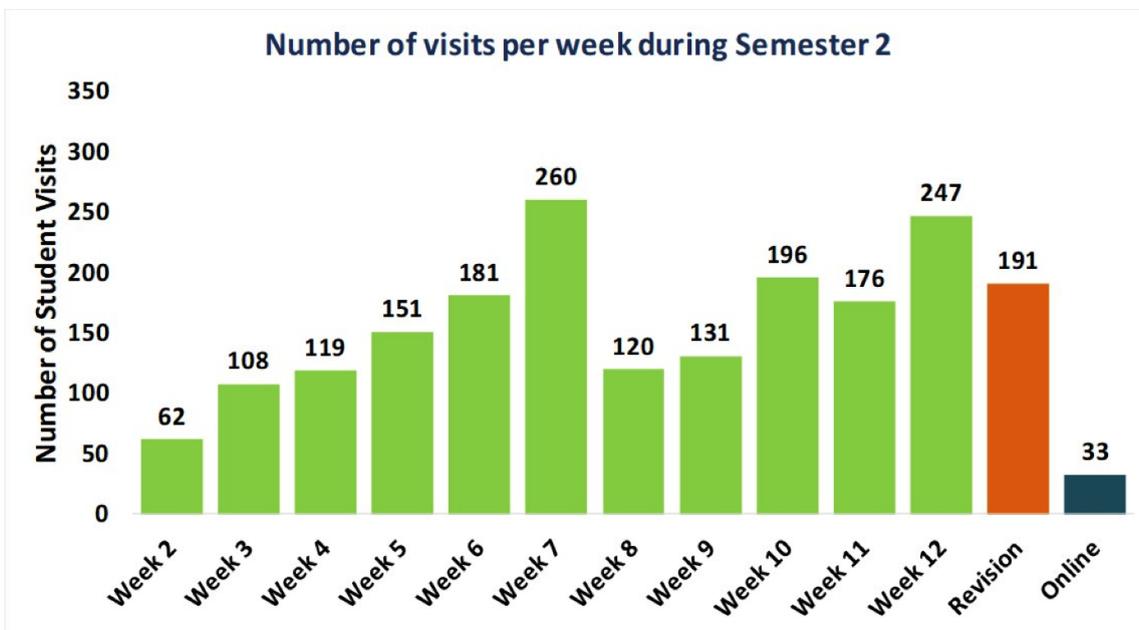


Figure 7: Number of visits per week to MSC for semester two of 2016/17

8 First Time Student Visit Rate

Due to concerns about the number of first time visitors attending the MSC during the revision and examination periods over the past 4 years, last year the MSC decided to close during the exam weeks and utilise that tutor expenditure earlier in the term to provide longer opening hours and a more bespoke service for particular programmes. The number of first time visitors attending the MSC per week for both semesters is given in Figure 8 below. We see that the number of first time visitors to the MSC in the revision weeks of semester one and two was 49 and 41 respectively, down from 102 and 43 last year respectively. This represents just 5% and 7% of all first time visitor figures - down from 13% and 15% of first time visitors to the MSC for these semesters last year respectively. This decrease suggests that the MSC opening hours (including late night openings and closing during examination weeks) has changed the behaviour among MSC visitors from one of last-minute cramming to a more sustained and consistent usage of the service throughout the teaching semester.

