

The Robert Gillespie
ACADEMIC SKILLS CENTRE

(RGASC)

Annual Report 2018/2019

Updated: June 7, 2019

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The RGASC's Mandate

The mandate of the Robert Gillespie Academic Skills Centre is *to support and promote teaching and learning in a range of contexts across UTM*. For students, the RGASC is a resource for developing academic skills through individual appointments and group-based initiatives. For Teaching Assistants, instructional staff, and faculty, the Centre is a partner in teaching and learning activities ranging from course and program design to implementation and to the assessment of a given intervention's impact.

Faculty and staff appointed at the RGASC have a range of specializations, including academic peer support, academic writing instruction, educational development, English language learning, numeracy, scientific literacy, and supplemental instruction. This diversity of experience and expertise enables the Centre to collaborate productively with partners from across the disciplines and campus, who bring with them a varied and diverse set of teaching and learning objectives.

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Introduction

This document reports on the programming and different forms of academic support provided by the RGASC between 01 May 2018 and 30 April 2019. It also provides a brief overview of the scholarship conducted at the RGASC that informs, advances, or assesses the efficacy of its programming.

The purpose of the Annual Report is to present RGASC stakeholders with the information they need to offer feedback on the programming and academic support the Centre provides to the teaching and learning community at the University of Toronto Mississauga (UTM). This document has not been written for the purpose of assessment or self-promotion.

The RGASC Advisory Committee¹ was struck in Fall 2015 with a dual mandate: to facilitate communication between the RGASC and its stakeholders, and to help ensure that the RGASC provides programming and support that genuinely respond to its stakeholders' needs. The Annual Report is intended to provide that Committee with the necessary information to fulfill the terms of its mandate. More generally, the Report is written to facilitate communication between the RGASC and all those members of the University of Toronto community for whom the Centre provides programs and services.

The 2018/2019 Annual Report is organized into five sections:

- 1) General Undergraduate Support;
- 2) Core Focus Areas;
- 3) Programs;
- 4) Course Teaching; and
- 5) Collaborative Programming.

Wherever possible, it offers both a quantification of the results of RGASC programming and qualitative feedback from our stakeholders. We hope this information will not only inform our stakeholders about the RGASC's activities over the past year, but also inspire a community-wide discussion about the reach, impact, relevance, sustainability, affordability, and scalability of RGASC programming more generally.

The common themes running through this year's Report are "managing growth" and "adapting to our new space." Over the last few years, the RGASC has expanded considerably; while we continue to experience some growing pains, the team is beginning to feel like it has developed strategies for managing this growth, and we now have procedures and personnel in place who can increase our capacity and take on new responsibilities when necessary. Having these meant that this year we were, for the most part, able to hire additional faculty and staff (LTAs and contract), increase the number of programs and services we offer, participate in collaborative initiatives with both new and established partners on campus, and provide a greater variety of options for our stakeholders to access teaching and learning support.

¹ The Terms of Reference for the RGASC Advisory Committee are posted on the RGASC website (<https://www.utm.utoronto.ca/asc/our-mission-0/rgasc-advisory-committee>). Information regarding this year's Committee membership is also included in Appendix A of this Report.

It is also important to observe that while many members of the RGASC team report an improved capacity to manage the growing demand for their services and programs, the administrative staff in the Centre are in a very different situation. The number of permanent administrative staff has not kept pace with the expanded offerings in the rest of the Centre. While the RGASC has received funding to hire casual employees to support operations, the Centre Coordinator and Front Office & Communications Assistant require significantly more support in order to manage their workload. We would like to strongly emphasize that resolving this problem is still the most pressing concern for the upcoming year.

The second theme that recurs throughout this report relates to the new space into which the RGASC moved in August 2018. We have been in the new North Building for over eight months now, and are happy to report that working conditions for everyone have dramatically improved. Unfortunately, we have no more room for growth in our new space, but in the meantime, we are all enjoying our private offices, larger conference room and lounge, kitchen, and reception area, as well as the privilege of being located on the third floor of such a beautiful new building. (We do, however, miss our colleagues in the library.)

Finally, we are saddened to report that we lost an important member of the RGASC in 2018/2019. On March 2, 2019, Laura Krajewski, the RGASC's Front Office and Communications Assistant, died unexpectedly as the result of a tragic hiking accident. Laura was passionate about supporting students and her contributions to the RGASC and student life at UTM as a whole will be felt for many years to come. A more detailed account of the remarkable contributions Laura made to the UTM community can be found on our website: <https://www.utm.utoronto.ca/asc/memorial-laura-krajewski>.

The RGASC greatly values feedback from all of its stakeholders. Comments about this Report can be forwarded via email or telephone using the contact information below; readers are also very welcome to drop by the RGASC in person to set up an appointment with an RGASC faculty or staff member.

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RGASC Mission

The RGASC is a hub for academic skills development on the University of Toronto Mississauga campus and has a dual mandate: to support instructors and teaching assistants in their efforts to implement best practices in teaching and learning, and to support students, undergraduate and graduate, in their efforts to enhance their academic skills and increase their understanding of their disciplines.

The RGASC works collaboratively with faculty and teaching assistants to help create the best possible environment for learning in classes, labs, and tutorials. It also directly provides academic support to students through a variety of programming channels, including one-on-one appointments, co-curricular courses, workshops, and peer-facilitated study groups.

In order to fulfill its dual mandate, RGASC faculty and staff maintain active research programs, often by collaborating with disciplinary colleagues to assess the impact of an intervention in the classroom. All RGASC programming is informed by a number of areas of SoTL including Writing Across the Curriculum, Supplemental Instruction, Critical Thinking, Problem-Based Learning, Collaborative Learning, Experiential Learning, and Active Learning Classrooms.

Organizational Structure

The RGASC is neither a Department nor an Extra-Departmental Unit; instead, it functions as an academic unit within the Office of the Dean and the Director reports directly to the Vice-Dean Teaching & Learning.

The following is an organizational chart of the RGASC, current as of April 2019:



As reported in the 2017/2018 Annual Report, the Vice-Dean Teaching & Learning has been in discussion with the RGASC, Centre for Student Engagement, Department of Languages, UTM library and other units on campus regarding the possibility of creating an EDU-A in which multiple stakeholders could work together to conduct research on, and support best practices in, university pedagogy. If approved, the proposed academic unit could provide an ideal home for some version of the utmONE courses, possible new composition and numeracy courses currently under discussion in the Working Groups struck in response to UTM's new academic plan, the Education courses currently housed in the Department of Language Studies, and course-based ELL support. This discussion has continued over the past year, but a formal proposal has not yet gone to governance.

Part One: General Undergraduate Support

1) *Face-to-Face Appointments*

Face-to-face meetings and small group consultations are the most popular forms of academic support provided by the RGASC. In addition to support with written assignments (typical of a university Writing Centre), the RGASC also offers instruction in mathematics, scientific problem-solving, and general academic skills development (e.g., time management, note-taking, lecture-listening, multiple-choice test preparation, critical reading). The majority of face-to-face appointments at the RGASC are conducted one-on-one and are 30 minutes long, but an increasing number of appointments are shorter (ca. 20 minutes) drop-in appointments offered on a first-come, first-served basis.

As in previous years, complete appointment data for 2018/2019 will not be available until the end of August 2019, so they cannot be reported here. The most recent data available (see Charts 1 and 2, below) demonstrate, however, that overall demand for face-to-face appointments decreased once again last year. Over the last four years, the RGASC's total number of appointments has hovered around 3,000 appointments (see Chart 1 below), peaking in 2015/2016 at 3,582. After years of steady growth, the RGASC saw fewer students in both 2016/2017 and 2017/2018. The decline from 2015/2016 to 2016/2017 was 386 appointments or approximately 12%. For complete appointment details, see Chart 2 below.

This decline in the number of students we have supported through face-to-face appointments can be explained by a number of factors. First, continuing the unfortunate pattern we remarked upon in last year's Annual Report, many Writing Instructors once again suffered prolonged or repeated illnesses and personal tragedies which resulted in their missing a total of 119 hours of work during the Fall and Winter terms (as compared to 80 hours the previous year). This meant that a large number of booked appointments were cancelled at the last minute, dramatically reducing the number of students the RGASC was able to see. We assume that this not only discouraged students from booking subsequent appointments, but also dissuaded them from recommending the RGASC to their peers. In spite of our best efforts, we were only able to recoup 51 of the 119 lost hours, resulting in a significant number of students never getting the opportunity to rebook their appointments.

Second, we continued to offer other models of support that may be reducing demand for traditional face-to-face appointments. For example, the 86 students who attended Writing Retreats in 2017/2018 would likely have booked appointments with Writing Instructors had the Writing Retreats not been available.

Finally, the trend whereby students prefer a "just-in-time" model of support (rather than booking appointments in advance) means that more students are showing up to the RGASC hoping for drop-in appointments but end up being turned away because the queue is too long and instructors are unable to see everyone waiting for an appointment. Many of these students are not recorded on a wait list and do not return for an appointment because they have waited until the last minute before looking for support.

While one might assume that this decrease in the total number of appointments at the

RGASC would correlate with an overall decrease in demand, the number of waitlisted students actually increased from 445 in 2016/2017 to 684 in 2017/2018 (see Table 1 below for details). More alarmingly, 425 students were on a waitlist in 2017/2018 but never booked with a Writing Instructor. While these waitlist numbers are nowhere near the record levels (over 1,500) we saw five years ago, they are evidence of a trend we want to address immediately. Accordingly, we have tried to lower our waitlist numbers and increase the total number of appointments booked by taking the following steps:

- 1) we hired more instructors and increased the number of appointments on offer at the traditionally busy times of the academic calendar;
- 2) we changed our business hours so that we are open Monday through Thursday, 9am till 7:30pm from September till April;
- 3) we increased the number and timing of Writing Retreats; and
- 4) we dramatically increased the number of hours of drop-in appointments.

We are also piloting an on-call system where Writing Instructors indicate their availability to cover shifts when another Instructor is unexpectedly unavailable for work. This has already proven effective and, taken together with the measures outlined above, should result in both an increase in the total number of students with booked appointments and a decrease in the number of students on the waitlist. We have also improved marketing of drop-ins and other forms of support through the RGASC website, social media, Campus Media Screens, conventional signage, and a tabling campaign and are confident that this will improve all our numbers for next year. Finally, we are hopeful that our new space with a much larger and more comfortable reception area, functional workshop space, and private offices for face-to-face appointments will result in significant increases to the number of students seen in both booked and drop-in appointments.

Chart 1: Automated Booking System Data (2014-2018)

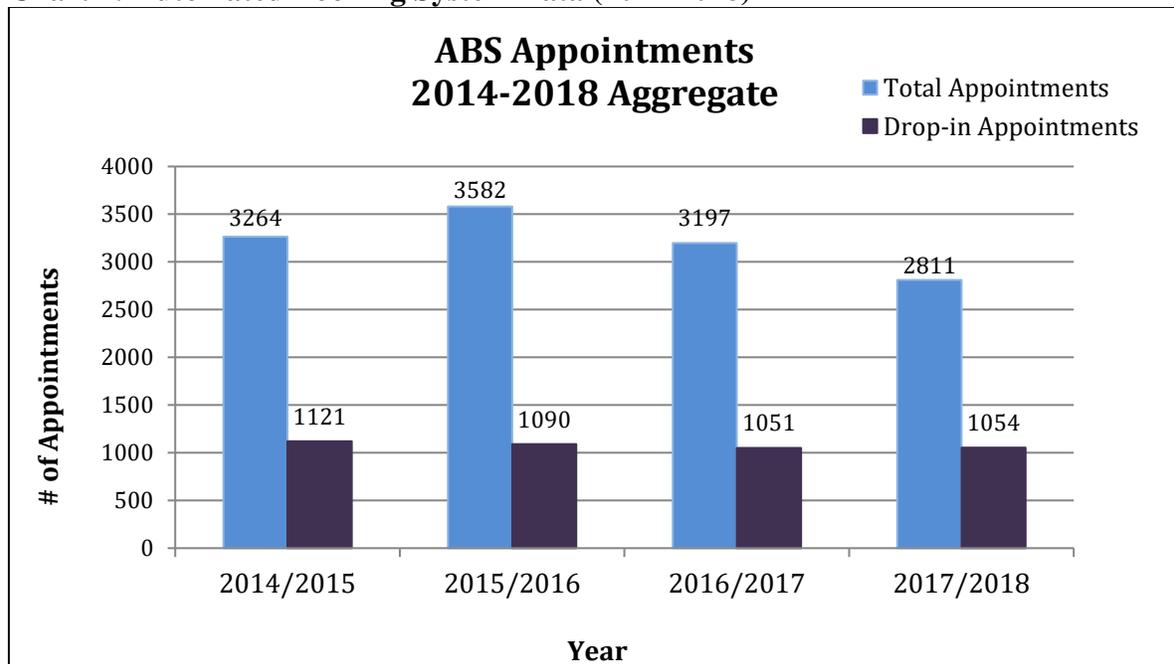


Chart 2: Total Unique Students (2014-2018)

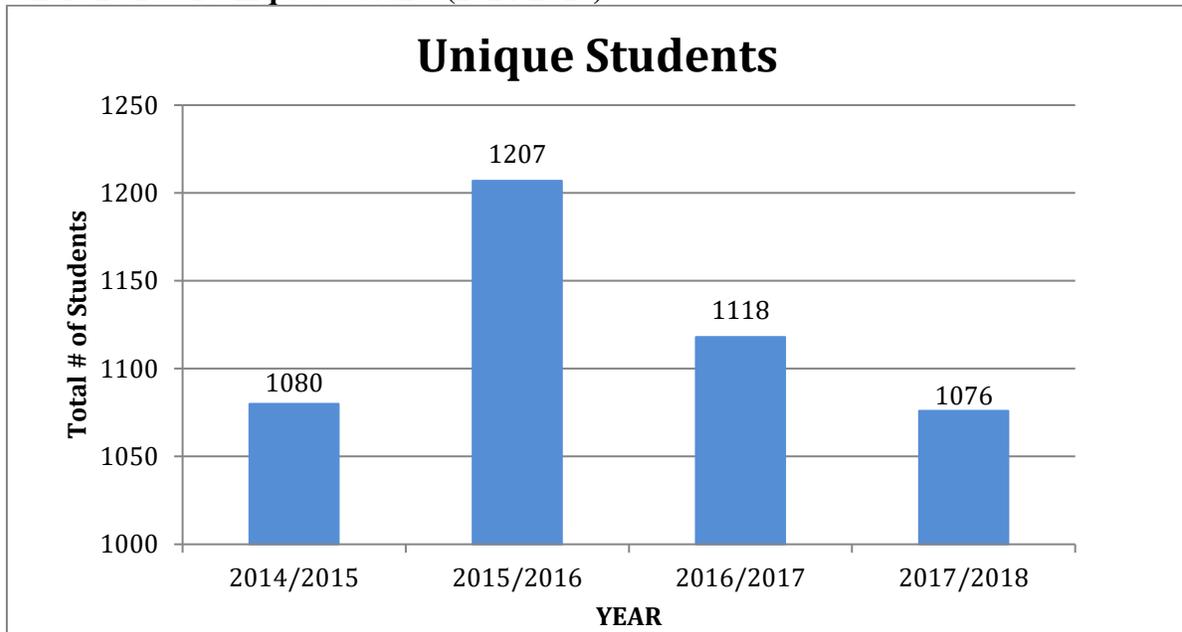


Table 1: Waitlist Data (2014-2018)

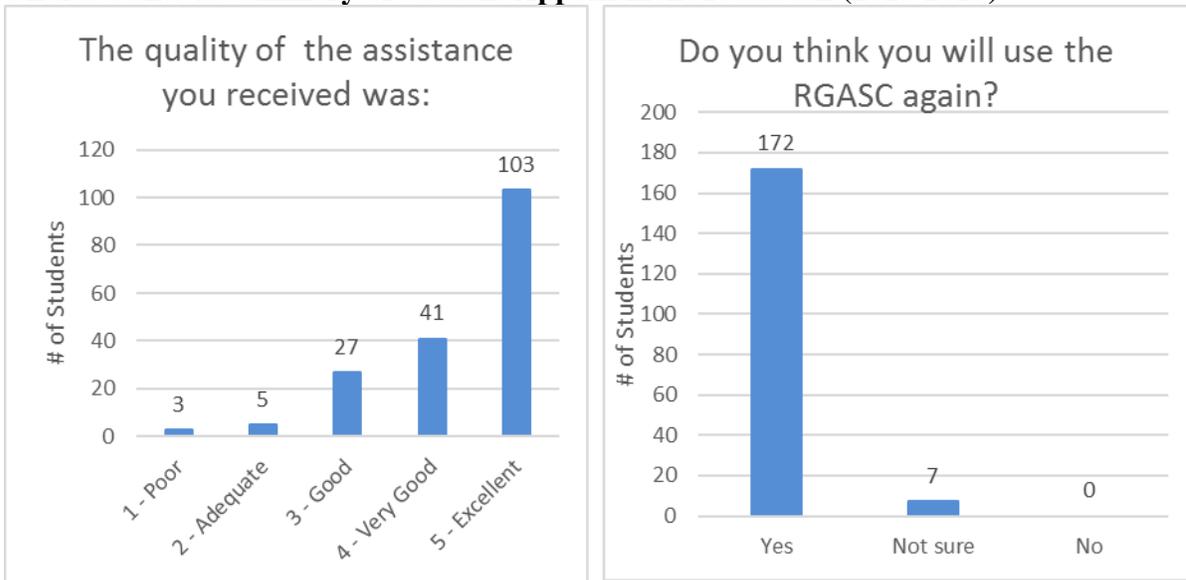
| <i>Year</i> | <i>Total Waitlisted Students</i> | <i>Waitlisted Students Booked</i> |
|-------------|----------------------------------|-----------------------------------|
| 2013/14 | 1564 | 612 |
| 2014/15 | 651 | 236 |
| 2015/16 | 448 | 119 |
| 2016/17 | 445 | 186 |
| 2017/18 | 684 | 259 |

While the RGASC’s online booking system prevents us from downloading attendance data until August 2019, we collect student feedback on our services throughout the year, so we are able to report those data here. This feedback is collected at the end of each week through an online survey that asks a number of simple Likert scale and open-ended questions regarding their perceptions of the value of the support they received.

In general, student feedback was very positive. Of the 179 students who responded to the weekly Appointment Feedback Survey, less than 5% of students (see Chart 3 below) indicated the “Quality of the Assistance” they received at the RGASC was poor or adequate”; approximately 96% rated the support they received as either “good”, “very good”, or “excellent”. Over 57% stated that the quality of assistance at the RGASC was “excellent” (see Chart 3 below). Perhaps most importantly, when asked whether they would use the RGASC again, the vast majority of students (96%) answered “yes,” and the rest were unsure; none said they would not.

The results were similar when respondents were asked whether they would recommend the RGASC to another student. Just under 97% said they would recommend the Centre; approximately 3% said they were “not sure”; 1 student (less than 1%) said they would not advise a peer to visit the RGASC.

Charts 3 and 4: Summary of Student Appointment Feedback (2018/2019)



When asked what they found “most helpful” in their appointment, students mentioned a wide variety of strategies and topics: the data in Tables 2 and 3 below provide a more detailed breakdown of students’ perceptions of the quality of support they received during face-to-face consultations with Writing Instructors. Please note that the number of responses below is significantly higher than the 179 respondents who completed the survey because many students identified multiple topics when offering feedback. Similarly, the % of respondents exceeds 100 because many respondents identified more than one kind of support as helpful.

Table 2: Student Appointment Feedback 2018/2019 (Most Helpful Areas of Support)

| <i>Topic</i> | <i>Count</i> | <i>% of respondents</i> |
|---|--------------|-------------------------|
| Feedback and advice on writing assignments | 115 | 64.2 |
| Brainstorming/discussing ideas | 10 | 5.6 |
| Structure/organization/format | 20 | 11.1 |
| Grammar/spelling/style | 32 | 17.9 |
| Referencing/citing sources | 8 | 5.0 |
| Thesis statement | 12 | 6.7 |
| Reviewing assignment guidelines & requirements | 14 | 7.8 |
| Study skills | 7 | 3.9 |
| Math | 1 | 0.5 |
| Instructors’ interpersonal skills/approachability | 15 | 8.4 |
| Instructors’ ability to respond to students’ specific needs | 6 | 3.4 |
| General tips/advice | 17 | 12.8 |
| Appointment format | 3 | 1.7 |
| Efficiency/time | 4 | 2.2 |
| Miscellaneous | 12 | 6.7 |

As the Table 2 suggests, students identified a wide variety of topics in their responses to the question “Please describe what you found most useful in this session.” Of course, it is not surprising that the majority of students (~64%, or 115 students) identified “feedback and advice on writing assignments” as the most helpful part of their sessions—this is precisely what the vast majority of students are looking for in their appointments. That said, it is reassuring to know that students generally find this kind of support to be useful. We were somewhat surprised, on the other hand, that almost 18% (32) of respondents indicated that they received useful advice and support on lower order issues such as grammar, spelling, and style. Our instructors generally avoid focusing on these kinds of concerns during appointments, and always avoid “editing” or “proof-reading” students’ writing. Any feedback students receive with regards to sentence-level concerns generally comes in the form of a mini-lesson or question-and-answer discussion where the student identifies and fixes an error and the instructor confirms that the correction is, indeed, correct.

The appointment feedback data also suggest that students appreciated the opportunity to review the assignment guidelines and requirements in order to interpret the assignment goals and expectations correctly (~8% or 14 students). Interestingly, students reported that reviews of assignment guidelines were often combined with feedback on the assignment draft, and many students indicated that these provided them with a direction to start. There were also a significant number of positive comments regarding instructors’ ability to listen to student concerns, discern problems and provide solutions, and provide general advice on writing and study skills.

Table 3 provides an overview of students’ suggested areas for improvement in the RGASC’s face-to-face appointments. While most students (almost 36%) were satisfied with their experience at the RGASC and had no improvements to recommend, approximately 29% of respondents requested changes to appointment availability, drop-in availability, and the length of the sessions. All 24 students who commented on appointment and/or drop-in availability indicated a preference for more appointments / drop-in sessions, while 23 of the 28 students who mentioned appointment length wanted more time per consultation.

Another subset of respondents (~15% or 26 students) made reference to the actual content of appointments, although suggestions varied widely. Examples of some repeating themes include providing more general advice or tips that they can apply outside of a specific assignment, prioritizing the most problematic areas of their assignment, and wanting more detailed feedback.

A small proportion of students (~7% or 13 respondents) also wanted more discipline- or assignment-specific assistance. While a couple suggested uploading the assignment guidelines ahead of time and allowing the instructors to review it before the appointment, there were also suggestions that the online booking system specify instructors’ areas of expertise.

We were heartened to note that very few respondents (5% or 9 students) requested improvements to our marketing strategies and methods we use to communicate with our stakeholders. As was discussed above, we have invested significantly in this area in the past

year, so we interpret this feedback as confirmation that this work is having the desired impact.

Table 3: Student Appointment Feedback 2018/2019 (Areas for Improvement)

| <i>Topic</i> | <i>Count</i> | <i>% of respondents</i> |
|---|--------------|-------------------------|
| No suggestion/satisfied with service | 64 | 35.8 |
| Improve availability/number of appointments/number of drop-in hours | 24 | 13.4 |
| More flexibility with time per appointment/better time management | 28 | 15.6 |
| Interactive online appointments | 1 | 0.5 |
| Improve booking system/better notifications | 7 | 3.9 |
| Change contents of appointments | 26 | 14.5 |
| More detailed/specific feedback | 3 | 1.7 |
| Prioritize most problematic areas | 3 | 1.7 |
| More tips/general advice | 5 | 2.8 |
| Better explanation/give examples | 5 | 2.8 |
| Provide written copy of feedback | 3 | 1.7 |
| Grammar/edits | 3 | 1.7 |
| Have instructor familiar with discipline/assignment | 13 | 7.3 |
| Review assignment outline before appointment | 3 | 1.7 |
| More information about services | 9 | 5.0 |
| More specific details about appointments (skills) | 3 | 1.7 |
| Better advertising | 3 | 1.7 |
| More resources available | 1 | 0.5 |
| Public review page | 1 | 0.5 |
| Negative experience | 3 | 1.7 |
| Miscellaneous | 6 | 3.4 |
| Meaning unclear | 6 | 3.4 |

2) *Writing Retreats*

We continued to offer Writing Retreats for a third consecutive year. These sessions were intended to not only provide students with a different way of interacting with a writing instructor, but also to create a relaxed, supportive environment where students could sit down and do some actual writing.

Table 4 summarizes the total number of attendees and unique attendees. The Fall sessions ran from September to December while the Winter sessions ran from January to April.

Table 4: Writing Retreat Program Overview 2018/2019

| <i>Session</i> | <i>Total number of attendees</i> | <i>Total number of unique attendees</i> |
|----------------|----------------------------------|---|
| 2016 Fall | 51 | 39 |
| 2017 Winter | 53 | 34 |
| 2017 Fall | 41 | 34 |
| 2018 Winter | 45 | 26 |
| 2018 Fall | 132 | 82 |
| 2019 Winter | 70 | 51 |

This year, we held the Writing Retreats in our new space on Monday and Thursday evenings, from 4:00pm till 7:30pm. Last year we had only one two-hour Writing Retreat per week, so our offerings this year increased significantly. As in previous years, the Writing Retreats were facilitated by a Writing Instructor who provided feedback on writing in progress and encouraged students to stay and write for as long as they liked. Snacks and coffee were offered to attendees. A total of 202 students attended the Writing Retreats held between September 2018 and April 2019, up from the 86 who attended the Retreats last year. Attendance was much better in the Fall semester than in the Winter semester (a pattern we saw this year in almost all of our programs and services). More generally, students in the Fall term came in groups to write with other students, while students in the Winter term came with specific questions or concerns and tended to use the Writing Retreat more like a booked appointment.

As is typical with this kind of support, many of the students who participated in the Retreats were repeat visitors. Not surprisingly, we had between zero and three attendees earlier in the Fall term, and then between 10 and 12 at a single session towards the end of that term. Many of the questions or concerns addressed during these kinds of sessions are very similar to those that are brought to a formal, booked appointment, including the following:

- How to write a thesis
- How to organize a paragraph or essay
- How to write in different genres (annotated bibliography, book review, research essay, etc.)
- How to research more generally
- APA/MLA/other formatting problems
- Emotional issues (e.g., perfectionism, procrastination and anxiety) connected with writing

Some students attended the Retreats because they had put themselves on strict deadlines and were using the hours in that space as a way of holding themselves accountable.

The instructors who led the Writing Retreats this year agree that one of the pedagogical strengths of this model of writing is its open-endedness. Students are encouraged to come without any preparation; once they are there, they can start writing, articulate their concerns or ask their questions, and find a solution. This is different from a booked appointment, where students are encouraged to come prepared with specific questions about writing they have already completed. Another strength of this approach is that it provides students with writing anxiety and students who have trouble focusing with an opportunity to work in a supportive environment where they see other people (including the instructor) getting writing done.

Finally, students often come to Writing Retreats with friends and therefore feel more at ease and better able to solve problems they aren't always aware that they have. For many students, the group format appears to make it easier for them to come for help, perhaps because it feels like there is less at stake. This informality and flexibility help to ensure that the RGASC is providing access to its services for a greater variety of students.

Of course, this model of writing support is not for everyone—no one model is. Some students may feel insecure asking questions in a public space; others like to “perform” their abilities for others, and so very publicly explain their thinking out loud so others can admire them, which can be distracting for everyone in the room; and still other students are likely to be distracted by the conversations between the instructor and other students. We are confident, however, that this initiative is addressing a need and so we intend to not only continue, but also expand Writing Retreats next year. We will also be conducting a formal assessment of the writing retreat model in 2019/2020.

3) *Math Drop-Ins*

We continued to offer math drop-ins in 2018/2019, increasing the number of hours per week and completely eliminating regularly booked Math and Science appointments. Details on these are provided in the Numeracy Support section below.

4) *Recent Changes*

As anticipated, moving to the RGASC's new home in the North Building allowed us to make a number of changes to our face-to-face and small group support programming. First, the configuration of the new space (with better security, an open reception area, and offices near the front) made it easier to extend our operating hours till 7:30 four days per week, even without a receptionist on site after 5pm. Second, having a good-sized conference room that did not have to double as a shared office for face-to-face consultations made it possible to offer Writing Retreats on site. Third, having three offices for Writing Instructors to conduct private consultations allowed us much more flexibility for scheduling appointments and the capacity to offer more each day.

Acting in response to feedback from the RGASC's Advisory Committee, the Administrative Staff made considerable efforts in 2018/2019 to improve the Centre's

marketing and communication strategies. First, the RGASC's website was completely redesigned to make it more accessible and user-friendly for all of its stakeholders. Most of the content on the site was updated and many new resources were created, including skills-instruction videos, math tip sheets, writing advice files, updated news about RGASC faculty and staff members' academic accomplishments, and new background documents for many programs. Second, the Centre's social media presence was dramatically enhanced, with updates of programming and services regularly posted and shared on Facebook, Twitter, and Instagram (the latter having been added to the RGASC's tool set in August of 2018). Third, "tables" staffed by Work Study students and RGASC employees were set up around campus in both Fall and Winter terms to promote the RGASC's programming. Finally, posters were created to provide a weekly overview of RGASC programming; the posters were displayed at the RGASC and distributed to Departments across campus. This combination of analogue and digital promotional strategies significantly increased awareness of the RGASC across campus and likely contributed to the increase in traffic (an average of 1700 people per month arriving at the Centre looking for academic support) we have experienced in the Front Office in the last year.

Other changes at the RGASC were precipitated by the unexpected increase in student enrolment at UTM. Because the additional students (many of who were international students) generated greater demand for RGASC programs and services, the Office of the Dean provided the RGASC with increased funding to support those students. This funding was used to hire an LTA and additional CUPE Unit 3 Writing Instructors who were able to help existing faculty and staff to work evenings, facilitate Writing Retreats, run ELL drop-in sessions, offer Math Drop-In Sessions, and teach workshops.

5) Future Directions

The University of Toronto is shutting down the custom-designed Automated Booking System used by most of its Writing Centres this summer. As a result, the RGASC has been in discussions with a commercial vendor, WCONLINE, to purchase a license for its web-based scheduling, recordkeeping, and booking system. WCONLINE is widely used at university Writing Centres throughout the United States and Canada and offers the following features that the RGASC is eager to explore: an online consultation module with audio, video, and text chat, and synchronous whiteboard; an eTutoring module with file upload and written response tools; graphical reports on utilization data; customizable demographic, appointment, post-session, and survey forms; and screen-reader compliant and mobile sites. The RGASC is in discussion with I&ITS to ensure WCONLINE conforms to UTM's privacy and internet security policies, and aims to pilot the new system on July 1, 2019.

Part Two: Core Focus Areas

In addition to offering individualized support for undergraduate students in writing, numeracy, and general academic skills, the RGASC has five core focus areas for its programming and service delivery:

- 1) Writing Support
- 2) Numeracy Support
- 3) English Language Learner Support
- 4) Graduate Student Support
- 5) Faculty Support
- 6) Work-Integrated Learning Support (new for this year)

The following pages offer a brief overview of each of these core areas of focus.

1) *Writing Support*

Writing Development Initiative (WDI)

The largest single writing-related project that the RGASC supports is the Writing Development Initiative (WDI), which provides financial and organizational support for departments to enhance the writing components in their courses. This is done through discrete projects, usually linked to a particular course, but potentially impacting several courses. To ensure that these projects are appropriate in terms of program and discipline, and that they respond to authentic needs, individual faculty members or Departments are encouraged to take the initiative to submit proposals for interventions to improve the development of writing in their programs. The RGASC's Writing Specialist provides support as needed in the development of proposals, and the completed proposals are adjudicated by the Writing Development Initiative Committee, whose members include faculty representatives from the Humanities, Social Sciences, and Sciences, as well as the RGASC, the Library and the Dean's Office.

Typically, proposals to the WDI involve a combination of extra writing assignments (often scaffolded), writing-focused tutorials, additional instruction in disciplinary writing practices, and enhanced formative feedback on written assignments. In 2018/2019, 32 courses across the campus with total enrolments of close to 6,000 students were directly supported; as well, an additional 20 courses in Historical Studies received WDI support that enabled Teaching Assistants to provide feedback on outlines of student essays. The number of proposals for new projects has been declining over the past several years (in 2018 there were three; this year there were three again); however, given the number of courses already supported, this is to be expected, as UTM does not have an unlimited number of courses with instructors who are invested in enhancing their writing support. In future the WDI will continue to support promising proposals generally, and we particularly hope to inspire proposals from departments with no courses currently receiving WDI support, so as to help broaden UTM's writing community, both in terms of students and faculty.

Once approved, projects are often repeated, and the WDI encourages faculty to reflect on and develop their projects over time. If a given project is successful and has attained a reasonably stable form, the WDI Committee may recommend that its costs be transferred into the departmental base budget. Thus, the WDI should be seen as a mechanism through which innovative uses of writing instruction and instruction through writing can be supported, and faculty innovation and reflection can be encouraged and rewarded. It should be noted as well that a) many of the faculty working with the WDI are also involved in other RGASC or UTM initiatives such as the Teaching-Learning Collaboration seminars and workshops or pedagogy-focused Communities of Practice, and b) TAs in WDI-supported courses are trained in using and assessing writing. Thus, the WDI is a key part of the teaching and learning community at UTM.

The most significant development in the WDI over the past year has been the enhancement of our project assessment process. To begin, it should be noted that assessment of these projects has, historically, been problematic. On the one hand, it is crucially important because it helps develop and refine the program or course and its preferred writing pedagogy; enables instructors to improve student learning and student writing; supports the professional development of TAs and faculty; and ensures that the WDI is being a good steward of the funds entrusted to it. On the other hand, such assessment is not in many faculty members' comfort zones and can be both time- and resource-intensive.

In order to help resolve this paradox, since 2017/2018, the Office of the Dean has committed to providing the RGASC with the financial resources to design, administer, and run a "basic assessment package" involving pre- and post-assessment of student writing (focusing on skills targeted by the funded interventions), the collection of student views on the interventions and their own writing, as well as formal interviews with instructors and TAs. While assessment of WDI projects is a condition of funding, there is no obligation to take advantage of this particular package: instructors are free to devise their own approaches to assessment.

The data collected by the WDI Writing Specialist and the team of assessment RAs that he assembles and trains are shared with course instructors; instructors then use these data in their Final Reports on their projects, where it helps inform and supports their reflection on their projects, whether in terms of evaluation of the project's efficacy, or the modification of the project. (Final Reports also serve as applications for continued funding.) As well, these data provide instructors and the WDI Committee with valuable information about effective writing pedagogy, enhancing our overall competence and providing a basis for research.

In 2017/2018, we began this move into more rigorous assessment, working with roughly half of the WDI-supported courses and collecting writing samples from 10% of the student population in those courses. In 2018/2019, as mentioned above, our assessment activities have expanded and become more informative, in a number of ways. First of all, we raised our sampling rates to 15% of the students in assessed classes. Secondly, we began carrying out assessment in courses that had WDI funding as part of their base budget, as discussed above, in the Departments of Biology and Sociology. Many of these courses (BIO152;

BIO153; BIO202; BIO203; BIO205; SOC205; SOC221) are quite large, and dramatically increased the scope of our assessment activities.

Finally, having now had a year of experience in working with the “basic assessment package,” this year we and course instructors were more comfortable with modifying it so as to better assess specific projects. To provide two examples: in several cases we collected three samples, whether assessing them all together or in combinations (e.g., in BIO205 we compared an introductory piece of writing with a final draft of a paper, and also compared the rough draft of the paper with the final draft); as well, in several courses we assessed student response to specific TA feedback rather than working solely with the student writing samples.

Thus, it appears that we were too modest when we wrote in last year’s Annual Report that “we anticipate no real changes to the [WDI assessment] process next year apart from minor revisions to scheduling and timelines.” Instead, a great deal has changed, dramatically expanding the scope, the rigor, and the range of the assessment process, enabling us to provide instructors with a great deal more data about their students’ progress, data which they can use “in terms of WDI planning, but also to inform our individual and group teaching,” as one instructor put it when discussing the assessment data with the RGASC’s writing specialist.

In their Final Reports (due at the end of May), instructors will be able to provide detailed discussion of what their data reveal about the utility of their specific projects; speaking generally, it seems that for students across the disciplinary curriculum saw marked improvement in terms of sentence level (grammar, punctuation) and structural issues, which in some cases were accompanied by improvement in critical thinking skills (e.g., assessing evidence) and in some cases were not.

For an example of the former case, the RA marking writing samples selected from short assignments in a third-year social sciences course noted that “in the area of ‘Critical Engagement with Research,’ samples of both the first and second assignment make quite good use of evidence/secondary sources, with improvements in the second assignment samples, where either more evidence is provided or it is more relevant to the argument being made. We also see improvements in the way that evidence is presented, explained, and linked to an argument. Rather than simple summary of an article, for example, the relevance of the source is explained. This is the case even in the weakest set of samples.”

For an example of the latter case, the RA marking writing samples from a critical review assignment in a science course noted that “the improvement among C students’ structure was particularly significant when compared to the ‘interaction with text’ [i.e., the source text that they were critically reviewing] category, which saw no difference at all [between the first and second samples]. This suggests that while these students’ critical thinking skills may not have been affected ... their writing skills did improve.”

We should also note the expansion of the WDI’s online presence this year (<https://www.utm.utoronto.ca/asc/writing-development-initiative-wdi>): many documents (including past calls for proposals, assessment criteria, and sample proposals) can be found online, as can course materials and teaching resources used in WDI-supported courses and generously provided by faculty. Providing these resources, which we will continue to

augment in the year to come, is another way in which the WDI supports the writing community at UTM and outside.

TA Training

In order to support WDI-funded courses, the RGASC works closely with TAs, a group that is often underappreciated in the development of pedagogical initiatives. At the start of both the Fall and Winter terms, we offered seven-hour Writing TA Training Sessions, at which TAs learned about the benefits of enhanced focus on disciplinarily relevant aspects of writing in their courses, and were given tools for, and training in, creating writing-focused environments. The Writing TA Training Sessions were attended by a total of 46 TAs from across the disciplines, and in several cases, the TAs attending were “head” or “writing” TAs, passing their training on to the other course TAs. In addition to these training sessions, the RGASC provides ongoing support to TAs during the term as they design, deliver and assess writing work.

Based on the feedback from anonymous written 6 question surveys distributed at the end of the training when the Writing Specialist was out of the room, TAs appreciated this training. When asked “on a scale of 1-5, with 5 being the most useful, how useful was this training for your professional development?”, the average in fall was 4 (30 responses) and in winter was 4.5 (13 responses). TA responses to the survey indicated that they particularly appreciated the modules on a) assessment principles and best practices, b) working with grammatical issues, and c) working with ELL students. The most consistent items of concern had to do with the timing (start of term) and length (7 hours in one day); these are reasonable concerns, but there is not much that can be done about them given the hiring process and the practicalities of gathering TAs, many from downtown, at UTM.

Our work with TAs extends beyond the WDI: in addition to the WDI-related training session mentioned above, in 2018/2019, we ran 9 writing-focused training sessions (typically two or three hours in length), integrated with course material or assignments.

Instructor Support

In addition to the WDI, the RGASC also offers support to instructors for course or assignment design. In 2018/2019 we were able to directly contribute to the creation, integration and execution of writing-based tasks in the following courses: ANT313, BIO152, BIO153, BIO203, BIO205, CHM110, CSC290, ENG101, ENG202, ENV201, GGR111, GGR277, HIS101, HIS308, POL200, POL208, POL368, POL440, POL443, RLG101, SOC100, SOC205, SOC209, SOC219, SOC224, SOC310, SSM1050, and VCC101. (This total does not include consultations with faculty preparing WDI proposals.)