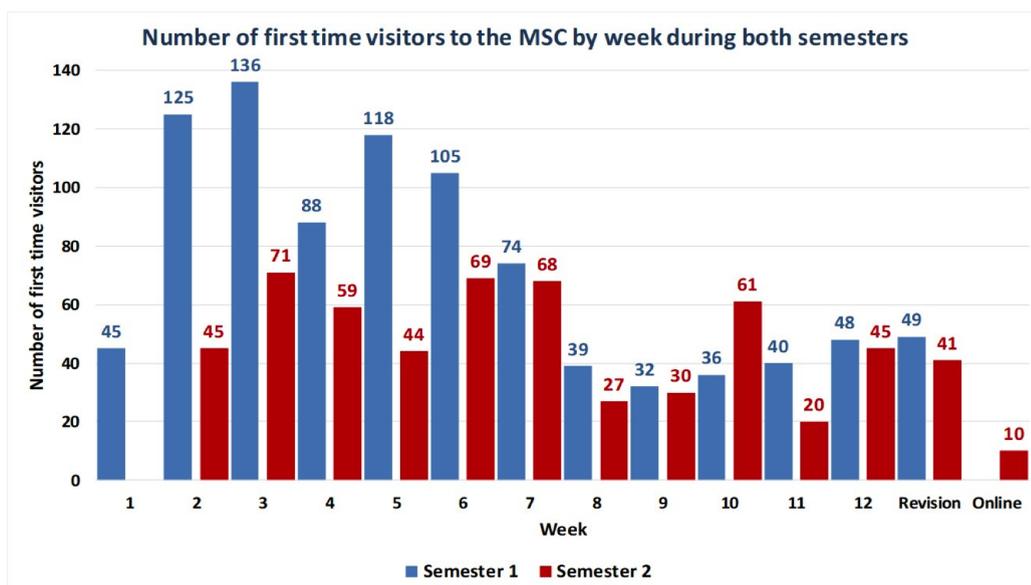


Figure 8: Number of first time MSC visitors per week for 2016/17

9 Late Night Opening and Busiest Times

From October 2016 until May 2017 the MSC experimented with extending its opening hours to include a 5-7pm slot Monday through Thursday. There were 624 visits made during this time slot meaning the proportion of students who visited during these later opening hours accounted for 12% of all visits, a statistic which suggests

that this development was welcome. Based on tutor and student feedback, particularly the mature student cohort, we will experiment with opening at 9am on some mornings during semester one next academic year and opening until 7.30pm each night (Mon-Thurs) for both semesters. The breakdown for the number of visits by day and by time slot is given in Figures 9 and 10 below. For example we can see that Tuesday (894 visits) is the busiest day in semester one and Wednesday (512 visits) is the busiest day in semester two and the time periods of 10am-12pm (1,006 visits) and 3-5pm (858 visits) in semester one and 10am-12pm (586 visits) and 3-5pm (501 visits) in semester two are the busiest in terms of student log ins.