These contributions often included assisting with development of assessment criteria (and associated rubrics) that help improve feedback, consulting on creating scaffolded assignment structures, and helping develop tools to assess the efficacy of writing instruction, such as student surveys and analyses of student writing.

Direct Student Assistance

In addition to regularly scheduled face-to-face meetings, discussed elsewhere in this report, our direct contact with students takes place in course-specific drop-in sessions focused around specific assignments, presentations and workshops in classes, and integration in special events. In 2018/2019, we ran drop-in sessions for the following courses: ANT313, BIO152, BIO153, BIO202, BIO203, BIO205, CCT109, CCT110, CCT222, CINN101, CSC290, ECO373, ECO400, ENG101, ENG102, ENG140, ENG202, ENV201, ERS111, ERS211, FAH101, GGR277, HIS101, POL200, POL208, POL368, POL440, RLG101, RLG204, SOC205, SOC219, and VCC101. (These drop-ins are included in the total number of appointments reported above in Part One: General Undergraduate Support.) These sessions involve short meetings with students to discuss a specific assignment: they enable us to assist students by addressing focused, immediately relevant issues. In addition to providing support with regard to specific assignments, these drop-in sessions raise student awareness of the RGASC, bringing significant numbers of students from the relevant courses to our face-to-face and online appointments; they also were enthusiastically embraced by faculty and helped keep the RGASC up to date with activities in these courses. These are significant benefits and make them worth continuing. One concern for us, which we signalled in last year's Annual Report, has been that many are under-attended. This year, we enhanced our promotional efforts and managed to raise attendance at least for fall term drop-ins, although winter term drop-ins remained under-attended, likely due to student fatigue by that point of the year. For next year, we are considering not offering winter drop-in sessions unless there is a very strong and focused promotional plan—for instance, winter-term BIO153 drop-ins this year used an online signup sheet for students rather than the standard “first come, first served” format, and this seemed to boost attendance.

We also gave 76 writing-focused presentations or workshops in credit-bearing courses from across the disciplines (this number does not include any co-curricular offerings, such as the workshop series discussed directly below). The presentations and workshops covered topics such as academic integrity, paragraph structure, thesis statements, critical reading and thinking, and exam writing.

Workshop Series

In 2018/2019 we ran two workshop series, offering each in both the Fall and Winter terms. The Elements of Academic Writing consists of eight 90-minute workshops scheduled so as to align with student writing needs as the term progresses (with topics moving from understanding the assignment through to proofreading). To complement it, and to make clear the link between critical reading and critical writing, we also ran the Elements of Academic Reading series, which consisted of six two-hour workshops addressing topics such as reconstructing the research context of articles and identifying and critiquing arguments and counter-arguments. These series averaged between 2 and 10 attendees per session; students attending a minimal number of sessions and completing the required homework were eligible to receive a Co-Curricular Record (CCR) notation on their transcript.

Student feedback was elicited through responses to a final “reflection” assignment. For the Reading series, 3 students submitted reflections (2 in fall, 1 in winter), while 4 did for the Writing series (3 in fall, 1 in winter). The feedback indicates that the material in these workshops is valuable and was put to use—one student noted, for instance, that taking the Reading series made them “more able to detect the main component of the paper[s]” that they had to read; a student in the Writing series singled out the material on paragraphing and revision as especially useful, and noted that “I was clearly subject to the Dunning-Kruger effect. I did not realize how much my writing could be improved until I took the time to try to improve it.” Despite such positive feedback, consistently low attendance at the series has been troubling, and it has been difficult to provide relevant learning objects and focuses to groups that span the disciplines. For next year we will combine aspects of both the Reading and Writing series into one series, to be offered in several sections, and we will be linking each section to specific courses or a specific program (though attendance will not be restricted to students in those courses/programs); this will enable us to promote more efficiently and to tailor each section to more defined student needs. The series will not address course-specific content, but rather will focus on teaching discipline-specific reading and writing skills.

Table 5: Elements of Academic Writing Workshop Attendance

| <i>Topic</i> | <i>Fall Attendance</i> | <i>Winter Attendance</i> |
|---|------------------------|--------------------------|
| How to understand the writing assignment | 12 | 8 |
| How to create outlines and reverse outlines | 9 | 4 |
| How to critique and present your argument or purpose | 13 | 9 |
| How to use and cite information from others | 5 | 4 |
| How to write clear, convincing and well-structured paragraphs | 5 | Cancelled due to weather |
| How to write sentences that flow | 4 | 3 |
| How to edit your work (overview) | 6 | 4 |
| How to edit your work (line by line) | 5 | 3 |

Table 6: Elements of Academic Reading Workshop Attendance

| <i>Topic</i> | <i>Fall Attendance</i> | <i>Winter Attendance</i> |
|---|------------------------|--------------------------|
| Why do academics write articles? | 14 | 4 |
| Quick and efficient reading strategies | 7 | 7 |
| The article in the context of its field of research | 6 | 3 |
| Identifying and critiquing arguments and counter-arguments | 4 | 2 |
| The basic element of academic thought: the paragraph | 4 | 2 |
| Words, expressions and nuance: getting the most out of every sentence | 3 | 2 |

Looking back, it seems that this year has been one of development and refinement of the enormous growth that we experienced in 2016/2017 and 2017/2018. Whether in terms of

the WDI's assessment process, the robust expansion of the WDI's online presence, the reconsideration of drop-ins, or changes to the Elements workshop series, this year has been focused on bringing out more of the potential of the plans that we have made.

2) Numeracy Support

Math Drop-in Support

In the 2018/2019 academic year, the RGASC continued to provide math drop-in support sessions for undergraduate students. These sessions provide an opportunity for any student who is experiencing difficulty with mathematical concepts and ideas within a course to drop by the RGASC during the scheduled hours. The math drop-ins' primary focus is to work on foundational mathematical, statistical, and computational background knowledge in order to bridge the students' curriculum gap (concepts presented in courses, however, are not re-taught or addressed). As well, students are shown how to better prepare for tests and assignments, how to find various resources for assistance, and how to study mathematics.

Math drop-ins were promoted by the RGASC front office and communications personnel through the use of Twitter, Instagram, and Facebook and conventional signage throughout the academic year. As well, the math drop-ins, along with facilitated study groups (see below), were advertised by the course coordinators of the first-year calculus and second-year linear algebra courses in the Department of Mathematical and Computational Sciences (MCS). Course coordinators were asked to post information about the math drop-ins on the course website and before any term test and final examination. As well, posters indicating the schedule hours of the math drop-ins were displayed in the MCS Math Help Centre (DH2072), a space where students work together or seek assistance from the Teaching Assistant (TA).

In Fall 2018, the math drop-ins were facilitated by the RGASC Numeracy Specialist (NS) who was available 7.5 hours per week and by appointment. Typically, the drop-ins lasted between 15 and 60 minutes depending the nature and severity of the student's concern. Through an informal and confidential discussion, the NS and the student worked together to fill in gaps in the student's background knowledge. As well, the NS provided suggestions on how to achieve optimal understanding of mathematics and directed the students to helpful resources such as the Math Tip Sheets on the RGASC website. The ultimate goal of the drop-in is to help the student feel more confident and comfortable working with the mathematical concepts and ideas in the context of a course.

In the Winter 2019 term, another math instructor was hired to provide more opportunities for students to visit the RGASC for math help. The NS was available for 6 hours per week, and the math instructor was available for 4 hours per week. The NS trained and mentored the math instructor during the term.

Appointment Data

Table 7 shows that the RGASC provided roughly the same level of face-to-face math support over the three years. In the 2018-2019 academic year, there are two possible explanations for why the number of math drop-in appointments did not increase as

projected: a number of snowstorms that forced UTM to close, and the late emergency hire of a math instructor in the Winter term.

Table 7: Over the Years Comparison of Students Attending Math Drop-in Sessions

| <i>Academic Year</i> | <i>Math Drop-in Support Attendance</i> |
|----------------------|--|
| 2016/2017 | 147 |
| 2017/2018 | 152 |
| 2018/2019 | 167 |

The number of face-to-face appointments for each of the past three terms is presented in Chart 5. The additional math instructor was hired to support the NS in the Winter term; unfortunately, due to the circumstances mentioned above, there was a significant drop in the number of appointments this term. Notwithstanding these appointment data, in future we intend to hire a math instructor each term to conduct a few hours of math drop-ins each week.

Chart 5: Number of Math Drop-in Sessions per Term in 2018/2019

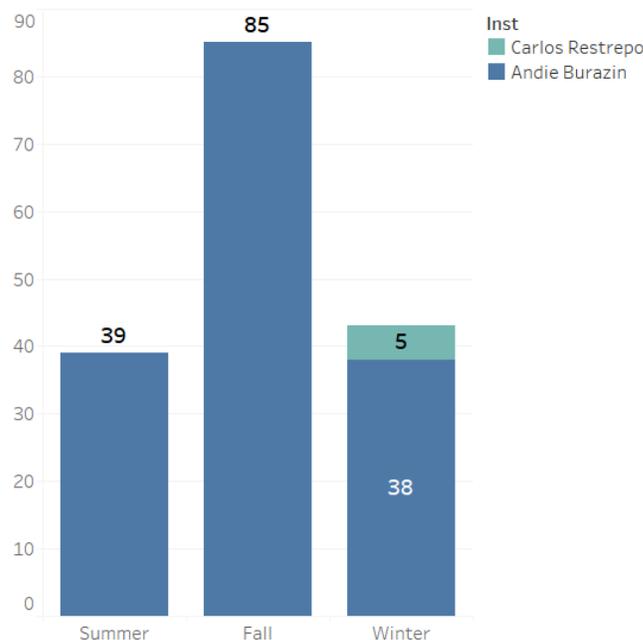
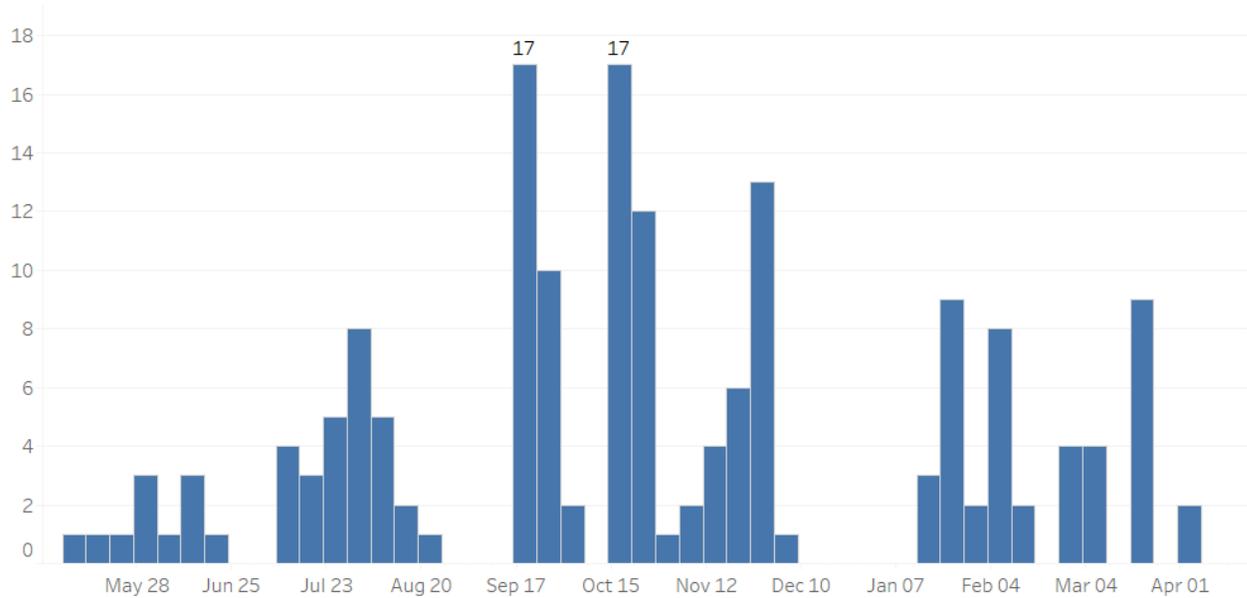


Chart 6 demonstrates that students generally seek math help at the beginning of the fall term and around term tests. When students attend math drop-ins, the NS and math instructor emphasize that preparing for assessments a week before an assessment is not helpful in mastering their mathematical skills. Mathematics, as with many other skills, requires continuous practice over time. Thus, an important part of the pedagogy the NS and MI employ involves providing effective tips on time management and test preparation skills.

Chart 6: Number of Visits over Time in 2018/2019 Academic Year



Out of the 167 face-to-face appointments, 147 were used by students taking first-year mathematics course (note: for purposes of our analysis, we are considering MAT223H in this count because there is no pre-requisite to take it). Some students from other courses and disciplines, however, also utilized the math drop-ins, since various mathematical, statistical, and computational concepts are required in their lectures and assessments. Table 8 shows the breakdown of the math drop-ins for each course.

Table 8: Courses for which Students Sought Assistance in Math Drop-in Sessions

| MAT135 Y | MAT133 Y | MAT134 Y | MAT102 H | MAT223 H | CSC236H | STA256H | Other |
|-------------|-------------|-------------|-------------|-------------|---------|---------|-------|
| 95 | 29 | 12 | 10 | 1 | 4 | 2 | 16 |

Student Feedback

Students feedback on the RGASC’s Numeracy Support was generally very positive. When asked to rate the “quality of the assistance you received”, 80% of respondents rated the assistance as Excellent and 20% as Good. The following comments are representative of students’ experience of the Math Drop-ins:

“For my reports, not only did they point out my mistakes but also told me how to improve it. And the math specialist also made sure I was understanding it properly.”

“Very helpful resources.”

“[The instructor] was very quick to explain concepts in a very memorable and helpful manner.”

Discipline-Specific Numeracy Support

The RGASC expanded on the discipline-specific numeracy support in the 2018/2019 academic year. The NS provided support ranging from developing numeracy-related components within a course assignment to creating and delivering instructional workshops. The objective of this support was to improve the students' abilities to engage with confidence in working with quantitative information. In short, the NS tried to create opportunities for students to apply mathematical, statistical, and computational approaches in order to make informed decisions, problem-solve, and logically think within the context of a course.

Biology

The numeracy support for BIO153H5 (Diversity of Organisms) continued in Summer 2018 and Winter 2019. Working with new BIO153H5 instructors for each iteration of the course, numeracy components were developed for a number of new and existing assignments. As well, numeracy support was integrated for the first time into a lab for BIO202H5 (Introduction to Animal Physiology). Details on how this support was delivered are below:

- **BIO153H5S (Diversity of Organisms): Summer 2018**

In consultation with the NS, the course instructor created a new assignment, which was partitioned into a three-part case study used throughout the course. Before administering the assignment, presentation slides created by the NS on basic functions were discussed in lecture by the course instructor. Within one of the parts of the assignment, portions of the previous BIO153H5 numeracy work were used to better assist students in interpreting the behaviour of the graphs of functions in the context of the assignment.

- **BIO153H5S (Diversity of Organisms): Winter 2019**

The course instructor wrote two assignments based on academic biology papers. The papers involved several numbers and statistical information to explain the outcomes of an experiment. In order for the student to understand some of the quantitative information, such as confidence intervals, standard error, etc., the NS created numeracy questions, along with solutions, to embed within the two assignments. The numeracy questions gave students an opportunity to play with numbers to gain an understanding of the data and its interpretation as presented in the paper.

- **BIO202H5S (Introduction to Animal Physiology): Winter 2019**

In one of labs, students had to extrapolate and interpret data from a graph in a pre-lab and apply the same procedure to their experimental results. The NS, with the guidance of the course instructor, developed presentation slides to embed with an existing pre-lab. The head TA was trained by the NS on how to explain and deliver the new presentations slides during the mandatory TA pre-lab meeting for all TAs.

Master of Management of Innovation (MMI) Program

- **Calculus and Statistics Review Workshop, September 2018**

For the second time, the representatives of the MMI program asked the NS to deliver a workshop based on calculus (as seen in MAT135Y5Y Calculus and MAT134Y5Y Life Science Calculus) and statistics for their in-coming graduate students. The purpose of the workshop was to review derivatives, optimization, and integration from calculus, as well as basic statistics, such as mean, variance, and standard deviation, as these pertain to the MMI program. The NS developed four two-hour workshop-style sessions where a mini-lesson accompanied in-class exercises for students to work on. For each session, presentation slides were developed along with tip sheets and homework questions with full solutions. All material was accessible online.

Physics

The supplementary mathematics/physics support sessions piloted in PHY146H5F (Principles of Physics I) and PHY147H5S (Principles of Physics II), were continued and expanded in the 2018-2019 academic year. The success of these sessions and students' feedback inspired the Department to extend this support to two second-year physics courses: PHY241H5F (Electromagnetism) and PHY245H5S (Waves and Vibrations). These second-year courses require students to know advanced mathematical concepts from multivariable calculus, vector calculus, complex variables, and differential equations, all of which are rich in content, challenging to master, and taught within their own designated mathematics courses much later.

The sessions were optional and offered outside of the regularly scheduled time (students were polled to identify the best times.) With the assistance of the course instructors, the NS and a TA (a Ph.D. physics candidate working under the NS's supervision) created the material for these sessions. Each session introduced, lecture-style, the mathematical or physics concepts and then provided students with an opportunity to work collaboratively on related exercises and problems. There were no graded assessments, nor was credit given. The first session, scheduled in the first half of the week, focused on the necessary mathematical techniques and calculations; the second session, scheduled toward the end of the week, tied the mathematics to the physics applications discussed in the course. The supplementary mathematics/physics support sessions not only helped students better understand mathematics and how it is applied, but also made them become familiar with and internalize the terminology within the context of physics. Additional details on how this support was provided are below:

- **PHY146H5F (Principles of Physics I) Math/Physics Sessions, Fall 2018**

The NS and the TA constructed five supplementary mathematics/physics support sessions. The specific topics discussed were the following: integration for kinematics; derivative and gradient for dynamics; integration of force and the dot product of vectors for energy, momentum, and collisions; cross product of vectors for rotational kinematics, torque, and angular momentum; and the ordinary differential equation for Newton's second law and its final solution for simple

harmonic motion and waves. These mathematical and physics concepts expand on material students experienced in high school.

- **PHY147H5S (Principles of Physics II) Math/Physics Sessions, Winter 2019**

In five supplementary mathematics/physics support sessions, the NS and the TA delivered material to cover the following topics: linear algebra review for charges and Coulomb's law; line integrals and surface integrals for Gauss's law; separable ordinary differential equations for current and Kirchoff's law; and, flux through the derivative for magnetism, Ampere's law, and Faraday's law. These sessions were tailored to make the students feel more confident to apply the mathematical concepts in physics applications.

- **PHY241H5F (Electromagnetism) Math/Physics Sessions, Fall 2018**

Given the advanced mathematical concepts involved in the course, seven supplementary mathematics/physics support sessions were developed. The focus of the sessions was more on the vector calculus concepts and ideas needed to understand, solve, and interpret physics applications within the course. Some vector calculus topics that were discussed are Del operator and gradient, line integrals, surface integrals, volume integrals, Divergence theorem, Stokes theorem, and Poisson equation. These topics are very challenging, but are only required to be used as an analytical tool in the course.

- **PHY245H5F (Waves and Vibrations), Math/Physics Sessions, Fall 2018**

In four supplementary mathematics/physics support sessions, students were exposed to different ordinary differential equations – understanding the general form of the equation, solving it, and interpreting the final solution (at times working with complex variables). This mathematical content is again challenging and requires time to master.

Unlike the rigidity and predictability of many first-year courses, the customization and fast-paced nature of the second-year courses required close collaboration between the NS and TA and course instructor. From the NS's perspective, the challenge was in creating a mini lesson, along with an adequate sequence of exercises, about the more complex content that takes time to fully understand. The NS found it difficult to teach this subject matter in the limited time available. This time constraint is an issue that will be addressed in future iterations of this initiative, should they occur.

In the second iteration of the mathematics and physics sessions for first-year physics courses, the attendance was lower than expected. Each term started with a strong attendance, with approximately 20% out of a class of 70 students, but as the term progressed, attendance dropped slightly to 15%. One explanation for the lack of student engagement comes from the pre- and post-feedback questionnaires from the now second-year students who attended the sessions in their first-year. They indicated that the level of mathematics being presented in the sessions was not always aligned with that presented in the first-year physics courses. This issue is difficult to address as the depth of mathematics is up to the course instructor. However, the now second-year students felt that the second-

year material was easier to learn and internalize because of the supplementary support they received in first year.

For both of the second-year physics courses, approximately 35% of a class of less than 50 attended the sessions regularly. Responses on the questionnaires indicate that those who attended found the support very helpful for understanding mathematical concepts and their applications to physics. In particular, the students felt more confident in handling physics questions that required a deeper understanding of math.

In some cases, scheduling conflicts which prevented students from attending the mathematics and physics sessions (which are not part of the official course schedule). Learning from the previous iterations and collaborating with the course instructors in the next academic year, the NS hopes to further develop and fine-tune these sessions, by possibly adding more support sessions or extending each session by an hour.

We have shared this work with the UTM community in the TLC Newsletter (<https://www.utm.utoronto.ca/tlc/cross-disciplinary-collaboration-support-students-supplementary-mathphysics-sessions-physics-majors>), as well as in the Canadian Mathematical Society Notes (to be published in June 2019).

Numeracy-Focused Training Workshops and Teaching Support

- **MCS Math TA Office Hours: Fall 2018 and Winter 2019**

The Numeracy Specialist organized and ran a “TA Office Hours” pilot project in the Department of Mathematical and Computational Sciences. This initiative provided an open space for TAs to come and discuss any concerns they had with any of their tasks or experiences. Some of the concerns were anonymously shared with the MCS Math Advisor, Maria Wesslen, to help course instructors better support their TAs.

- **MCS First-time Math TA Training Session**

The MCS Math Advisor, Maria Wesslen, invited the NS to run a 90-minute training session entitled “First tutorial and classroom management” on September 5th, 2018. Tyler Holden, an MCS faculty member, assisted with the development of some session materials. The training included a communication activity and discussion of mock tutorials. TAs received a tip sheet highlighting best practices for running a tutorial, office hours, marking assessments, and communicating with students.

- **Instructor/TA Workshops**

Tyler Holden, an MCS faculty member, invited the NS to help create curricular resources for the “MCS Instructor Information First Session: Boardwork, lesson planning, classroom management” held September 13th, 2018. This session was part of the MCS First-time Math Instructor Workshop series.

Numeracy Development Initiative (NDI) Program

The Numeracy Development Initiative (NDI) was launched through the RGASC in February 2019. This program makes funds available for instructors to support projects that integrate instruction and learning activities on numeracy (quantitative literacy) into courses

across the curriculum. The objective is to help students gain and improve their ability and confidence to employ quantitative reasoning skills which include mathematical, computational, or statistical approaches, when engaging with specific course content, as well as beyond in everyday life. The NDI program and the proposal application for instructors was developed and modelled on those used for the Writing Development Initiative (WDI) and English Language Learner Support Initiative (ELLI).

The Call for Proposals were circulated in February 2019 and five different faculty members submitted proposals before the deadline in April. The Committee will meet in late May to discuss the projects and make recommendations for funding. For more information on the NDI, visit <https://www.utm.utoronto.ca/asc/numeracy-development-initiative-ndi>.

Outreach

- **2019 High School CS/Math Teacher Workshop: Dialogue on CS and Math Education, UTM, April 30th, 2019 and May 1st, 2019**

The NS organized the High School CS/Math Teacher Workshop with four other colleagues in the MCS Department. The workshop's objective is to create a document for incoming students that outlines professor's expectations and identifies strategies for preparing for first-year computer science and mathematics courses. For the first time, we have invited university faculty from all over the GTA and surrounding areas to participate in the workshop.

- **'Transition: from HS to Uni Math', University of Waterloo, April 24th, 2019**

The NS was invited by the University of Waterloo to give a seminar talk about first-year mathematics courses. The talk showcased the work done at the RGASC as well as the prior research the NS has done in the area of transition from secondary to tertiary level in mathematics.

- **Mathematics Outside of the Classroom, Mathematics Education Forum at Fields Institute, March 30th, 2019**

The NS co-organized along with Dr. Miroslav Lovric at McMaster University the Mathematics Education Forum at the Fields Institute with the topic being 'Mathematics Outside of the Classroom'. The objective of the day-long forum was for invited presenters (undergraduate and graduate students, high school teachers, and university instructors) to showcase initiatives at their institution that support students and educators with mathematics outside of the classroom. This was an opportunity to share work done with the supplementary mathematics/physics sessions at the RGASC (presented by Marc De Benedetti, physics PhD candidate), as well as the MCS High School CS/Math Teacher Workshop (presented by Tyler Holden). Details can be found at <http://www.fields.utoronto.ca/activities/18-19/MEForum-Mar> for more information about this event.

- **'Transitioning into First-year Mathematics Courses', Mentor College, March 6th, 2019**

The NS gave a talk on the issues that incoming students experience in first-year mathematics courses at Mentor College, a private high school. Topics of discussion ranged from the very first assessments in calculus courses offered at UTM to how

students can improve on their foundational mathematics skills to succeed in first-year mathematics courses.

- **Math Circles, UTM, November 13th and 20th, 2018**

The organizer of this event at MCS, Marina Tvalavadze, invited the NS to develop and run two two-hour sessions for Math Circles offered at UTM. A Math Circle is a meeting of elementary and high school students who gather weekly to discuss, explore, and engage with mathematics. The objective of the two sessions was to show how numbers tell a story and help us in everyday life. Students worked with numbers through several fun, yet challenging, mathematical problems. The mathematical concepts discussed were later connected to situations in everyday life without the students knowing.

- **2018 High School CS/Math Teacher Workshop: Dialogue on CS and Math Education, UTM, June 5th and 7th, 2018**

The NS and Tyler Holden, an MCS faculty member, took responsibility for the annual High School CS/Math Teacher Workshop. The workshop departed from traditional presentations and focused on having university faculty, high school teachers, and undergraduate students voicing their issues and concerns learning mathematics. The open dialogue formed a supportive community. The revamped version of the workshop was a success with a total attendance of 120 high school teachers. We have shared what we have learnt through the workshop with the UTM community in the TLC Newsletter (<https://mailchi.mp/00c818d9e4d2/teaching-learning-collaboration-fall-2017-newsletter-424797#Spotlight%20-%20math>), as well as in the Canadian Mathematical Society Notes (<https://cms.math.ca/notes/v50/n5/Notesv50n5.pdf>).

Ongoing Pedagogical Research

LEAF Seed Grant

MAT135Y Calculus – Implementing Computational Assignments

The NS and Tyler Holden, a faculty member in MCS, received a LEAF grant to conduct research on the use of computational assignments in first-year math. Presently, first-year calculus courses in the Department of Mathematical and Computational Sciences (MCS) are delivered in a traditional format including assessments done through online/written assignments and supervised tests. As industry moves increasingly towards valuing computational methods over pen-and-paper computation, introducing numerical methods early will give our students an additional useful skill. For the next two summer terms, the PIs will implement computational assignments (CAs) in MAT135Y Calculus, a course that is typically taken by physical science students. CAs are assignments that require students to think computationally and to work with computer code in order to investigate and solve given problems, thus reinforcing their understanding of mathematical concepts. Through their dynamic and interactive nature, these CAs will allow students to experiment with and explore mathematical ideas which are challenging if approached solely by paper-and-pen. These CAs have the potential to improve student performance in MAT135Y and other mathematics and physical science courses. A repository of CAs and related documentation will be created for future use in any first-year calculus course. To examine the effectiveness

of the CAs, we will use a mixed-method approach to identify whether and how CAs contributed to students' learning: a quasi-experimental design (measuring assessment gains) and administration of pre- and post-student feedback surveys. The success of CAs in MAT135Y could lead to the introduction of a new calculus course with an enhanced computational approach. Similar CAs could be implemented in upper-year mathematics courses.

MAT133Y5Y – Renewal

Thanks to the UTM Teaching Development and Innovation (TDI) Grant received in February 2019, the NS and Tyler Holden are developing a concept inventory of some of the mathematical concepts within MAT133Y5Y (Calculus and Linear Algebra for Commerce). The concept inventory will be used to measure the progress of a modified peer instruction scheme. The concept inventory questions will be created to reflect a detailed list of learning objectives and to measure the student gains.

Assessing efficacy of graded assignments in large first-year mathematics courses

The NS and Tyler Holden conducted a research study in MAT133Y5Y (Calculus and Linear Algebra for Commerce) in the 2018/2019 academic year to determine whether students perform better on invigilated assessments, such as term tests, with or without graded assignments. The results will help identify what type of assessments work best for students to succeed in the course. The statistical analysis of the data will begin in Summer 2019.

3) *English Language Learner (ELL) Support*

The 2018/2019 academic year saw a substantial increase in the number of international students who accepted offers to study at UTM; as a result, the number of ELL students was higher than expected. The Office of the Dean provided the RGASC with additional resources to hire a 75% LTA to support this increased enrollment as well as to address the gap due to the teaching release of the ELL Specialist in order to prepare for her continuing status. This year the English Language Learner (ELL) program expanded to include the English Language Learner Initiative (ELLI). ELLI provides financial support for instructors who wish to implement specific ELL programming within their courses. While last year the program was piloted in FAH215 and FAH287, this year it was run in FAH216, FAH289, and ANT101. While the growth was modest, we were able to partner with three new faculty members, which meant greater exposure for ELL support across campus. In the Department of Visual Studies (DVS), the TAs for FAH216 and FAH289 focused on critical reading skills. In Anthropology (ANT101), the TA focused on vocabulary development and structured writing practice to ensure maximum comprehension of lecture material. Attendance numbers for these sessions varied dramatically. In FAH289, an average of 1-3 students attended each session, whereas in ANT101 there were approximately 12 students who consistently attended. On the other hand, in FAH216, there were between 50-60 students each week. We attribute this range to the inclusion of incentivized attendance in the FAH216 class.

While ELLI was an exciting advancement over the past academic year, so too was the increased integration of ELL support into the Academic Culture and English (ACE)

program. It has been challenging to find the right ‘fit’ for the RGASC in the ACE program because of the intensive nature of the core curriculum offered by the School of Continuing Studies (SCS). However, while working with the Office of the Registrar (OR) and the SCS, the RGASC delivered four three-hour workshops to 307 ACE students in July and August 2018. This substantially increased the exposure of the RGASC to incoming ELL students. Because ACE students are in classes of 20-25, the RGASC hired 16 Program Assistants to facilitate individual classes. The first three sessions targeted peer mentorship, library skills, and academic integrity, while the final session included a faculty panel where the ACE students asked questions to high-profile first-year faculty. While only 16% of students responded to the end-of-course survey, the results received were positive, with between 75-83% of respondents indicating that each session was ‘somewhat useful’ or ‘very useful’. Applications are currently being accepted for the 2019/2020 year, and it is expected that ELLI will further expand into the sciences in addition to the current partnerships.

With the addition of ELLI in the suite of ELL offerings, the Professional English Language Skills (PELS) program was scaled back and only offered to courses that had demonstrated past success. This meant that PELS was no longer offered in CSC108 and HIS101, both of which had low attendance rates in previous years, but was continued in FAH101, CIN101, RLG101 (fall and winter), and VCC101. One generic PELS session was also offered. We ran largely the same model as last year, but included two more optional workshops in both fall and winter terms of RLG101 to address the demand from 2017/2018.

Students’ anonymous feedback on the PELS workshops in the winter term demonstrates that 85.4% (35 out of 41) students believed the workshops helped them become confident about their writing/study skills and 95.2% (39 out of 41) of students believed that the workshops had developed their comprehension and prepared them for their future assignments. This indicates that these workshops are meeting the intended learning outcomes.

Students’ open-response comments to the PELS workshops include:

“I have learned so much from these workshops. My writing has improved significantly.”

“I like how interactive they are and all the group activities.”

“Very informative, engaging and creative.”

Attendance numbers for the PELS workshops were lower than expected. While there were a number of factors that contributed to this including new instructors, scheduling challenges, and changes to participation bonus points (see future challenges section), the numbers are still at levels that are meeting the needs of many ELL students. Furthermore, the smaller class sizes allowed for more engagement between students and instructors, which offered a much more enjoyable experience. The attendance numbers are as follows (last year’s numbers are in parentheses in the last row of each table):

Table 9: PELS Workshop Attendance – FAH101

| <i>Date</i> | <i>Topic</i> | <i>Attendance</i> |
|-------------|-----------------------------------|-------------------|
| Sept 14 | Critical Reading | 65 |
| Sept 21 | Writing an Effective Introduction | 64 |
| Sept 28 | The Organization of Writing | 68 |
| Oct 19 | Editing and Proofreading | 48 |
| Oct 26 | Test Preparation and Midterms | 64 |
| Nov 2 | Time Management | 64 |
| Nov 9 | Summarizing and Paraphrasing | 59 |
| Nov 16 | Grammar! | 48 |
| Nov 23 | Written Analysis | 46 |
| Total | | 526 (403 in 2017) |

Table 10: PELS Workshop Attendance – CIN101

| <i>Date</i> | <i>Topic</i> | <i>Attendance</i> |
|-------------|-------------------------------------|-------------------|
| Sept 14 | Essay Writing for Film Studies | 25 |
| Sept 21 | Writing and Organization | 25 |
| Sept 28 | Editing and Proofreading | 21 |
| Oct 19 | Midterms | 22 |
| Oct 26 | Critical Reading | 21 |
| Nov 2 | Writing a Film Review | 20 |
| Nov 9 | Writing a Great Conclusion | 20 |
| Nov 16 | Grammar! | 21 |
| Nov 23 | Preparing for Multiple Choice Exams | 22 |
| Total | | 197 (586 in 2017) |

Table 11: PELS Workshop Attendance – VCC101

| <i>Date</i> | <i>Topic</i> | <i>Attendance</i> |
|-------------|---|----------------------|
| Jan 18 | Strategically Learning to Learn | 8 |
| Jan 25 | Preparing to Write | 27 |
| Feb 1 | Writing an Effective Introduction | 27 |
| Feb 8 | Body Paragraphs (1) | 20 |
| Feb 15 | Body Paragraphs (2): Argumentation and Analysis | 21 |
| Mar 1 | Editing and Revising (1) | 24 |
| Mar 8 | Editing and Revising (2): How to Make Your Sentences Shine? | 21 |
| Mar 15 | Critical Thinking: What Professors Really Want | 21 |
| Mar 22 | Time Management | 15 |
| Mar 29 | Test Taking Tips | 14 |
| Total | | 198 (298 in 2017/18) |

Table 12: PELS Workshop Attendance – Generic

| <i>Date</i> | <i>Topic</i> | <i>Attendance</i> |
|-------------|---|--------------------|
| Sept 19 | Strategically Learning to Learn | 1 |
| Sept 26 | Preparing to Write | 1 |
| Oct 3 | Writing an Effective Introduction | 1 |
| Oct 17 | Editing and Revising (1) | 2 |
| Oct 24 | Editing and Revising (2): How to Make Your Sentences Shine? | 2 |
| Oct 31 | Critical Thinking: What Professors Really Want | 3 |
| Nov 7 | Time Management | 2 |
| Nov 14 | Test Taking Tips | 1 |
| Total | | 13 (40 in 2017/18) |

Table 13: PELS Workshop Attendance – RLG101 (Fall and Winter courses)

| <i>Date (Fall)</i> | <i>Date (Winter)</i> | <i>Topic</i> | <i>Attendance (Fall)</i> | <i>Attendance (Winter)</i> |
|--------------------|----------------------|---|--------------------------|----------------------------|
| Sept 13 | Jan 17 | Strategically Learning to Learn | 5 | 3 |
| Sept 20 | Jan 24 | Preparing to Write | 9 | 3 |
| Sept 27 | Jan 31 | Writing an Effective Introduction | 8 | 2 |
| Oct 4 | Feb 7 | Body Paragraphs (1) | 11 | 6 |
| Oct 18 | Feb 14 | Body Paragraphs (2): Argumentation and Analysis | 17 | 3 |
| Oct 25 | Feb 28 | Editing and Revising (1) | 26 | 6 |
| Nov 1 | Mar 7 | Editing and Revising (2): How to Make Your Sentences Shine? | 28 | 6 |
| Nov 8 | Mar 14 | Critical Thinking: What Professors Really Want | 26 | 12 |
| Nov 15 | Mar 21 | Time Management | 37 | 25 |
| Nov 22 | Mar 28 | Test Taking Tips | 42 | 27 |
| Totals | | | 209 (262 in 2017/18) | 93 (202 in 2017/18) |

In addition to PELS, the RGASC continues to offer one-to-one, face-to-face (f2f) appointments specifically targeted at ELL students. This year, not only did we offer 30-minute pre-scheduled f2f appointments, but drop-in appointments as well. Over the course of the year, 206 scheduled appointments were conducted. Additionally, there were 108 drop-in appointments, 29 cancelled appointments, and 18 missed appointments.

While undergraduate students make up a significant portion of the ELL population, there is also a need for support among the graduate students at UTM. Because of this, the ELL program offered individualized support through face-to-face consultations to these graduate students. These consultations were tailored to meet the specific needs of these students, but generally targeted skill building in areas of reading, writing, and oral communication. In 2018/2019, 34 one-hour ELL graduate student appointments were completed.

In addition to the above initiatives, the ELL program also encouraged students to improve their English communication skills through a for-credit course titled *UTM115H5: Communication among Cultures*. This 0.5FCE course has been offered annually since 2016. It is part of the ONE series, open to all first-year students and facilitated by the Centre for Student Engagement (CSE). The course description, in its first line, specifically suggests that this course is designed for English Language Learners. UTM115H5 examines cultural differences by using experiential and game-based learning techniques, and this year there were 52 students in the class (out of 55 spaces). Feedback from students was particularly positive and highlighted several key strengths, including:

“I personally loved the way the course was taught. The style of the lecture was very different compared to all the other lectures I’ve had. It reminded me of high school as I felt very comfortable with the general environment. It’s a course I always look forward to every week.”

“The interactivity of the class made it easier to understand and apply the lessons taught in class. The group work also made it discussion more meaningful.”

In line with the transitional type programming that has been a consistent component of UTM115H5, ELL support was also offered through engagement with external groups, including the PEEL District School Board’s International Teachers. This year, the RGASC delivered a 2-hour workshop on “Teaching International Students: Challenges of Practice – Reading and Writing”. High school teachers working at five different international (ELL) schools from across the region were invited to attend this Professional Development Day in February. The goal of the day was to facilitate discussion on the transition to university studies by outlining the types of expectations instructors may have of students in first-year university courses. Feedback from the Head Instructional Resources Teacher was positive, as she suggested *“Your presentation was extremely informative, useful, and teachers liked your approach. We are very grateful for your generosity with time and learning.”* Approximately 35 teachers and administrators were in attendance.

Finally, over 20 online resources have been developed specifically for ELL students. Each handout provides brief explanations related to different core skills (reading, writing, listening, and/or speaking) and offers simple examples of language-related challenges and how these might be corrected. While many relate to grammar (e.g. dangling modifiers, articles, comma splices, etc.), others focus on broader components of language (e.g. developing reading skills, expanding academic vocabulary, word choice, etc.). These handouts are currently being finalized and will appear on the RGASC website by Summer 2019.

Future Directions

The ELL program ran into a few challenges in 2018/2019. First, we noticed considerably lower attendance in PEELS, particularly in RLG101 and in CIN101. Despite increasing the number of offerings (increase from 8 to 10 sessions) in RLG101, the number of participants fell by 53 in Fall term and by 109 in Winter. The large winter decline can possibly be explained by changes to the way participation marks were assessed by the course instructor. We are working with the instructor to ensure that future programming takes these changes

into consideration. In CIN101, the Friday afternoon workshop time paired with changes to the participation point structure for PELS could have affected attendance. We are working to find a solution to bolster participation in the upcoming year.