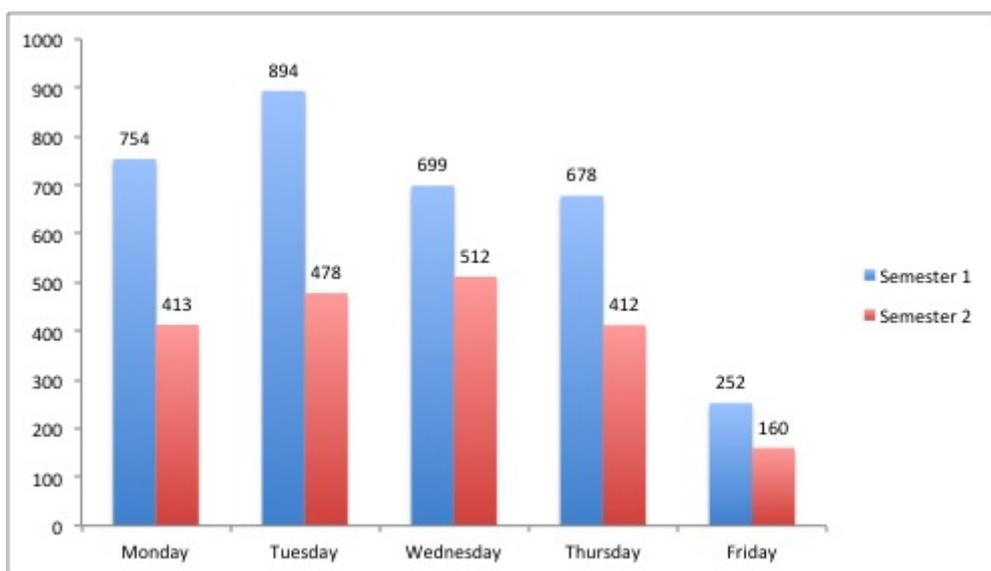


Figure 9: Number of visits by day of the week for both semesters of 2016/17

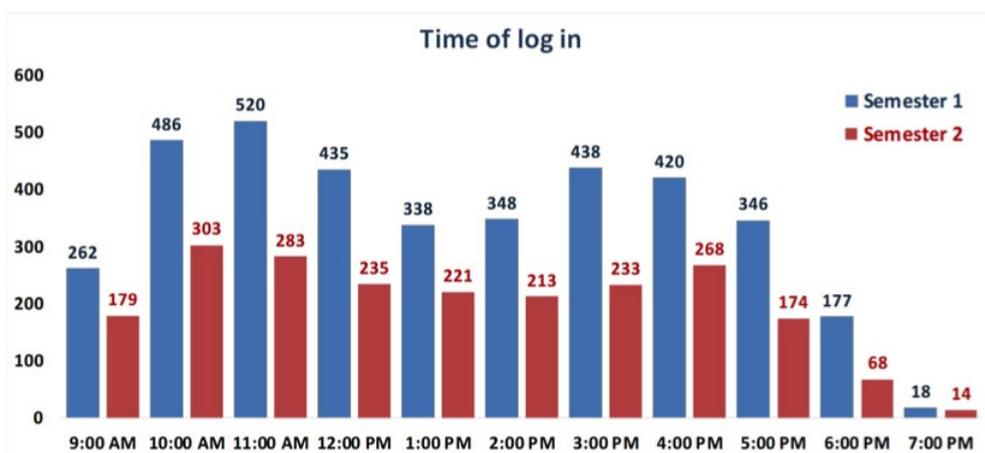


Figure 10: Number of visits by time slot for both semesters of 2016/17

10 Programme Levels and Colleges in the MSC

The MSC received visits from 68 different programmes at UCD in 2016/17 which included all six of the university's colleges, with Science (22% - down 3%), Health and Agricultural Sciences (20% - down 3%), Engineering and Architecture (19% - up 2%), Social Science and Law (13% - up 8%), Arts and Humanities (11% - down 4%) and Business (10% - up 2%) accounting for the largest proportions of visits respectively (see Figure 11 below).

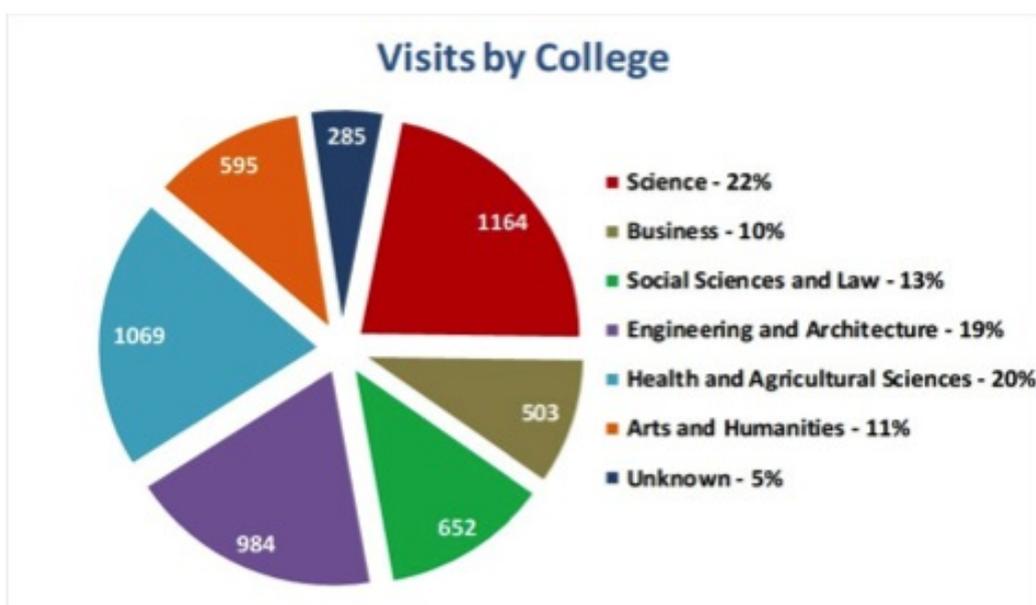


Figure 11: MSC student visits and percentages by college

The percentage of each module level visiting the MSC is given for each semester in Figure 12 below. In total the percentage of level 0, level 1 and level 2 visits was 7% (up 3%), 57% (down 1%), and 33% (up 1%) respectively. The 3% of visits from stage 3, stage 4 and postgraduate students refer to Smurfit School of Business students.



Figure 12: MSC student visits and percentages by level for 2016/17

11 Modules served by the MSC

Students from 118 distinct modules attended the MSC during semester one, traditionally the busier semester for the MSC, while 63 modules were represented during semester two (or 107 distinct modules including repeat/resit visitors from semester one). The MSC received visits from 50 modules taught by the School of Mathematics and Statistics (SMS) in semester one, equating to 2,626 of the total visits, and 49 modules in semester two (including 29 resit/repeat modules from first semester), corresponding to 1,612 visits. The 111 non-SMS modules assisted by the MSC accounted for 651 visits (a decrease of 3.5% on last years figure) and 363 visits (an increase of 31%) in semesters one and two respectively. Visits related to statistics modules or modules with a statistics component accounted for 15.3% of all MSC visits this year. There were 53 modules for which there was just one visit and 46 of these were from non-SMS modules. In total 81% of all visits emanate from students registered to School of Mathematics and Statistics (SMS) modules (a decrease of 2% on last year's figure) and 19% from outside of this school. The breakdown for these visits can be seen in Figure 13 below.

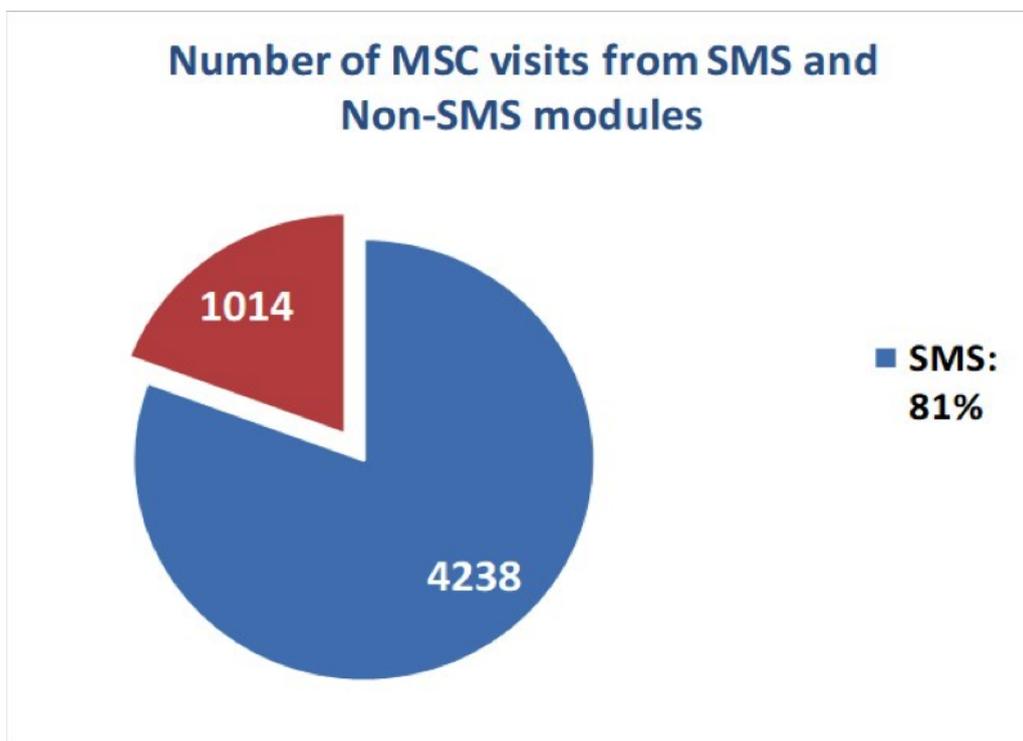


Figure 13: MSC student visits by SMS and Non-SMS 2016/17

12 Online Maths Support

As part of their fulfillment for a Digital Badge (a scheme piloted by UCD Teaching & Learning in 2016/17) nine MSC tutors offered online Maths Support via the slack.com software for each of the 12 nights of examinations from May 5th to May 17th. In total 33 students engaged with this level of support and though there can be no comparison with face-to-face support the initiative was well received by these students as they had access to a tutor online at very flexible times including two sessions run from 10pm-1am.