Furthermore, in both Fall and Winter terms, we offered ELL drop-in appointments which were somewhat underutilized, despite 108 completed appointments. Two instructors were scheduled to see students during drop-in hours. Moving forward, we anticipate that alternating between the two instructors will be sufficient to manage the demand in 2019-2020.

Research/New Initiatives

New to 2018/2019, research began on several projects assessing the impact of certain teaching interventions in the classroom. One area of focus was the impact of the Graded Response Method (GRM) on ELL students. The GRM is a method of assessment with a question prompt and several possible responses (similar to a multiple choice question). However, unlike a multiple choice question, the GRM asks students to rank the possible responses in order from ‘most correct’ to ‘least correct’. The benefit of the GRM is that it asks students to engage their critical thinking skills through the use of reasoning techniques. The GRM relies on students’ understanding of language to determine the ranking and it was initially hypothesized that this put ELL students at a disadvantage.

In our study, students participated in two low-stakes assessments consisting of 20 GRM questions each. We found that in the first assessment, there was a statistically significant difference in test scores between ELL students who had been in Canada for 5+ years and those who had not. However, by the second assessment (four weeks later), there was no difference between the two groups. This was encouraging as it not only demonstrated students’ ability to adapt, but it suggested that the work being done in the course to improve the critical thinking skills of students was having the desired impact.

With the implementation of ELLI, there has also been a need to assess the impact that the program is having. This is an important component because we must ensure that the students are receiving skills support that links to the ELL learning outcomes (as indicated in the proposals submitted by instructors). In FAH216 and FAH287, the outcome was to improve reading comprehension and vocabulary development. Students were given a pre- and post-test on reading comprehension. Of the 20 students that participated in both tests, 11 showed an improvement in reading comprehension. In ANT101, students’ grades in the course were monitored in relation to attendance of the ELLI workshops, and a tentative link has been made demonstrating improved performance on course assessments. In all cases, we are waiting on the final reports to get a better understanding of overall impact.

4) Graduate Student and TA Support

The primary way that the RGASC supports graduate students is by offering programming accredited by either the Graduate Professional Skills program (GPS) or the Teaching Assistants’ Training Program (TATP). These programs offer incentives—transcript notations and certificates—to students who complete the required programming. Low registration and attendance at graduate student workshops have been a significant challenge for the RGASC in the past. We continue to address these challenges by determining

programming priorities through consultation with UTMAGS, departmental graduate student groups, graduate supervisors, and UTM-wide graduate student surveys. A major development this year was the hiring of a Graduate Student Support Strategist (50%), who joined the RGASC on August 29, 2018. The Graduate Student Support Strategist's role is to coordinate academic and professional skills support to UTM graduate students, to conduct research on UTM's current graduate student programming, and identify opportunities for growth and development of graduate student programming at UTM. The RGASC's graduate student programming has expanded significantly because of this hire.

Graduate Programming Research

During the Summer 2018 semester, the RGASC's Educational Developer distributed a needs assessment survey to graduate students through the UTM graduate student listserv and through communication with graduate supervisors. The goal of the survey was to help determine the RGASC's graduate programming priorities for the 2018/2019 academic year. Ninety graduate students completed the online survey. All degree types (MA, MSc, PhD, and professional graduate degrees) and almost all departments with UTM-affiliated graduate students (Anthropology, Biology, Chemical and Physical Sciences, Geography, Psychology, Sociology, and IMI) were represented in the survey data. The survey asked students to indicate their level of interest in a range of professional development topics and their preferences regarding session format, timing, and method of communication. The most popular workshop topics were as follows: data visualization; career management; project management; academic writing; research data management; networking skills; and editing skills. The survey data confirmed that workshops and workshop series were the preferred session format for the majority of UTM-affiliated graduate students. The majority of respondents indicated that they preferred sessions to be scheduled between 10:00 am and 3:00 pm. The UTM graduate student listserv was the preferred method of communication for most respondents, with communication through supervisors being a close second.

From December 2018 to April 2019, the RGASC's Graduate Student Support Strategist (GSSS) conducted interviews with both graduate students and graduate supervisors with the aim of gaining a deeper understanding of the needs of UTM-affiliated graduate students. The GSSS sent personal emails to all UTM faculty members who were supervising graduate students during the 2018/2019 academic year requesting their participation in an interview. Thirty-three graduate supervisors and five staff members from a range of departments (details in Table 14 below) responded and were interviewed.

Table 14: Faculty and Staff Participants in Graduate Programming Interviews

| <i>Department</i> | <i>Number of Faculty</i> | <i>Number of Staff</i> |
|------------------------------------|--------------------------|------------------------|
| Anthropology | 4 | 1 |
| Biology | 1 | |
| Chemical and Physical Sciences | 8 | |
| Geography | 8 | |
| Mathematical and Computer Sciences | 1 | |
| Psychology | 2 | |
| Sociology | 5 | |
| Professional Graduate Programs* | 4 | 4 |

*Professional Graduate Programs included MBiotech, MFAcc, MMI, MScBMC, and MScSM

The GSSS used the following methods of communications to request interviews with graduate students:

- Emails sent through the UTM’s graduate listserv
- Department coordinators, department and campus graduate associations, and graduate supervisors
- A notice on the RGASC website
- In-person recruitment during RGASC-hosted workshops; and posters across the UTM campus

Twenty-four graduate students participated in interviews and four participated in a focus group. The GSSS attempted to organize five focus groups, but due to low interest, all but one were cancelled. Graduate students from a range of departments and at different points in their degrees (details in Table 15 below) participated in the focus group and interviews.

Table 15: Characteristics of Graduate Student Participants

| | <i>Number of Graduate Students</i> |
|--------------------------------|------------------------------------|
| <i>Department</i> | |
| Anthropology | 2 |
| Biology | 5 |
| Chemical and Physical Sciences | 10 |
| Geography | 6 |
| Professional Graduate Programs | 5 |
| <i>Degree</i> | |
| MA | 1 |
| MSc | 9 |
| MScBMC | 1 |
| MScSM | 4 |
| PhD | 13 |
| <i>Year</i> | |
| 1 | 11 |
| 2 | 11 |
| 3 | 1 |
| 4+ | 5 |

The results from the graduate programming research will be coded and analyzed in the Summer 2019 semester and a full report presented in the 2019/2020 RGASC Annual Report. Preliminary results suggest two key themes:

- 1) the need for improved communication (i.e., there is a lack of awareness among graduate supervisors and students regarding graduate programming available at UTM); and
- 2) the need for more workshops.

Academic and Professional Skills Supports

Graduate and Professional Skills (GPS) Program

The RGASC offers programming accredited by the GPS program, an initiative of the School of Graduate Studies, which offers a transcript notation for students who complete 60 hours of programming. Our GPS programming had two key priorities this year: offering a two-day conference of GPS-accredited workshops and offering one-time workshops throughout the year.

In collaboration with UTM's Office of the Dean, School of Graduate Studies (SGS), UTM Career Centre, and the UTM Library, the RGASC organized and delivered the second annual UTM Graduate Student Professional Development Conference (GPDC) from October 10–11, 2018. The GPDC was a two-day event with workshops and seminars designed to enhance graduate students' professional and academic skills to better prepare them for their studies and for a competitive job market. Students who participated in the event earned up to four GPS credits. Graduate Expansion Funds awarded by the Associate Dean, Graduate provided financial support for the event.

A total of 89 students registered for the GPDC, of which 56 attended. The majority of students (68%) attended more than one workshop at the event. Three students attended the full two days of offerings.

Most of the GPDC participants were MSc students (43%). PhD students also made up a large percentage of the event attendees (39%). There were also two postdocs, two UCRSEA graduate fellows, one MA student, and one Master's student each from MBiotech, OISE, Faculty of Law, and Engineering. Approximately 36% of the attendees were from Biology and 30% were from Chemical and Physical Sciences. The remaining students, from largest percentage to smallest, were from Anthropology, Geography, Psychology, Munk School of Global Affairs and Public Policy, Chemical Engineering, Educational Leadership and Policy, Faculty of Law, Sociology, and UTM's Professional Graduate Programs.

The table below lists all GPDC workshops and their respective attendance.

Table 16: GPDC Workshop Attendance

| <i>Workshop Title</i> | <i>Facilitator(s)</i> | <i>Attended</i> |
|--|---|-----------------|
| Beyond Books: Using the UTM Library as a Graduate Student | Andrew Nicholson , Graduate Student Liaison Librarian, and Head, Research Scholarship & Data Services, UTM Library | 15 |
| Maximising Your Oral Presentations | Peter Grav , Associate Professor, Teaching Stream, Graduate Centre for Academic Communications | 26 |
| Four Strategies for Improving your Academic Writing | Peter Grav , Associate Professor, Teaching Stream, Graduate Centre for Academic Communications | 40 |
| Fundamentals of Course Design from Outcomes to Assessments | Mike Kasprzak , Curriculum Developer; Abdullah Farooqi , UTM Trainer, Teaching Assistants' Training Program, Centre for Teaching Support & Innovation, University of Toronto | 10 |
| Campus Resources for Aspiring Entrepreneurs | Christina Kim , Entrepreneurship Librarian, Gerstein Science Information Centre; Sam Dumcum , Program Coordinator, ICUBE, UTM | 10 |
| “The Psychology of Focusing on What Really Matters” | Joe Kim , Associate Professor, Psychology, Neuroscience & Behaviour, McMaster University | 19 |
| Career Management Workshop: Where are the Jobs? | Anne Gaiger , Assistant Director, Employer Relations & Marketing, Career Centre; Malou Twynam , Career Counsellor, Career Centre | 15 |
| Designing Better Classroom Experiences for Your Students | Mike Kasprzak , Curriculum Developer; Abdullah Farooqi , UTM Trainer, Teaching Assistants' Training Program, Centre for Teaching Support & Innovation, University of Toronto | 13 |

Following the event, all students who attended were invited to complete a feedback survey. When asked what they liked most about the event, the majority of survey respondents highlighted two GCAC workshops:

- 1) Maximising Your Oral Presentations
- 2) Four Strategies for Improving your Academic Writing.

Respondents also appreciated the variety of sessions and the keynote workshop entitled, “The Psychology of Focusing on What Really Matters”. A representative sample of feedback is included below:

“The writing workshop was very well conducted”

“Very informative and a wide variety of sessions.”

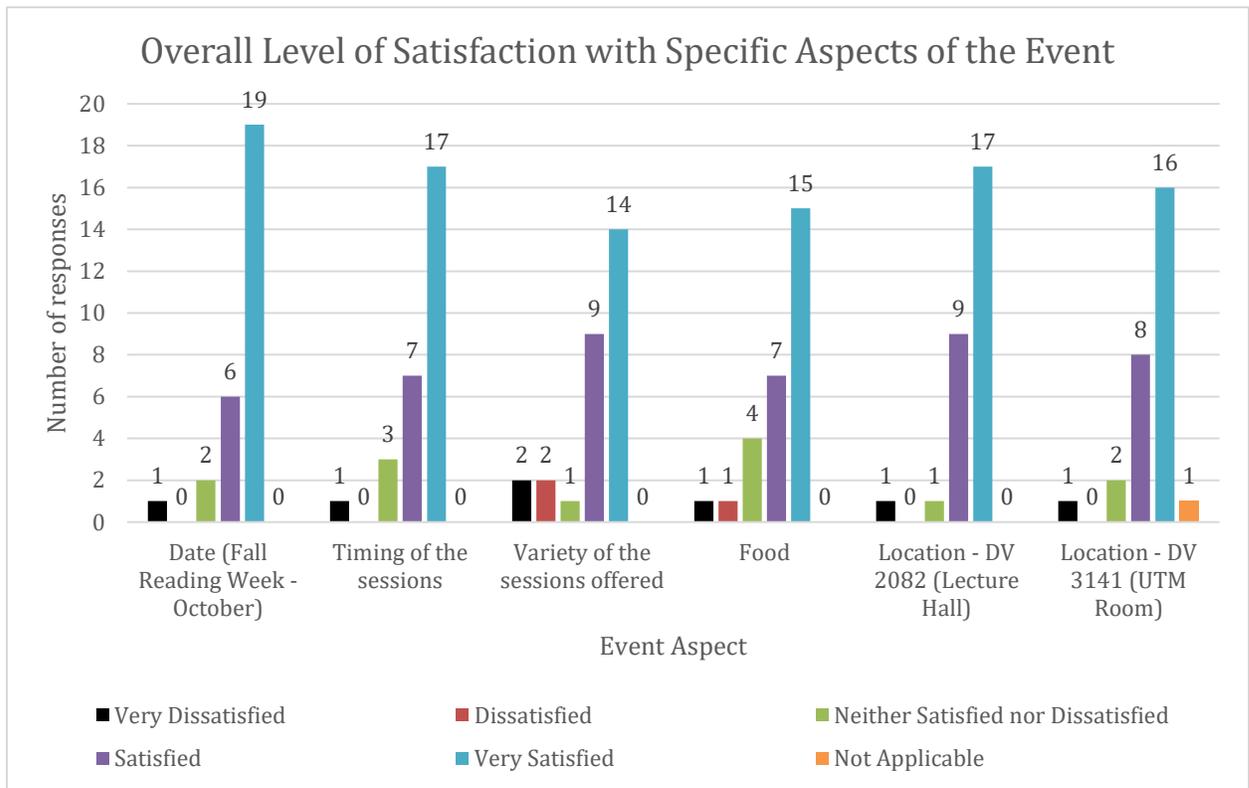
“The sessions provided vital information for graduate students that we don’t usually have exposure to in our academic programs.”

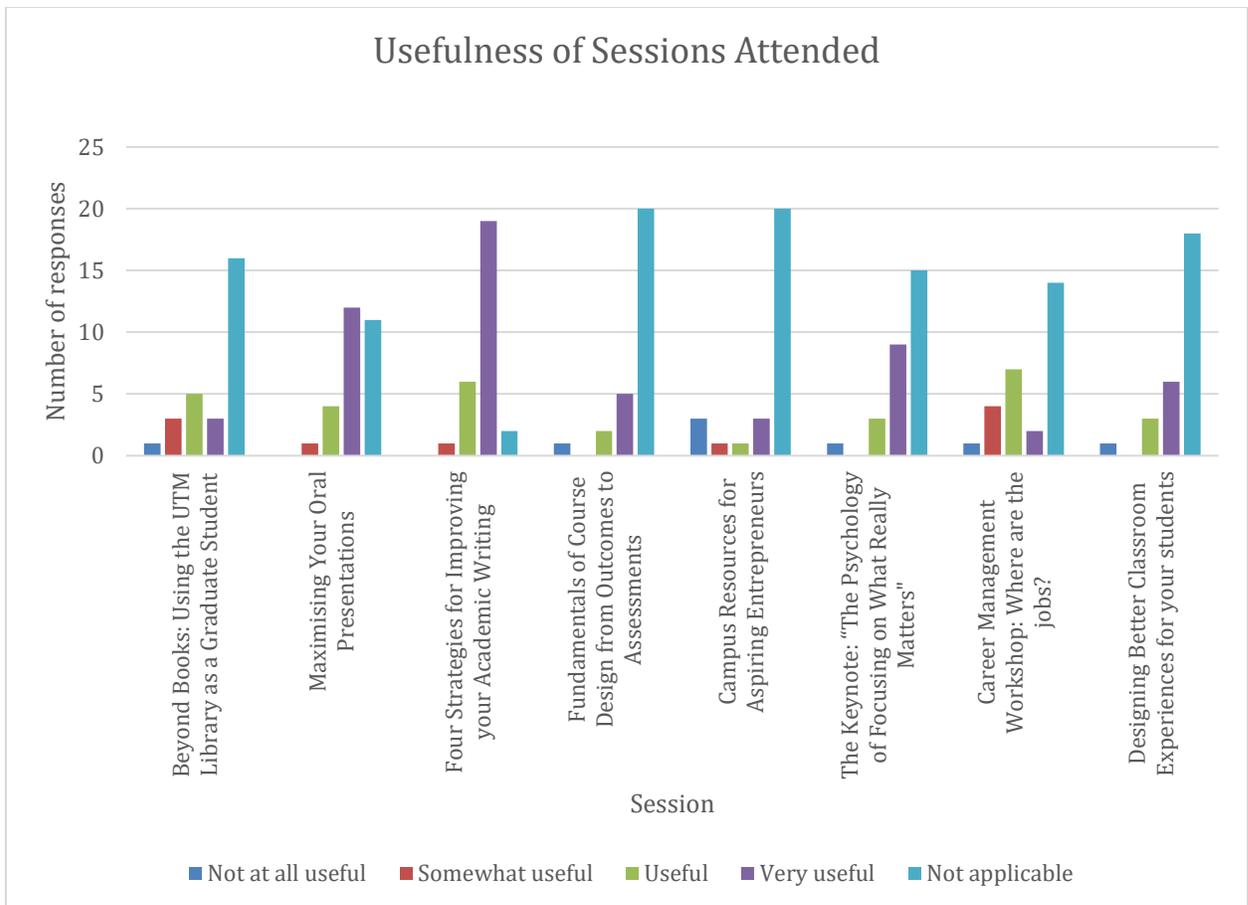
“The keynote talk on productivity – very applicable to graduate students.”

When respondents were asked what they liked least about the event, the event’s timing and offerings were the top two factors brought up by graduate students. In regards to timing, graduate students expressed presentations being either too short or too long and feeling exhausted at the end of the day. Regarding the GPDC’s workshop offerings, graduate students commented that sessions were too general or too similar to the offerings at the GPDC in 2017.

Respondents were also asked to rate their satisfaction with different aspects of the event. The results are shared in the charts below.

Charts 7 and 8: GPDC Feedback





Approximately 68% of survey respondents indicated that they would attend GPDC next year. Roughly 18% reported that they would have liked to attend GPDC next year but would not be on campus. The remaining respondents reported that they would only attend GPDC next year if new topics are offered (~7%) or they would not attend GPDC next year (~7%).

75% of respondents noted that the opportunity to attend the “Four Strategies for Improving your Academic Writing” session motivated them to attend GPDC. Additionally, just over 64% of respondents indicated that the opportunity to earn GPS credits motivated them to attend GPDC. Other common motivators, in order from most frequently reported to least frequently reported were the “The Psychology of Focusing on What Really Matters” workshop, the “Maximising your Oral Presentation” workshop, the food, and the opportunity to meet other graduate students.

When asked how they heard about GPDC, just over 64% of respondents indicated that they heard about the event from the UTM graduate student listserv. 32% of respondents reported hearing about the event through UTMAGS and approximately 21% of students heard about the event through their supervisors. Students were also made aware of the event through the GPS listserv, internal department communications, posters around campus, and by word of mouth.

In addition to the workshops offered during the Graduate Student Professional Development Conference, the RGASC offered the following GPS accredited workshops:

Table 17: GPS Accredited Workshops Offered at UTM

| <i>Workshop Title</i> | <i>Date & Time</i> | <i>Facilitator(s)</i> | <i>Registered</i> | <i>Attended</i> |
|---|----------------------------|---|-------------------|-----------------|
| Using MATLAB (pt. 1) | Oct 22, 2018 9am – 12pm | Xinli Wang , Lecturer, Mathematical and Computational Sciences, UTM | 24 | 12 |
| Using MATLAB (pt. 2) | Oct 29, 2018 9am – 12pm | Xinli Wang , Lecturer, Mathematical and Computational Sciences, UTM | 21 | 9 |
| Editing your Work for Science Students | Nov 7, 2018 10am – 1pm | Michael Kaler , Assistant Professor, Teaching Stream & Writing Specialist, RGASC | 6 | 4 |
| Introduction to Statistics using R Software | Nov 28, 2018 10am – 1pm | Vera Velasco , Post-doctoral Research Scientist, Biology, UTM | 10 | 4 |
| Creating Scientific Figures using Adobe Illustrator | Feb 1, 2019 9am – 12pm | Tracy Xiang , MScBMC Student in Biomedical Communications, UofT | 6 | 4 |

Student feedback surveys were sent to participants after each GPS accredited workshop. In the MATLAB workshops, respondents most liked the clear examples and hands on experience; contrastingly, respondents expressed that there were not enough sessions and the instructions were too fast paced for beginners.