13 MSC-Module Coordinator Partnerships

Module Coordinators have online access to the MSC (anonymous) feedback in real time that relates to their module(s). Module Coordinators and lecturers also receive an automated email each Friday afternoon detailing (i) the number of visits the MSC has received (both visits and unique student count) from their module(s),

(ii) the duration of each visit, (iii) a running count of the total visits over that particular semester and (iv) the nature of the student query (as interpreted by the attending tutor(s)) and how it was remedied. In the past this feedback has been discussed during term time and in preparation of a new term with a few Module Coordinators. As part of the Module Coordinator-Maths Support Centre Partnership (see Appendix 2 for the actual agreement) initiated this year the MSC feedback from each individual visit and summary statistics was discussed with a selection of thirty lecturers of large (≥ 70 students) first and second year modules both prior to the start of the new academic year and during the semester (see Appendix 1 for an example). Included in this report are the following summary statistics:

- (1) Summary stats for MSC visits from last academic year e.g. no. of visits, no. of distinct visitors, no. registered to sit terminal examination and no. of students that subsequently failed this exam
- (2) A time series graph for the number of visits and distinct student visits per week of semester
- (3) A chart showing the most commonly occurring difficulties
- (4) A summary of the issues raised by MSC visitors and finally
- (5) All the documented visits as recorded by the MSC system (and attending tutors).

These discussions help both parties to provide the best mathematical educational experience for the university's undergraduate students and ensure that sufficient support is offered at school level before the MSC is utilised by a particular student.

14 MSC tutors

In April 2017 the MSC tutor team received 17 nominations (citing 7 tutors) for the Award for Outstanding Contribution to Student Learning and subsequently won this Award from the College of Science in May. In June 2017 the team were awarded the University Award for Outstanding Contribution to Student Learning 2017 in recognition for their "Significant impact on the quality of the student educational experience". This award has been established to recognise individuals or teams including UCD faculty, staff, tutors or demonstrators who have made outstanding contributions to student learning in a specific area. In May 2017, MSC tutor Cesar Scrochi won an Outstanding Contribution to Student Learning Award from the *VP for Academic Affairs* unit for his work in the MSC.



MSC tutors receiving their College of Science Outstanding Contribution to Student Learning Award from Prof Joe Carthy in May 2017



MSC Tutor Cesar Scrochi receiving his *Outstanding Contribution to Student Learning Award* from the Vice President for Academic Affairs Prof Jason Last

As always the success of the MSC is down to its committed staff. This year the MSC hired 22 tutors over both semesters (providing 39 hours of support per week). Four of these tutors have doctorates in Mathematics or Physics. Five tutors are in the final stages of their PhD studies in the School of Mathematics and Statistics and four are in the first three years of their PhD. Six of our tutors were undergraduate students with a strong academic record in mathematics/statistics who came through our tutor training programme in September 2016. Four of these undergraduate tutors are starting PhD programmes in September, three in UCD including an SFI funded project in the School of Maths and Stats, an IRC funded project on Carbon Monoxide Detection, a Business Analytics project at the UCD Smurfit School of Business, and one at the University of Waterloo Canada. The remaining tutors were sourced from outside UCD and included a mathematics lecturer from DIT and Maynooth University and a computer science lecturer from Griffith College Dublin. All MSC tutors undergo vetting, interview, extensive training and mentoring throughout their time at the MSC. Every year the MSC loses its tutors either to industry or high calibre educational institutions and so sourcing and retaining high quality mathematics tutors remains a significant challenge for the UCD MSC.



MSC tutors for 2016/17

14.1 Continuing Professional Development of MSC tutors

- Nine MSC tutors, including two undergraduates, signed up for and were awarded a Digital Badge (an extracurricular micro accreditation) for successful participation in two full semesters of Maths Support Centre tutoring in the academic year 2016/2017. The badge was awarded by UCD School of Mathematics and Statistics and forms part of the ongoing UCD Digital Badges Pilot. Criterion for the MSC digital badge award is available at

https://openbadgefactory.com/v1/badge/_OPN5SRa9FEa2Y/criteria.html

- On December 15th 2016, using funding from the National Forum for the Enhancement of Teaching and Learning in Higher Education a team led by Dr Kieran Mulchrone of University College Cork conducted a one-day workshop on using Numbas, an open source e-assessment software tool for mathematics. Eleven MSC tutors and 6 lecturers in the School of Mathematics and Statistics attended this event. Further information is available at www.teame.ie
- Six MSC tutors Anthony Brown, Leonard English, Emma Howard, Brendan Murray, Cesar Scrochi and Laura O'Brien received individual nominations for the Outstanding Contribution to Student Learning Awards. The MSC tutor team won the University's Outstanding Contribution to Student Learning 2017 in recognition for their "Significant impact on the quality of the student educational experience".