In the “Editing your Work for Science Students” workshop, all respondents reported that they felt better equipped to write their thesis and scholarly articles. Additionally, all respondents felt the “Editing your Work for Science Students” was relevant and useful. When asked what they liked the least about the sessions, one respondent mentioned the low attendance. In regards to what respondents liked the most, sample responses included:

“I actually liked and enjoyed the whole workshop.”

“I liked the definition work sheet, at first it was intimidating but once we went through it I felt better.”

“The instructor seemed to have a good grasp of the material.”

After participating in the “Introduction to Statistics using R software” workshop, all respondents indicated that they felt more confident in using R and found the shared information useful. When asked what they least liked about the workshop, one respondent

expressed difficulty understanding how what they learned would translate to their own work. In regards to what respondents liked the most, sample responses included:

“Scope and depth of information was perfect.”

“I liked the ability to work with more data, and I got a good idea of how to access files to work with, so hopefully I will be able to do it more easily on my own in the future.”

In the “Creating Scientific Figures using Adobe Illustrator” workshop, all respondents found that information shared during the workshop was useful. When asked what they least liked about the workshop, respondents mentioned difficulty adjusting to using Mac, an unfamiliar operating system, and the workshop being too long. In regards to what respondents liked the most, sample responses included:

“Figure design principles and basics of Illustrator.”

“Got to learn a new software for creating scientific images. The instructor made sure that everyone’s able to follow the instructions.”

“Very hands on workshop.”

Teaching Assistant Teaching Program

The RGASC works in partnership with the Teaching Assistants’ Training Program (TATP), a tri-campus training program for any student working as a teaching assistant at the University of Toronto. This program provides certification of professional teaching development and supports Departments in their efforts to provide general training for TAs, especially new TAs and TAs teaching in new contexts. The RGASC collaborated with TATP to deliver two extensive training programs for new TAs – one in August 2018 and another in October 2018. A total of 85 TAs attended TA Day in August and 11 attended in October.

The RGASC also offered the following TATP-accredited workshops in 2018/2019, but TATP decided to cancel both sessions due to low enrollment:

Table 18: TATP Workshops Offered at UTM

| <i>Workshop Title</i> | <i>Date & Time</i> | <i>Notes</i> |
|---|-----------------------------|----------------------------|
| Effective and Efficient Grading | Feb 12, 2019 10am – 12pm | Cancelled – Low enrollment |
| Setting Students up for Success: Skills-Based Learning in Entry Level Tutorials | Feb 12, 2019 1pm – 3pm | Cancelled – Low enrollment |

Graduate Centre for Academic Communication

The Graduate Centre for Academic Communication (GCAC) provides graduate students across all three University of Toronto campuses with academic writing and speaking

supports including non-credit courses, single-session workshops, individual writing consultations, boot camps and writing intensives, as well as additional resources for academic writing and speaking. In collaboration with GCAC, the RGASC arranged to video conference two GCAC workshops offered at UTSG so that students on the UTM campus could participate without making the trip downtown.

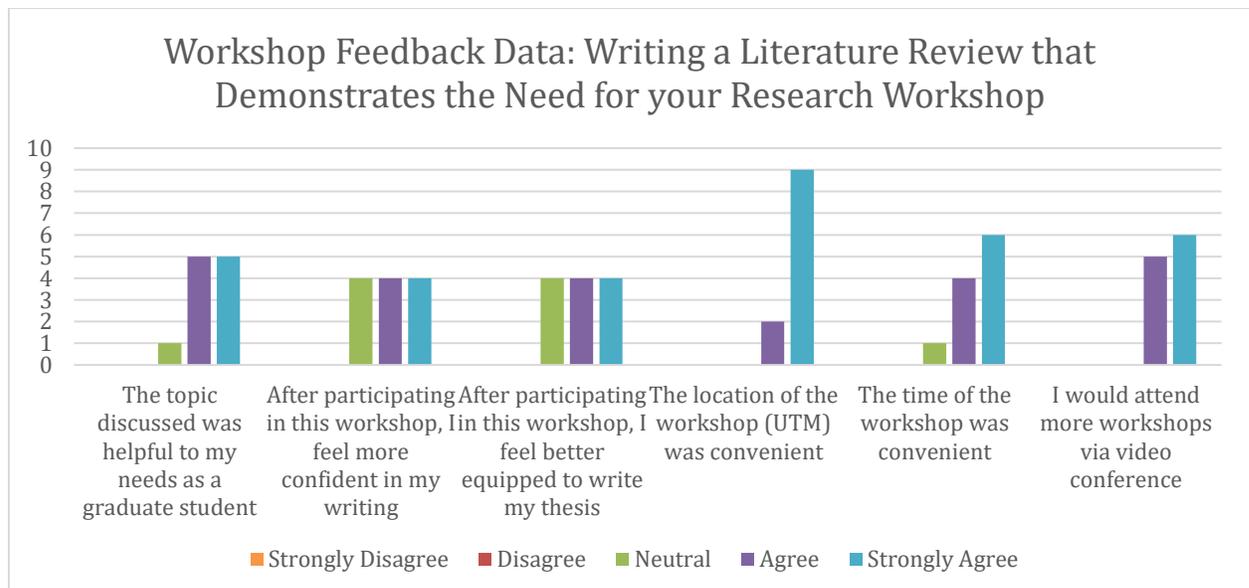
Below are the workshops offered to UTM graduate students via video conference:

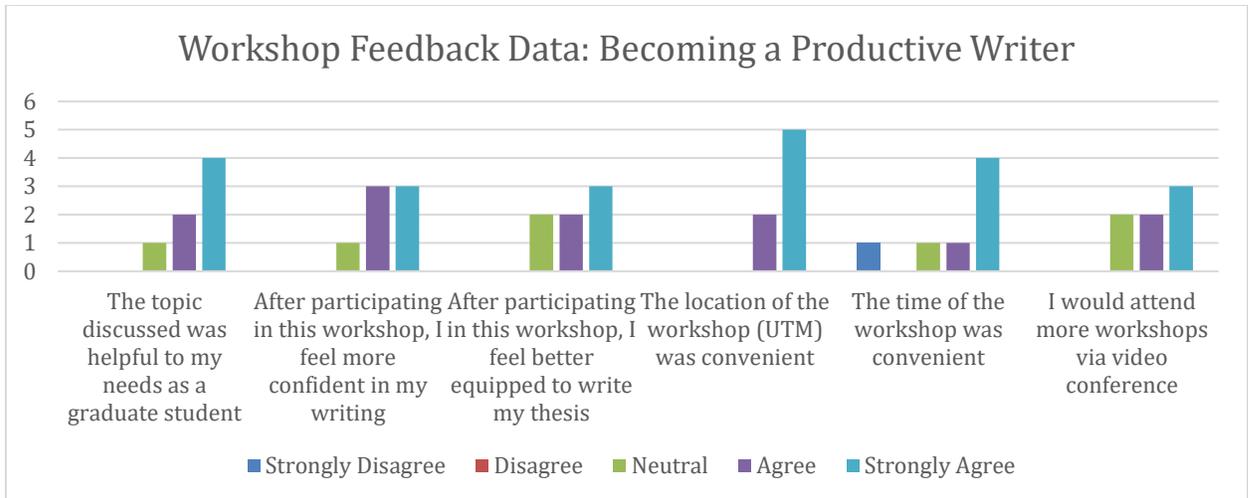
Table 19: GCAC Workshops Offered via Video Conference at UTM

| <i>Workshop Title</i> | <i>Date & Time</i> | <i>Facilitator(s)</i> | <i>Registered</i> | <i>Attended</i> |
|--|----------------------------------|--|-------------------|-----------------|
| Writing a Literature Review that Demonstrates the Need for your Research | Sept 25, 2018 4:10pm – 5:30pm | Jane Freeman, Director, Graduate Centre for Academic Communication, UofT | 13 | 13 |
| Becoming a Productive Writer | Nov 29, 2018 4:10pm – 5:40pm | Rachael Cayley, Associate Professor, Teaching Stream, Graduate Centre for Academic Communication, UofT | 25 | 8 |

Evaluation surveys were distributed to students following each GCAC workshop. The results of the evaluation surveys are shared in the charts below.

Charts 9 and 10: GCAC Workshop Feedback





Evaluation surveys also asked participants what they liked the most about the workshop’s video conferencing format. Sample responses are included below.

“Covered a key topic that I have not had access to before”

“It was convenient to get to and the information was helpful”

“It was super convenient. I wouldn’t have been able to gone downtown”

“That we get access to these workshops @ UTM; Far more efficient than also taking the time to go downtown”

Participants also made the following suggestions to improve workshop delivery using a video conferencing format:

“It was awkward when we didn’t have questions”

“Hard to interact w/speaker if desired”

“Couldn’t hear other student inquiries (at St. George)”

Other RGASC Graduate Workshops

The RGASC offered two pilot workshops to address topics consistently requested by graduate supervisors and graduate students: time and project management, strategies for communicating research to a general audience, and oral presentations.

Table 20: RGASC Graduate Workshops

| <i>Workshop Title</i> | <i>Date & Time</i> | <i>Facilitator(s)</i> | <i>Registered</i> | <i>Attended</i> |
|--|-----------------------------|---|-------------------|-----------------|
| Project Planning and Goal Setting Workshop using the Bullet Journal Method | Jan 30, 2019 10am – 12pm | Dianne Ashbourne , Educational Developer, RGASC, UTM Jessica Carlos, Graduate Student Support Strategist, RGASC, UTM | 9 | 8 |
| 3MT Workshop | Mar 14, 2019 3pm – 5pm | Richard Kil , Sessional Instructor, Chemical and Physical Sciences, UTM | 7 | 3 |

Student feedback surveys were distributed to participants after each workshop. In the “Project Planning and Goal Setting Workshop using the Bullet Journal” workshop, respondents either agreed or strongly agreed that the information shared during the workshop was useful, that they would recommend the workshop to another graduate student, and that the time and location of the workshop (UTM) was convenient. When asked what they liked most about the workshop, graduate students mentioned the following:

“Interactivity; good explanations; helping us actually get started; good tools for breakup goals down into manageable tasks; free notebooks”

“I really enjoyed the artistic side that was brought out of me when designing the collections. It was therapeutic. Great advice was given!”

“Really well structured and it was good that we actually worked through things in our journals”

“Everything about it: the teaching style, the slides, the handouts, the practice activities, and the journal. Thank you!”

When asked how the workshops could be improved, students mentioned:

“Additional modules (ideas for other workshops that can complement this workshop); project management – e.g., how to keep supervisors and supervisees and collaborators updated in a systematic way; decision making: e.g., which tasks to prioritize, which is the best solution; Physical copy of presentation slides because the examples in the presentation were really helpful”

“Address anxiety around time management and procrastination (more directly)”

“Rulers or different coloured pens”

In the 3MT workshop, respondents either agreed or strongly agreed that the information shared during the workshop was useful, that they would recommend the workshop to

another graduate student, and that the time and location of the workshop (UTM) was convenient. Participants appreciated that the workshop was hands on and provided general advice on public speaker, but would have liked to get more practice on removing jargon from their talks.

Graduate Writing Cafes

Writing cafés are weekly group writing sessions. They are informal events designed to help graduate students connect to a larger community, stay focused, and to continue making writing progress. Writing cafes were organized in response to requests received by the Vice-Dean, Graduate. The RGASC's Writing Specialist was available for graduate students to consult with during most sessions. When the RGASC's Writing Specialist was unavailable, either the RGASC's Graduate Student Support Strategist or Educational Developer would facilitate the writing cafés. In the Fall 2018 semester, writing cafes were held every Wednesday from 10:00 am – 12:00 pm In the Winter 2019 semester, writing cafes were held every Tuesday from 10:00 am – 12:00 pm A total of 11 unique students attended the graduate writing cafes. The GSSS will request feedback from all graduate students who attended a graduate writing café following the last writing session.

Appointments for Graduate Students

Graduate students can also meet with RGASC staff and faculty one-one-one to discuss grant applications and research proposals, doctoral applications, their thesis and defence, presentation skills, teaching dossiers, statements and strategies, and managing their online presence. Some graduate students book appointments to work on different stages of their thesis. For students who are English Language Learners, consultations target skill building in areas of reading, writing, and oral communication. RGASC faculty conducted a total of 44 appointments with UTM-affiliated graduate students this year.

Future Directions

The RGASC hopes to pilot the Graduate Student Support Strategist role as a 100% position in 2019/2020.

The RGASC will continue to offer a wide range of workshops for UTM-based graduate students. Using the survey, interview and focus group data collected throughout the 2018/2019 year, more targeted workshops will be offered to the UTM graduate community in the 2019/2020 year. For example, the RGASC plans to offer more in-person GCAC workshops at the UTM campus due to their popularity among graduate supervisors and graduate students. The GSSS also plans to improve communication with all UTM stakeholders to increase awareness of the RGASC's graduate offerings in order to increase workshop attendance.

The UTM Graduate Professional Development Conference will be offered again in October 2019, with support from the Associate Dean, Graduate. The RGASC plans to add a second Graduate Professional Development Conference in the Winter 2020 term. The decision to host a second Graduate Professional Development Conference was taken in response to graduate students expressing a preference to take a day or two to focus on their professional development as opposed to attending one-off workshops scheduled throughout the year. To

encourage students who have already attended GPDC in the past to attend again, the RGASC plans to offer sessions not offered in previous years. Additionally, for one-off workshops that have been cancelled due to low registration (e.g., TATP workshops), the RGASC hopes to increase enrollment by including them into the GPDC events.

5) Faculty Support

Individual Consultations

In 2018/2019, the RGASC provided individualized support for over 60 different faculty members and course instructors (excluding consultations with WDI- funded courses or consultations related to teaching in the active learning classrooms). Individualized support had the following emphases:

- 1) New course development
- 2) Course redesign
- 3) Syllabus review
- 4) Learning outcome development
- 5) Alignment of learning activities, assessments and course learning outcomes
- 6) Assignment and rubric design
- 7) Scholarship of teaching and learning research projects

The RGASC's Educational Developer also conducted 12 teaching observations for instructors and one teaching observation for a teaching assistant. All observations involved a pre-observation meeting, a one- to two-hour teaching observation, a post-observation meeting, and an average of two pages of written feedback. The RGASC's Educational Developer also provided feedback on the teaching dossiers of 11 faculty members and assisted with seven proposals for teaching and learning grants. The RGASC's Educational Developer consulted with individual faculty members on over 90 different matters, about half requiring multiple consultations.

Professional Development Opportunities

Professional development opportunities for UTM faculty and instructors are hosted by the Teaching and Learning Collaboration (TLC) group and coordinated by the RGASC's Educational Developer. The Teaching and Learning Collaboration at UTM aims to connect colleagues with a shared interest in teaching and learning in order to advance teaching practice at UTM. During the 2018/2019 academic year, the TLC hosted the following 14 events:

Table 21: TLC Events

| <i>Workshop Title</i> | <i>Date & Time</i> | <i>Facilitator(s)</i> | <i>Registered</i> | <i>Attended</i> |
|--|---------------------------------|---|-------------------|-----------------|
| Preparing to teach: A just-in-time syllabus clinic (workshop) | Aug 30, 2018 1:20pm - 2:20pm | Fiona Rawle , Associate Dean, Undergraduate & Associate Professor, Teaching Stream, Department of Biology, UTM Dianne Ashbourne , Educational Developer, RGASC, UTM | TBD | TBD |
| Course design 101: Writing learning outcomes (workshop) | Sept 19, 2018 2pm - 4pm | Dianne Ashbourne , Educational Developer, RGASC, UTM | 3 | 3 |
| Developing students' critical reading skills (workshop) | Sept 27, 2018 11am - 1pm | Tyler Evans-Tokaryk , Associate Professor, Teaching Stream and Director, RGASC, UTM | 10 | 8 |
| The dreaded group project: Tips for supporting meaningful student collaboration (seminar) | Oct 17, 2018 1pm - 2pm | Monika Havelka , Associate Professor, Teaching Stream, Department of Geography | 10 | 10 |
| Course design 101: Designing effective assessments (workshop) | Oct 30, 2018 10am - 12pm | Dianne Ashbourne , Educational Developer, RGASC, UTM | 8 | 4 |
| Where you fit in the big picture: Aligning your course with program expectations (seminar) | Nov 8, 2018 1pm - 2pm | Fiona Rawle , Associate Dean, Undergraduate & Associate Professor, Teaching Stream, Department of Biology, UTM | 10 | 8 |
| Faculty perspectives on teaching large classes (panel discussion) | Nov 13, 2018 1pm - 2:30pm | Ken Derry , Associate Professor, Teaching Stream, Department of Historical Studies; Sherry Fukazawa , Assistant Professor, Teaching Stream, Department of Anthropology; Judith Poë , Professor, Teaching Stream, Department of | 21 | 18 |

| | | | | |
|--|-----------------------------|--|----|----|
| | | Chemical & Physical Sciences; Alex Rennet , Assistant Professor, Teaching Stream, Department of Mathematical and Computational Sciences | | |
| Faculty perspectives on active learning (panel discussion) | Feb 7, 2019 2:30pm - 4pm | Yuhong He , Associate Professor, Department of Geography, UTM; Sanja Hinić-Frlog , Assistant Professor, Teaching Stream, Department of Biology; Paul Piunno , Associate Professor, Teaching Stream, Department of Chemical and Physical Sciences; Chester Scoville , Assistant Professor, Teaching Stream, Department of English and Drama, UTM | 8 | 8 |
| Indigenous curriculum reform initiatives at UTM (panel discussion) | Feb 27, 2019 12pm - 1pm | Jennifer Adese , (Otipemisiw / Metis) Associate Professor, Department of Sociology, UTM; Robin Gray , Assistant Professor, Department of Sociology, UTM. Dr. Gray is Ts'msyen from Lax Kw'alaams, BC, and Mikisew Cree, with Dene roots, from Fort Chipewyan, AB; Stephanie Johnston , Anishinaabe/Metis MA student in Anthropology; Nicole Laliberte , Associate Professor, Teaching Stream, Department of Geography, UTM; Sherry Fukuzawa , Assistant Professor, Teaching Stream, Department of Anthropology, UTM; Cat Criger , Indigenous Advisor, UTM | 29 | 17 |
| Moving from feedback to feedforward: | March 7, 2019 | Michael Kaler , Assistant Professor, Teaching Stream & | 8 | 3 |

| | | | | |
|--|---------------------------------|--|----|----|
| Best practices and useful tips (workshop) | 2pm – 4pm | Writing Specialist, RGASC, UTM | | |
| Demystifying the Dossier Series: Preparing the Teaching Dossier (workshop) | Mar 7, 2018 11am - 2pm | Dianne Ashbourne , Educational Developer, RGASC, UTM; & Megan Burnett , Associate Director, Centre for Teaching Support and Innovation, University of Toronto | 16 | 11 |
| How to identify and mitigate unconscious bias in teaching and learning (seminar) | Apr 9, 2019 12:30pm - 1:30pm | Fiona Rawle , Associate Dean, Undergraduate & Associate Professor, Teaching Stream, Department of Biology, UTM | 18 | 13 |
| Getting started in the Scholarship of Teaching and Learning (SoTL) (workshop) | Apr 17, 2019 10am – 1pm | Nicola Simmons , Assistant Professor, Department of Graduate and Undergraduate Studies in Education, Brock University. | 24 | 18 |
| ALC Show & Share (showcase) | May 1, 2019 11am - 12pm | Dianne Ashbourne , Educational Developer, RGASC, UTM with contributions from Ken Derry , Associate Professor, Teaching Stream, Department of Historical Studies, UTM; Bogdan Simion , Assistant Professor, Teaching Stream, Department of Mathematical & Computational Sciences, UTM; Christoph Richter , Associate Professor, Teaching Stream, Department of Biology, UTM | 20 | 17 |
| Year-end Teaching & Learning Debrief (celebration) | May 1, 2019 12pm - 1pm | Fiona Rawle , Associate Dean, Undergraduate & Associate Professor, Teaching Stream, Department of Biology, UTM; Dianne Ashbourne , Educational Developer, RGASC, UTM | 21 | 16 |

Session topics were selected based on responses to a needs assessment sent out to all UTM faculty members, and on feedback received from participants in the response to the TLC 2017/2018 programming.

All TLC session participants were asked to complete feedback surveys; these surveys had an average response rate of 35%. When asked to provide an overall rating for the TLC session they attended, over 40% of respondents rated the session “excellent”, with the remaining respondents rating the session they attended either “very good” (38%), “good” (10%), “fair” (5%), or “poor” (2%). When asked what they found most useful about the session they attended, the opportunities to interact with others and to hear about colleagues’ experiences were by far the most commonly noted, followed by expressing appreciation for a specific concept covered during the session. Panel discussions were a new session format introduced this year and they were very well received by participants. Almost all participants who provided feedback on these sessions expressed a desire to have more sessions using a panel format. The most common concern indicated by session participants related to the organization of the session in terms of the order of topics addressed or the amount of time spent on each.

Moving forward, the TLC will make several adjustments to its programming in response to session participation statistics and participant feedback.

- a) The TLC will continue to offer faculty panels as a regular part of its programming, but these will be augmented by more informal opportunities to interact with colleagues to discuss innovations and challenges related to teaching and learning, beginning with monthly lunches using a structure similar to the TLC’s year-end debrief.
- b) The “Course Design 101” workshop series titles will be changed to something more inclusive of faculty members at different points in their career.
- c) The TLC will offer a number of online workshops this summer focused on preparing to teach.
- d) Finally, the TLC will try offering a couple of workshop series comprising several 50-minute weekly sessions.

Due to low levels of engagement by faculty members, the TLC reduced the number of communities of practice (CoPs) it supported from four in 2017/2018 to two in 2018/2019. Topics for this year’s CoPs were as follows:

- Teaching in active learning classrooms
- Game-enhanced learning

Both of these CoPs continued from the 2017/2018 academic year. It was decided that scholarship of teaching and learning (SoTL), one of the CoP topics from 2017/2018, could be better supported in other ways. The goals of the CoPs are to connect faculty, librarians, and staff with a shared interest in a teaching and learning topic and to advance teaching practice at UTM. Again this year, engagement in the communities of practice was lower than we had expected.

The TLC, in collaboration with the RGASC’s Writing Specialist, Director, and Educational Developer, offered faculty writing cafes beginning in September 2018. These writing cafes represented a reconceptualization of the community of practice dedicated to supporting faculty writing that began in November 2017. The writing cafés were organized in response

to faculty members' requests for designated time to write surrounded by a supportive community. Due to low participation, the faculty writing cafés did not continue in the Winter 2019 term.

After a successful pilot in Winter 2018, the RGASC's Educational Developer organized five pedagogical reading groups, two in the Fall 2018 term and three in the Winter 2019 term. The groups met to discuss thoughts, reactions, and reflections on how the reading influenced participants' teaching. Participants were invited to join a group focused on one of the following five books each term:

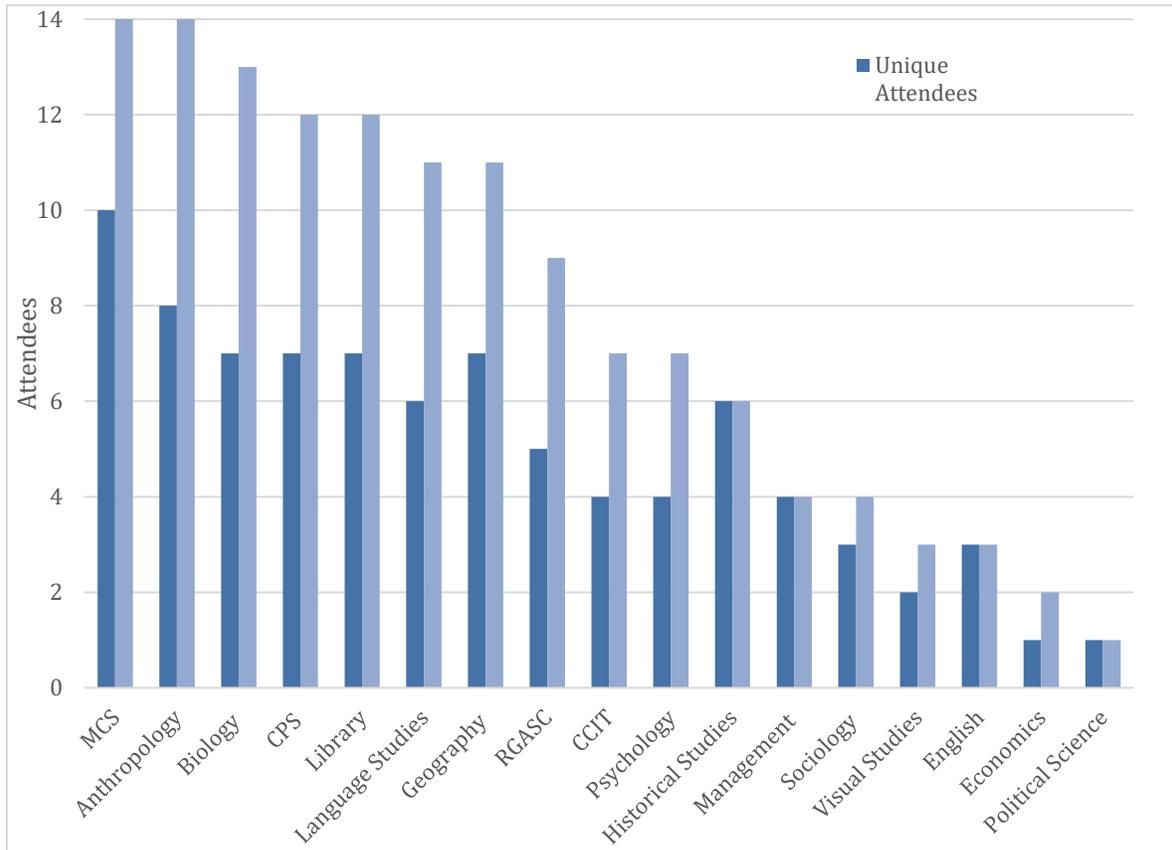
1. *What the Best College Teachers Do* by Ken Bain (Fall 2018)
2. *Decolonizing Education: Nourishing the Learning Spirit* by Marie Battiste (Fall 2018)
3. *How Learning Works: Seven Research-Based Principles for Smart Teaching* by Susan A. Ambrose and Michael W. Bridges (Winter 2019)
4. *The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life* by Parker J. Palmer (Winter 2019)
5. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* by Robin Wall Kimmerer (Winter 2019)

Seventeen faculty members, five staff members, three sessional instructors, a librarian, and a postdoc participated in the reading groups. The following departments were represented in the reading groups: Biology; Chemical & Physical Sciences; Mathematical & Computational Sciences; Historical Studies; Geography; Anthropology; English & Drama, Psychology, and Institute of Communication, Culture, Information and Technology (CCIT).

After their last meeting, participants in the pedagogical reading groups were asked to complete a feedback survey. In response to the survey, participants noted that the opportunity to network through the reading of a relevant text and hearing others' perspectives on teaching were what they found most valuable about the reading groups. All but one participant, who expressed a strong dislike for the book they read, indicated that they would participate in another reading group. Again, all but one participant "strongly agreed" that they learned something new as a result of participating in the reading group. Most participants liked the structure and frequency of the biweekly meetings. Responses to the question "After participating in a pedagogical reading group, is there anything you hope to change about your teaching or course design?" indicated that meaningful learning occurred for many group participants. We should note that the Winter 2019 reading groups will not conclude until mid-May, and so the feedback noted above only pertains to the Fall 2018 reading groups.

Ninety-six different faculty and staff members participated in this year's TLC offerings. Participation by academic department is represented in figure X below.

Chart 11: Participation in TLC Programming by Academic Department



Faculty members from the teaching stream made up just over one-third (34%) of all participants in TLC offerings. Twenty-three percent of participants were research stream faculty members. Sessional instructors (17%) and staff members (17%) also made up a large percentage of attendees. Five librarians, four postdocs, and a graduate student made up the remaining participants.

In July 2018, the TLC hired a Marketing and Communications Assistant to help put together a teaching & learning collaboration handbook. The handbook outlined all programming offered by the TLC, and also listed resources for UTM instructors, funding opportunities for teaching and learning projects, and advice from UTM faculty members.

The TLC website continues to expand with new content and increased readership. With the help of the TLC’s Marketing and Communications Assistant, the TLC website was restructured to make it more user-friendly and visually appealing. A new section called the “Teaching Excellence Showcase” was added to share teaching-related advice from UTM faculty members. The number of users accessing the website increased by 136% compared to last year. Page views increased by 62% from 4,441 to 7,315.

In September 2017, the TLC launched a newsletter sharing information about upcoming events and articles covering a range of topics relevant to teaching and learning in higher

education. The TLC newsletter, published once per term, showcases teaching and learning projects happening on the UTM campus; it both celebrates teaching and learning work done at UTM and aims to inspire instructors across the campus. The TLC newsletters are created and distributed using MailChimp, the same platform used by the UTM Research Office for their SURGE newsletter. There have now been five editions of the TLC newsletter and the number of opens of this year's newsletters is up 7% compared to the Winter 2018 newsletter. As MailChimp's readership analytics indicate that a large percentage of readers are not subscribed to the newsletter, the TLC's goal is to grow the newsletter subscribers through direct outreach to those who have participated in TLC offerings.

Active Learning Classrooms

UTM's technology-enhanced Active Learning Classrooms (ALCs) are learning spaces designed to facilitate dynamic student participation in learning. The Fall 2019 term was the last term during which the pilot ALCs were operational. In the Winter 2019 term, UTM opened three new technology-enhanced ALCs and the pilot rooms were decommissioned. The new rooms have capacities of 60 students, 84 students, and 162 students. The new room layout is the same as it was in the pilot rooms, with round student tables fitting 6 students organized around the perimeter of the room. All student tables have their own physical and digital whiteboards, as well as several new features that were not available in the pilot ALCs.

The RGASC collaborates with the Library, Information and Instructional Technology Services (I&ITS), the Office of the Registrar, and Facilities Management and Planning to support and document the usage of the ALCs. With help from I&ITS, the RGASC's Educational Developer coordinates and facilitates the instructor and TA support and training initiatives related to the ALCs. This year, events coordinated and facilitated by the RGASC's Educational Developer included:

- ALC Course (re)Design Retreat in May 2018
- Six ALC Instructor Orientation/Refresher sessions in August/September 2018
- 10 ALC Instructor Orientation sessions in December 2018/January 2019
- Four ALC Teaching Assistant Orientation sessions in January 2019
- ALC Show and Share community-wide event in April 2019

The RGASC's Educational Developer also worked directly with instructors to support the design and re-design of courses for the ALCs.

Online and Hybrid Learning

The RGASC works collaboratively with technology librarians and I&ITS to provide support for instructors using online resources in their courses. While support for online initiatives is provided centrally, the RGASC supports funding proposals for the ITIF and UTM Teaching Innovation Fund, and provides educational development resources to successful projects.

6) *Work-Integrated Learning*

The new position of Work-Integrated Learning (WIL) Faculty Liaison was created at the RGASC in 2018 to provide direct academic support to faculty involved with Work-Integrated Learning (WIL). As of July 2018, Michael deBraga has taken on this role and spent the past year acquainting himself with the literature in the field, networking with faculty and the Experiential Education Unit (EEU) in the Office of the Dean, and developing resources for faculty to use in their classes.

As the WIL Faculty Liaison's role was new to UTM, it was necessary to inform faculty members and other stakeholders of his mandate. As such, he created an overview of the support that the RGASC could provide for faculty engaged in WIL, which he presented at the December 2018 monthly meeting of the Chairs and Directors. Then, in order to inform other stakeholders of the support he could provide, he delivered a workshop at the EEU mini-symposium held in February 2019.

In the winter term, the WIL Liaison reached out to UTM faculty involved in EL and was invited to provide support in two courses (VST410H5S & MGT480H5S). While his involvement in these two courses were directly the result of work conducted in this new position, he also continued his support for JCB487Y5, where over the last 5 years he has examined team-building skills through the use of the Kolb Learning Styles Inventory and applied Reflective Practice methodology. This prior work provides a foundation for much of the work he has done in 2018/2019 with the WIL Faculty Liaison portfolio.

While these pieces were the primary focus of the WIL Faculty Liaison's support, he has also been conducting research on comprehensive assessment strategies on how best to assess the learning gains associated with WIL opportunities. Specifically, he has met with Tracey Bowen (Associate Professor, Teaching Stream and Internship Coordinator at iCCIT) and Kayla Sousa (Experiential Learning Officer in the Experiential Education Unit) to begin the process of developing a methodology and set of tools for assessing the impact of UTM's experiential learning courses. Much of his contribution to this work has been exploring the potential of adapting existing survey and other assessment methods to the Graded Response Method (GRM) he has already developed for use in a number of courses at UTM.^{2,3} We are hopeful that the assessment of WIL and EL at UTM will be informed by GRM methods going forward.

The following is a brief summary of the work the WIL Faculty Liaison has conducted in specific courses at UTM:

² deBraga, M., Boyd, C., and Abdunour, S. (2015). Using the Principles of SoTL to Redesign an Advanced Evolutionary Biology Course. *Teaching & Learning Inquiry*, 3(1): 15-29.

³ Fukuzawa, S. & deBraga, M. (2019). Graded Response Method: Does Question Type Influence the Assessment of Critical Thinking? *Journal of Curriculum & Teaching*, 8(1): <http://www.sciedu.ca/journal/index.php/jct/article/view/14952>

- 1) In AIRLab (JCB487Y5 LEC0101), he provided support focused on developing collaborative skills for two AIRLab teams (9 students in total) and set up regular team meetings with an emphasis on reflective practice. The work related to this course has led to an accepted conference presentation (Paris, June 2019) and also contributed to a paper recently published in the *Journal of College Science Teaching*⁴.
- 2) In VST410H5S - Internship in Visual Studies, he delivered a workshop on Reflective Practice (RP) and worked with course instructor to produce a template for the application of RP, which was accepted for presentations at the Conference on Postsecondary Learning and Teaching, April 30th – May 1st, 2019 at the University of Calgary’s Taylor Institute for Teaching and Learning⁵, and the University of Guelph’s Conference – Designing, Teaching & Assessing Experiential Learning also held on April 30th, 2019⁶.
- 3) In MGT480H5S, an internship course, he delivered a workshop on RP, with a specific focus on how to ensure that the reflections are constructive and that the process is useful as a tool for further academic and/or professional development.
- 4) For the Professional Experience Certificate in Digital Media, Communication and Technology, he is in the process of collaborating with Tracey Bowen (ICCIT) and Kayla Sousa from EEU to develop an assessment tool to facilitate a comprehensive assessment of the internship program. While we are only in the very preliminary stages of this collaboration, plans are in place for piloting the assessment methodology during this summer (2019).

Future Directions

In the upcoming academic year, the WIL Faculty liaison will create additional resources to support UTM faculty teaching WIL / EL courses including:

- 1) generic and course-specific workshops on Reflective Practice that can provide students across UTM with the opportunity to practice deep reflection;
- 2) a tip sheet and learning objects that students and faculty can use to acquaint themselves with the Reflective Practice genre of writing; and

⁴ Laflamme, M., Krull, U.J., deBraga, M., & Piuanno, P. (2018). The Advanced Interdisciplinary Research Laboratory Course: Refinements, Reflections, and the Introduction of Earth Sciences. *Journal of College Science Teaching*, 48:1 – 2018. <https://search-proquest-com.myaccess.library.utoronto.ca/docview/2096473427?accountid=14771&pq-origsite=summon>

⁵ University of Calgary Conference on Postsecondary Learning and Teaching. April 30th & May 1st, 2019, Calgary, Alberta. Reflective Practice – A Model for how best to implement it? Co-authors: Professors Harriet Sonne de Torrens & Tyler Evans-Tokaryk

⁶ University of Guelph Conference – Designing, Teaching & Assessing Experiential Learning. April 30th & May 1st, 2019. Guelph, Ontario. How to Implement and Assess Deep Reflection in an Experiential Learning Course. Co-authors: Professors Harriet Sonne de Torrens & Tyler Evans-Tokaryk.

- 3) a set of Reflective Practice workshops to be integrated into the mandatory training for FSG leaders and Program Assistants in the RGASC's PASS and FSG programs.

Part Three: RGASC Programs

In addition to its core focus areas, the RGASC provides academic support to UTM undergraduate students through four formal programs:

- 1) Head Start
- 2) Facilitated Study Group Program
- 3) Promoting Academic Skills for Success (PASS) Program
- 4) Program for Accessing Research Training (PART)

The following is a brief overview of each program's activities in 2018/2019.

1) Head Start

In terms of attendance, Head Start was a resounding success in 2018, as the number of students who attended was nearly double the number from 2017. We believe this occurred for a number of reasons. First, there was a shortened Orientation week (O-week), which meant that Head Start occurred closer to the first day of classes. Second, the work undertaken by the RGASC's Communications Assistant was particularly valuable. The front office was able to directly communicate with students via email. Updates were sent at timely intervals and re-confirmation of attendance was recorded. Furthermore, because the Departmental workshops were moved into O-week, Head Start was able to focus on providing a multitude of skills-based workshops over the first two days. The morning sessions on both the first and second days were two hours in length. The first day, *Creativity, Collaboration, and Problem Solving* saw an attendance of 363 (compared to 193 in 2017), and on the second day, *Reading and Writing for Success*, was attended by 295 (as compared to 127 in 2017).

Attendance numbers for the concurrent sessions were as follows:

Table 22: Comparison of Attendance from 2017 to 2018 for Workshop Sessions

| <i>Session Name</i> | <i>Attendance 2018</i> | <i>Attendance 2017</i> | <i>% difference</i> |
|---|------------------------|------------------------|---------------------|
| Writing and Reading Focus | | | |
| Academic Integrity | 31 | 25 | +24% |
| Critical Reading | 54 | 31 | +74% |
| Critical Writing* | 66 | 77 | -14% |
| Lab Report Writing | 128 | 62 | +106% |
| Library 101* | 117 | 64 | +83% |
| Academic Language | NA | 8 | NA |
| Academic Vocabulary | 36 | 16 | +125% |
| Numeracy Skills | | | |
| Test your Math Skills | NA | 16 | NA |
| Problem Solving | 78 | 17 | +359% |
| Sneak-a-Peek 1 st year Math Tests | 165 | 87 | +90% |
| First Year Science Uncovered | 104 | NA | NA |
| General Skills | | | |
| Interpreting your Syllabus (renamed “Study Planning” in 2018) | 84 | 59 | +42% |
| Time Management* | 148 | 100 | +48% |
| Note Taking* | 242 | 128 | +89% |
| Navigating UTM as an ELL | NA | 2 | NA |
| Faculty Panel | 296 | 123 | 140% |
| Student Panel | 290 | 145 | 100% |

* Workshops that were held multiple times are identified by an asterisk

Table 23: Comparative Head Start Attendance Data

| <i>Year</i> | <i>Total Attendance</i> | <i>Unique Attendance</i> | <i>Presenters</i> | <i># of Total Sessions</i> | <i># of Total Hours</i> |
|-------------|-------------------------|--------------------------|-------------------|----------------------------|-------------------------|
| 2013 | 1540 | 377 | 32 | 30 | 36 |
| 2014 | 1668 | 397 | 33 | 24 | 46 |
| 2015 | 1642 | 322 | 37 | 35 | 51.5 |
| 2016 | 828 | 246 | 26 | 35 | 40 |
| 2017 | 1319 | 287 | 23 | 26 | 14 |
| 2018 | 2698 | 539 | 23 | 24 | 14 |

As always, students were asked to provide feedback on the value of the Head Start program. We surveyed them over the course of September 2018 and received 121 responses. When asked if the Head Start experience helped in preparation of university studies, an overwhelming 96.7% (117 of 121) responded ‘yes’. Of the offerings available, the student panel and faculty panel were deemed to be most ‘helpful’, with 75.7% and 72.4% respectively indicating it was either ‘helpful’ or ‘very helpful’. Students were most negative about the free lunch, where 12 students (out of 121) deemed this to be ‘unhelpful’. Further, when asked about the level of difficulty of the sessions attended, less than 2% indicated that the sessions were ‘very difficult,’ which seems to suggest that the level of programming was targeted appropriately.