15 Events and Communications at the MSC in 2016/17

The MSC management presented information on MSC usage statistics and the lecturers' feedback system to delegates who visited from the Thomas More University in Belgium (November 2016), the Tallinn University of Technology (March 2017), and to Dr Rocio Rodriguez from the University of León, Spain (May 2017). Other events the MSC management presented at include:

February 2017 - Congress of the European Society for Research in Mathematics Education. Croke Park Dublin.

July 2017 - Institute of Mathematics and its Applications - Mathematics Education beyond 16: Pathways and Transitions. Birmingham University, UK.

16 Outreach Activities at the MSC

16.1 UCD Library-MSc Leaving Certificate Programme

From May 29th to June 2nd the MSC assisted 34 students in preparation for their Leaving Certificate maths exams with free maths support sessions for 26 students from three DEIS schools (Delivering Equality of Opportunity in Schools), Loreto College Crumlin, Marian College and Ballinteer Community School, and from the following six non-DEIS schools - Oatlands College, Muckross Park College, Coláiste Íosagáin, Mount Anville, St Michael's College and St Gerards School in Bray.

16.2 Maths Sparks, Maths Week, Future You and Suas

From December to March saw the third installment of the SFI Discover-funded *Maths Sparks*, an outreach programme designed and delivered by staff and students of the School of Mathematics and Statistics to over 70 DEIS students from 12 local secondary schools with the voluntary assistance of MSC tutors. MSC management and tutors also presented at local primary schools for Maths Week in October 2016 and assisted with Future You and Peer Mentoring programmes. MSC management also offered advice and expertise on a new numeracy pilot being implemented by *Suas Educational Development*, an education-focused Irish registered charity. Suas work exclusively with designated disadvantaged (DEIS) schools targeting support towards children aged 8-14 years.



Maths Sparks students and coordinators at InspireFest conference

17 Summer Courses at the MSC

In August 2016 the MSC designed and delivered four 3-hour workshops for the 38 students registered to the Access to Science, Engineering and Agriculture programme. Four 2-hour workshops were also given to 31 students registered through the Mature Students office. Five 2-hour sessions were delivered to students coming to UCD through the HEAR (Higher Education Access Route) programme and one "Introduction to the Maths Support Centre" session for the DARE (Disability Access Route to Education) students. The MSC also attends and presents at many orientation events in the preceding weeks of term. All these sessions are set to continue and grow in 2017/18.

18 Future Developments and Recommendations

18.1 Developments for 2017/18

From September 2017 the MSC will help embed maths and stats support in the pilot module SSCI10010 *Societal Challenges in the 21st Century* on the new Bachelor of Social Science programme. This pilot will have 150 students in 2017 increasing to over 500 students from 2018. The MSC will extend its opening hours from 39 per week to 41 to include late opening until 7.30pm each night Monday through Thursday. The 6-7.30pm nightly slot will give priority to the Access, DARE, HEAR, Mature and International student cohorts. The MSC will implement a live feed on the MSC website which will offer a forecast of how busy the MSC is likely to be. We hope to cement the 30 existing partnerships with Module Coordinators from SMS and extend this to include 20 Module Coordinators and lectures external to SMS. Finally the MSC will seek to strengthen its oversight by appointing a senior member of staff from a key area of use external to SMS either or from the UCD Teaching and Learning Centre.

18.2 Recommendations

During the summer of 2017 the MSC lost an unprecedented eleven of its award-winning staff. The high turnover of staff is a somewhat natural part of the transience of

a maths support centre. However, lost tutors this year have secured teaching roles in institutions such as Trinity College, DIT, Maynooth University, University of Glasgow and University of London. While the MSC invests heavily in the professional development of its tutoring staff more thought needs to be put in to how we can keep these valuable people at UCD. With HR restrictions and insecure contractual conditions for hourly paid staff the MSC would advocate for a university tutor position to be created such as the roles created by the UCD Applied Language Centre in 2017 and the Maynooth University Maths Support Centre in 2016. Also we recommend that tutors, who are not postgraduate students of UCD, be permitted to work more than the current maximum of nine hours per week to ensure a continuity of service so vital in an academic support setting.

19 Feedback

Management decided not to conduct a comprehensive feedback survey of all MSC users and non-users in 2016/17 - this will be done every second year from now on.

19.1 Unsolicited feedback from staff

April 27th 2017 - Many thanks for all the work the Maths Support Centre does. A number of the students here have benefited; the service is invaluable.
Niamh Nestor, Student Adviser, School of Veterinary Medicine

October 15th 2016 - Thanks for all your help. MSC is a great resource to the computer science students and I've heard only good feedback about it (except that it can be v busy).
Nikki Dillon Computer Science Student Support Officer

January 31st 2017 - I find the existence of MSC of great help for both the lecturer and the students. Thanks for all the feedback, it contributes to the improvement of my teaching. Thanks also to the tutors and Anthony for all his help. Keep up the good work! - Mathematics lecturer

It is useful for me to see where students have difficulties, though I mostly expect them to as this is part of the learning process. The feedback is useful but only as verification, it does not impact on my learning, though I may decide to do a bit more examples depending on the feedback I receive. - Statistics lecturer

I found this information very useful as I was using it a) as a feedback for my teaching approach and b) to keep track of how my students understand the theory introduced

to them. I was actually using the main issues addressed to the MSC to further explain them in class. - Business lecturer

19.2 Unsolicited feedback from students

“I personally couldn’t speak highly enough of the service and the staff on offer at the MSC. Over the course of the year I missed only a couple of classes because for me I felt it was a huge help and very important I took advantage of it. Apart from Anthony and Catherine, who are obviously brilliant, all the tutors were excellent help. No question was ever a stupid question whether it was the first or the fifth time of asking it, they had the patience of a saint.” - Access student.

“Without the help of the MSC I would not have coped as well as I did with Maths over the course of the year and I hope next years bunch have the same access to it that we did because it will make things a whole lot easier.” - Engineering student.

“I actually thought it [the MSC] was very useful. Sometimes I miss something small during a lecture that throws off a whole question so having someone guide you through an example in detail is perfect.” - Economics student.

20 Appendix 1 - MSC-MC Partnership - Module Summary Statistics

MATH***** Maths Support Centre Visits (Academic year 2016/17)

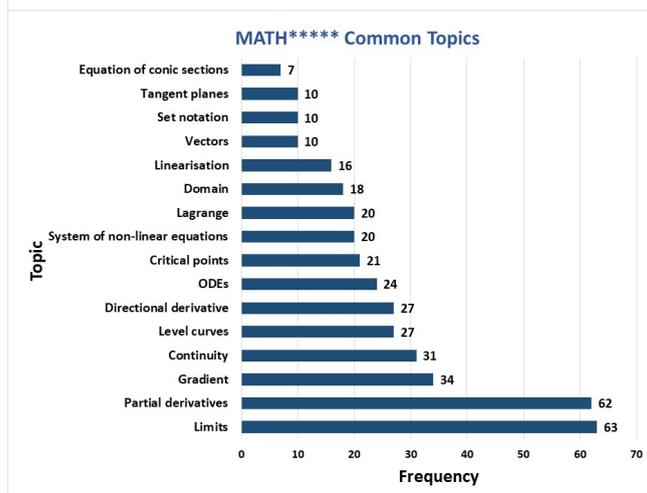
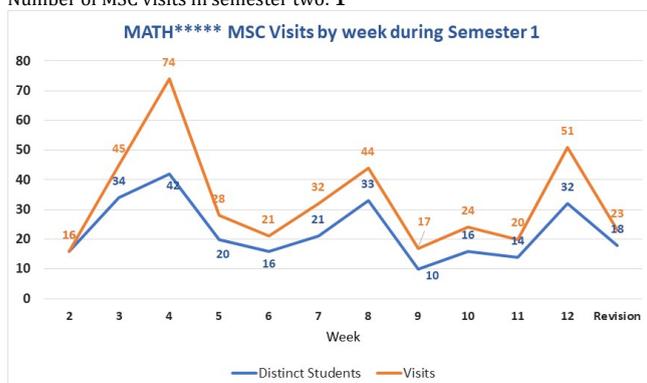
Number of MSC visits: **407**

Number of distinct MSC visitors: **90**

Number of students sitting the December exam: **271**

Number of students failed (or withdrew from) the December exam: **39**

Number of MSC visits in semester two: **1**



21 Appendix 2 - MSC-MC Partnership - The Agreement and Process

Maths Support Centre-Module Coordinator Partnership Agreement - STAT20070 2017/18

Rationale: The purpose of this partnership agreement is to facilitate and streamline the communication between the Maths Support Centre (MSC) and Module Coordinator/Lecturer in order that students on the module are supported appropriately.

1. Do you give permission to STAT20070 students to attend the MSC? Yes No

If yes what level of support do you want the MSC to provide?

Details: e.g. tutors to help students with lecture notes but not assigned homework or CA components *← Agreed! Tutors could help with basic concepts that may arise from a homework, but not solving the assignment itself.*

2. Do you agree to me (or an MSC representative) attending one of your lectures to advertise the MSC? Yes No

Time - *I did it in my very first lecture*
Place - *including your flyer with all details. But I'm happy if you'd wish to attend one of my lectures.*

3. Do you agree to notify students via lectures and/or Blackboard/Moodle of the location and opening hours of the MSC, and explain to them what support you expect them to receive in the MSC? *I have done so.* Yes No

4. Do you agree to set up the MSC manager as a student/tutor on your Blackboard/Moodle page in order to access the module material? Yes No

5. What are the dates of the midterm or CA submission?

Details: *No midterm. 5 assignments. 1st due 3/10 (week 4). Then roughly week 5, 7, 9, 11*

6. Do you agree to meet at the end of the semester to review this agreement and discuss your second semester module(s), if applicable? Yes No

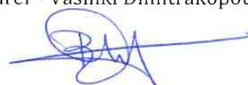
Agreement: If you agree to the above, the MSC will ask you to engage with the MSC feedback that you receive via a weekly email each Friday at 1.30pm containing details of the visits to the MSC from the module STAT20070.

If a significant proportion of students from this module attend the MSC in a given week the MSC manager will inform the Module Coordinator of the issue.

If these visits continue the manager will inform the Module Coordinator again and if the issue persists we will agree on how to proceed regarding support from the MSC for this module. The MSC manager will ask the Module Coordinator to inform their students of this.

Signature: MSC manager - Anthony Cronin

Signature: STAT20070 Module Coordinator/Lecturer - Vasiliki Dimitrakopoulou

 29/9/17

The Process

- Early September/January - MSC manager meets Module Coordinator (MC) and/or lecturer to discuss MSC feedback and summary statistics from the previous year and plans for the year ahead.
- Same meeting - MSC manager runs through MSC-Module Coordinator Partnership Agreement and discusses any issues arising.
- MSC manager and Module Coordinator/lecturer agree on the partnership document and both sign the MSC-MC agreement.
- A copy of the signed agreement will be forwarded to the MC after this meeting.

Notes

1. The MSC does not open during the examination weeks.
2. The MSC opens in week one (two) in semester one (two) respectively.
3. The MSC website is www.ucd.ie/msc

22 Acknowledgements

Many thanks to Cesar Hernandez Scrochi for producing the charts, and the MSC Oversight Committee for helping proof read this report.

23 References & Photographs

[1]. Cronin, A., Meehan, M (2016). The development and evolution of an advanced data-management system in a Mathematics Support Centre. In: David Green ed. 2015 CETL-MSOR Conference - Sustaining Excellence UK, pp.21-27.

[2] Cronin A. (2017). Evidenced-based decision making in a maths support centre. Proceedings of the Institute of Mathematics and its Applications annual conference - University of Birmingham UK.



MSC tutors Emma Howard, Cesar Scrochi, Anthony Cronin and Daniel Giles



New 2017/18 MSC tutors following a tutor training event



The UCD Teaching & Learning Awardees Group for 2017