2) *Facilitated Study Group (FSG) Program*

Program Overview

Based on the Supplemental Instruction model developed by the University of Missouri at Kansas City, facilitated study groups are a non-remedial approach to learning enrichment that uses peer-assisted study groups to integrate essential academic skills with course-related material. The study groups employ a wide range of collaborative learning techniques to help students build a structured study routine in order to process their study material more effectively.

The essential features of the RGASC’s Peer Facilitated Study Group Program are as follows:

- FSGs are only offered in support of courses in which there is active collaboration between the course instructor and the RGASC.
- FSGs target historically difficult courses rather than “at-risk” students.
- Participation in the FSG program is voluntary and open to all students enrolled in the course.
- The impact of this intervention on the academic performance of the class as a whole is measured by the RGASC at the aggregate level.

- The sessions are peer-facilitated by a team of facilitators, model students who volunteer or who are hand-picked by the course instructor and intensively trained by the RGASC in proactive learning and study strategies.
- The opportunity for students to attend the study groups is made available at the beginning of the term, before students encounter academic difficulties.

The goal of the FSG program is two-fold:

- 1) To provide course instructors and their students with a non-remedial approach to learning enrichment by deploying peer-assisted study groups to integrate essential academic skills with course-related material.
- 2) To provide senior students, who are in the process of transitioning out of the undergraduate phase of their university career, with an experiential learning opportunity through which they acquire skills and competencies critical to their professional development and commensurate with Degree Level Expectations.

The FSG Program operates through volunteer participation from the Facilitators. The opportunity to gain experience in a facilitation role is a key motivator for them, particularly as many of them have ambitions to teach in the future. Facilitators also receive a Co-Curricular Record (CCR) annotation on their transcript and guidance from RGASC faculty on how to construct a facilitator portfolio. Throughout the year, facilitators meet with the RGASC's Program Manager, Program Strategist, and Program Assistants, who are experienced, senior Facilitators themselves, to receive feedback on the portfolio as a "work-in-progress".

Facilitator Training

A. Initial training

Approximately 15 hours are devoted to initial training, with three objectives:

- 1) To define the role of facilitators as role models. While TAs act in the role of a "content expert" in a course, facilitators learn to see themselves as a "course expert", developing meta-cognitive awareness of how to be successful in the course.
- 2) To present the concept of the study group as an anti-tutorial. Facilitators are trained to use collaborative learning techniques and other learning strategies to build learning networks within the study sessions.
- 3) To emphasize the importance of incorporating a "scaffolding" approach into the design of the study sessions. The study sessions model the process of effective study and exam preparation strategies by practicing study skills and eventually building the students into self-directed learners.

B. In-service training

In-service training is offered once per term, and each session is one hour. The objectives of the in-service training are, first, to allow facilitators to reflect on their work thus far in supplying Supplemental Instruction; second, to help them develop new instruction

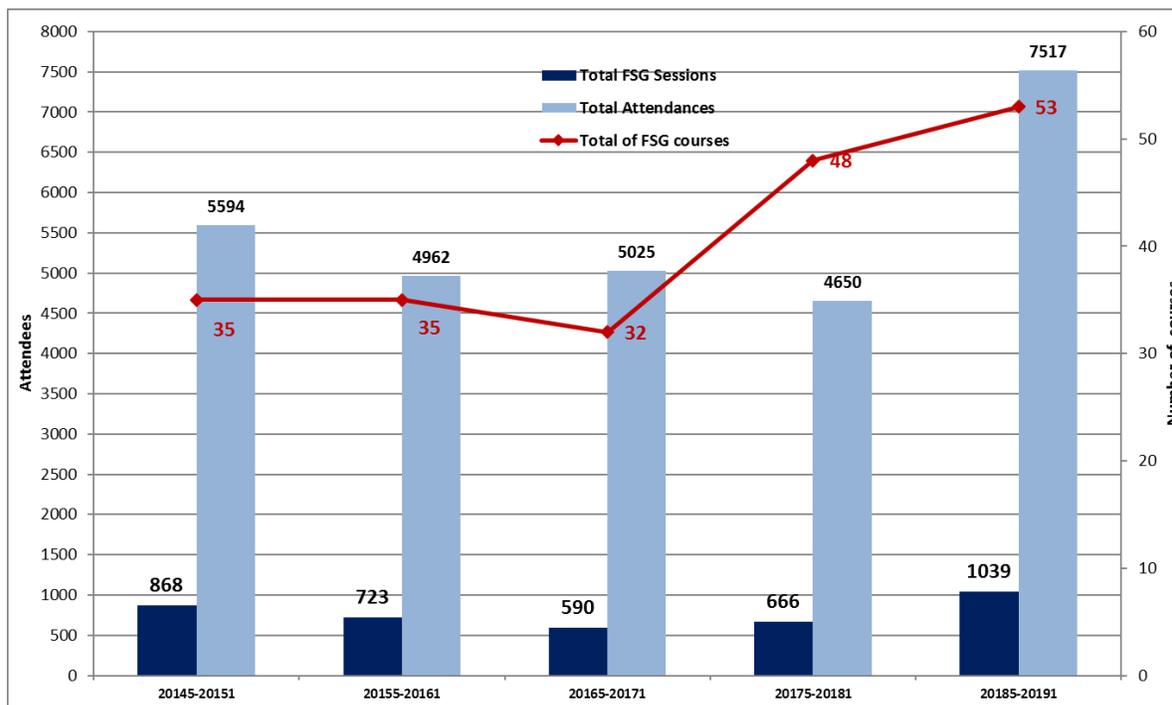
strategies and refine older ones; third, to allow them to share experiences with Supplemental Instruction and develop understanding of best practices; fourth, to use surveys and discussion to collect qualitative data based on facilitator experience to improve training processes.

All in-service training takes place over a one- to two-week period in the middle of the term, with multiple sessions occurring throughout the day. The emphasis on generic training means that the program is not dependent upon the availability of specific Program Assistants.

Program Results

In 2018/2019, there were **7,517 attendances** at Facilitated Study Groups for **1,039 FSG sessions** in **53 courses**. Included in this total are 405 attendances in FSG sessions within Living Learning Communities associated with three programs (Residence PALs and LLCs; LAUNCH program; Language Conversation Circles within the International Education Centre). This compares to 4,650 total attendances for 666 sessions in 48 courses in 2017/2018. A total of **277 students (+ 18 PALs in the Residence) volunteered as Facilitators** in 2018/2019, as compared to 176 in 2017/2018.

Chart 12: FSG Aggregate Summer 2014 – Winter 2018



The following courses participated in the FSG Program in 2017/2018:

ANT101, ANT102, BIO152, BIO153, BIO207 (Winter, Summer), BIO210, CHI103, CHI104, CHI203, CHI204, CHM110 (Fall, Winter), CHM211, BIO202, CHM242 (Fall, Winter, CHM243 (Summer), CHM362, CSC148, ECO100, ECO220 (Summer, Fall,

Winter), ENG102, ENG110 (Winter), ENV100, ERS101, ERS111, FSL105, FSL106, GGR214, ITA100, ITA200, LIN101, LIN102, MAT102 (Fall, Winter), MAT133, MAT134, MAT135, MGT120, PHY136, PHY137, PSY100, PSY290 (Fall, Winter), PSY270, PSY346, RLG101, SOC100, SPA100.

Growth in the FSG Program

The program results from 2018/2019 represent a significant increase in the program over the results from previous years:

- **Attendance: 62% increase from 2017/2018**
- **FSG Sessions: 56% increase from 2017/2018**
- **Facilitators: 57% increase from 2017/2018**

There were greater efficiencies introduced within the program through improvements to the Facilitator training process, the increased effectiveness of the Quercus Learning Management System, and a focus on scheduling FSG sessions only during optimal times during the week. However, these efficiencies alone would not account for such a dramatic jump in the program results. There are two main factors that may account for this increase:

- 1) A shift from one-time-only (OTO) funding to base-funding allowed the program to recruit, hire and train a cadre of Program Assistants in June (when the RGASC would typically still be waiting for approval of funding). This change permitted program staff to train facilitators, create a schedule of sessions and have advertising in place well before the start of classes.
- 2) A comprehensive and sustained advertising campaign highlighting the FSG program was run before and during the academic year. This campaign involved targeted marketing during Head Start and Orientation, and continued with multiple weekly pop-up tabling events across the campus.

Managing the Continued Growth of the FSG Program

Several modifications have been made to the FSG operations to help sustain this recent program growth.

Program Assistant Recruiting and Hiring

Because of the earlier hiring cycle, Program Assistants are now assigned early in the summer to manage their Facilitators by “course clusters”; they are trained during the summer to work closely with their fellow PAs to liaise with course instructors, monitor FSG sessions and generate documentation of the FSG sessions in the form of session plans, session maps and attendance.

Adoption of Microsoft Teams Platform

The FSG Program adopted the Microsoft Teams communications platform to facilitate information sharing and collaboration among Program Assistants. This tool has made it much easier to generate and share files for tracking attendance, session mapping, etc., by allowing the PAs to see updates in real time on their phones.

Quercus Learning Management System

The FSG Program began using Blackboard in October 2017 to centralize Program Assistant-Facilitator communications. Before this, all communication had been done through email. Using Blackboard allowed Program Assistants to send out general announcements and easily share Supplemental Instruction resources with all facilitators. Blackboard was also used to house and track facilitator attendance, session plans, and reflections. With the University of Toronto's move to Quercus as the new Learning Management System (LMS) over this past year, the FSG program was able to set up separate "sandboxes" to house different types of Facilitators. Quercus was used in a similar way for EDS325 (a new credit-bearing experiential learning course where students complete an internship as FSG leaders) – that is, the course-based Facilitators were attached to the EDS sandbox, in addition to the sandbox for all Facilitators. As well, Quercus was used as a hub for Supplemental Instruction Resources, as a collaborative tool to share best practices, and as the central location for submitting reflections and session plans.

In addition, Quercus allowed for the collection of facilitator data (attendance, session plans, and reflections), and allowed Facilitators to receive feedback on a more regular basis. When Blackboard was first used in 2017, FSG staff were better able to compare Facilitators' resources and found that the quality of the session plans submitted by Facilitators varied significantly, as did the level and type of feedback given by Program Assistants. To address these challenges, Program staff created grading schemes, success criteria for session plans and reflections, and timelines and shared these on Blackboard.

This increased exposure to Quercus allowed Program staff to define the expectations for submitting session plans and reflections, to emphasize the connections to professional development, and to monitor Facilitator engagement and address problems. In addition, existing grading schemes and success criteria were supplemented with examples of Facilitator submissions of different qualities to highlight program expectations. Quercus training was also integrated into the Program Assistant training, and our use of Quercus has enabled a renewed focus on attendance tracking, as it allowed us to better spot and address gaps in attendance submissions and make appropriate corrections to the FSG schedule in a timely manner.

Changes to Training

As a response to the challenges that facilitators faced during the academic year and observations from previous iterations of the program, the initial Facilitator training was modified to increase its efficacy and efficiency. For 2018/2019, we expanded the breadth of the initial training to increase the number and variety of facilitating techniques that could be applied in practice. Role-play scenarios were used to illustrate difficult situations and to encourage problem solving. On-line training modules were used to introduce the basic conceptual and pedagogical theory (wait time, redirect, etc.) of Supplemental Instruction, techniques for managing sexual violence and mental health issues, and strategies for working with at-risk students. Covering the basic pedagogical theory online allowed the trainers more time to emphasize skill building in the training sessions; it also allowed for training in coping with challenging situations (e.g., training recommended by the Sexual Violence Prevention & Support Centre). The experiences of Program Assistants and Senior

Facilitators were incorporated to highlight challenges that they have observed and best practices for overcoming these difficulties. In 2018/2019, initial FSG training was offered during specific time frames (e.g., before each semester, during Reading Week) rather than being set up on an ongoing basis. This led to a more efficient use of the budget since more facilitators were trained per session; as well, the higher attendance per session encouraged more collaboration and sharing of ideas.

Session Maps

A critical tool for managing the growth of the FSG program is the continual generation of session maps to document FSG sessions throughout the academic year. This system of observation and both visual and verbal feedback that the session mapping app provides allows the Program Assistant to almost instantly correct Facilitators' misconceptions with Supplemental Instruction (e.g., teaching vs. facilitating) and to support their real-time challenges (e.g., sexual harassment, mental health issues). The session maps can serve as discussion pieces for professional development and improving Supplemental Instruction practices. During 2018/2019, session maps were closely integrated into both initial and in-service training as a means of both modelling and discussing best practices for Supplemental Instruction. In addition, the new Quercus LMS allowed for setting up a method to track facilitator mapping alongside the tracking of attendance, session plan submissions and reflection submissions. This integration of the tracking of mapping into the LMS has enabled Program Assistants and staff to better target which sessions needed to be mapped and therefore increased the number of facilitators who were mapped each term. In 2018/2019, 180 session maps were created, compared to 108 maps for 2017/2018.

Outreach and Program Support

The FSG program continued to expand its model of academic support beyond the FSG program to four additional areas: Residence Peer Academic Leader (PAL) program, Academic Societies, Exam Jam and Living Learning Communities in the Residence, the International Education Centre, and the LAUNCH program. The RGASC continued to provide Facilitator training and FSG academic support for the Peer Academic Leaders in the Residence, with two days devoted to facilitator training for the 18 Residence PALs in August 2018. The PALs also supported non-residence FSG sessions and the Program Assistant from the Residence collaborated with the RGASC Program Assistants to provide additional support for FSG sessions within the Residence. During 2018/2019, the RGASC trained members from two academic Societies, the UTM Anthropology Society, and the J. Tuzo Wilson Geology Club, to deliver FSGs within several first-year ANT and ERS courses. The RGASC and the Centre for Student Engagement continued to work closely in planning for the end of term Exam Jam. This resulted in an increase in the number of FSG sessions and led to the sessions being scheduled into rooms that were closer to other events and more conducive to high quality facilitation. These changes also resulted in stronger attendance during Exam Jam. During the Fall term, the fourth week of the LAUNCH program was co-facilitated by RGASC Facilitators and the LAUNCH Leaders. The RGASC provided support in the form of one Program Assistant and 29 Facilitators in the 20 LAUNCH sessions – all of which were conducted in the conference room in the RGASC's new space. LAUNCH and the RGASC have already established a time in the Fall term of 2019 to continue this collaboration.

EDS325: Supplemental Instruction in Higher Education

To the best of our knowledge, no post-secondary institution in Canada has created a credit course in Supplemental Instruction (FSGs) to run alongside a Supplemental Instruction (FSG) program. However, we felt that the advantages offered by the FSG program infrastructure in terms of scalability, sustainability and measurability presented the ideal conditions for piloting this type of course, and so we created EDS325H: Supplemental Instruction in Higher Education: The Impact of Peer Facilitated Study Groups.

This course was a collaborative venture between the Department of Language Studies and the RGASC to introduce students to the theory and practice of Supplemental Instruction in higher education. Focusing on the history and evolution of SI, the rationale for its use, current research, and tools and resources that Facilitators need to run study groups, the course ran for the first time in Fall 2018. EDS325 incorporates a mandatory internship component, through which each student is placed within the FSG program in the RGASC. Each student must go through an approval (vetting) process before being formally enrolled in the course.

Essentially, EDS325 drew on the RGASC's FSG program provided for the logistical infrastructure for the internship, as well as a framework for the production and assessment of course work. This included extensive collaboration with the course instructor with regard to the following topics:

- Recruitment of students
- Ongoing (throughout Summer term 2018) revision of the EDS325 Course syllabus and the course enrollment process (exclusions, enrollment control annotations, etc.)
- Enrollment control – vetting potential EDS325 students and giving approval for enrollment in the course
- Consultation with the course instructors in FSG-supported courses prior to the placement of EDS325 Facilitators
- Program Assistant support of the EDS325 placement according to discipline
- Initial Facilitator training of each EDS325 student before the placement, and subsequent in-service training during the placement
- Enrollment of each EDS325 student in the FSG program Quercus shell
- Scheduling of the FSG session for the EDS325 student, which involved room bookings, advertising of the session, and enrollment of the EDS325 student within the Quercus shell of the FSG-supported course
- Monitoring (providing feedback), recording of attendance, and mapping (documenting) support during each EDS325 student's session – this material would form the basis the student's portfolio (one of the main graded assignments in the course)
- Ongoing support for each EDS325 student's FSG sessions (mandatory session plan and other teaching materials)
- Participation of the FSG Program Manager in each EDS325 lecture

- Participation by both the Program Manager and Program Strategist in the poster presentations during the final class
- Analysis of both the quantitative data (attendance) and qualitative data (feedback) from each EDS325 student's FSG sessions
- Contributions to an advertising strategy for the course for 2019-2020

It is difficult to determine the precise number of hours that have been spent over this past year in providing logistical support from the FSG program for the EDS325 course. For example, considerable time and effort was invested in recruiting potential students for the course in the form of individual correspondence through email or in 1-1 meetings, and then following up with a check of the potential student's record on ROSI. In terms of the final course enrollment, 23 students finished the course, but an additional 15 students were at one time or another enrolled in the course, and withdrew before the end of the Fall term. Approximately a dozen additional potential EDS325 students corresponded with the FSG Program Manager throughout the summer to determine if the EDS course would be a suitable option, but ultimately decided against enrollment because of timetable conflicts or program of study workload. This means that there were approximately 50 students who were interested in EDS325 in 2018, and each required individual attention in terms of additional information, etc.

One unanticipated development from the EDS course was the role it could play in producing effective and motivated Program Assistants for the FSG program. As well, the pedagogical approach taken by the EDS325 course instructor has provided the FSG program with ideas to better support other FSG for-credit initiatives in the Language Studies department. During 2018/2019, seven additional students acted as Facilitators for the FSG program on a for-credit basis: four students/Facilitators doing a placement within LIN101 and LIN102 (course credit: LIN495Y), and three students/Facilitators doing a placement within ITA100 and ITA200 (course credit: LIN493H).

Future Directions

- Continue to search for more efficient and effective ways to recruit potential Facilitators for the FSG program, and especially for the EDS325 course (for 2019/2020, this course may be expanded to run in both Fall and Winter terms).
- Continue to pursue mechanisms for synchronizing the EDS course with the FSG program
- Continue to improve advertising strategies for the FSG program. For 2018/2019, the "Group Chat" process followed spontaneously by students within a number of courses at UTM will be explored as an advertising mechanism
- Continue to explore new ways to encourage Facilitators to give more priority to the professional development potential of the Facilitator portfolio, especially with respect to their written reflections. Options we are considering include e-Portfolio programs and the integration of reflective writing workshops (run the RGASC's WIL Faculty Liaison) into the Facilitator and Program Assistant Training programs

- Continue working with the Office of the Registrar to enhance the FSG reporting format for 2019/2020. We would like FSG attendance data to tell us whether students are using FSGs a “distributed practice” mode of study, or a “just-in-time” mode of study, or as part of a “learning community” mode of study

3) Promoting Academic Skills for Success (PASS) Program

The PASS Program was launched in February 2015 to provide dedicated support to academically “at risk” students. The Program’s ultimate goal is to build students’ resilience through rebuilding students’ motivation, modeling successful behaviors, and raising students’ self-awareness.

The PASS Program comprises a six-week course (non-credit-bearing) in one term followed by individualized support in the subsequent term. Each week of the course includes the following activities:

- A two-hour “class meeting” focusing on foundational academic skills such as listening, note-taking, reading, writing, problem-solving, critical thinking, and research skills.
- An hour-long PASS Facilitated Study Group providing students with an opportunity to practice the skills introduced in the preceding class.
- A reflective writing exercise.

In addition, all PASS participants are required to attend both an intake and exit interview. The exit interview includes a one-on-one consultation with a writing specialist to discuss their post-PASS writing assessment.

Enrolment and Completion Data

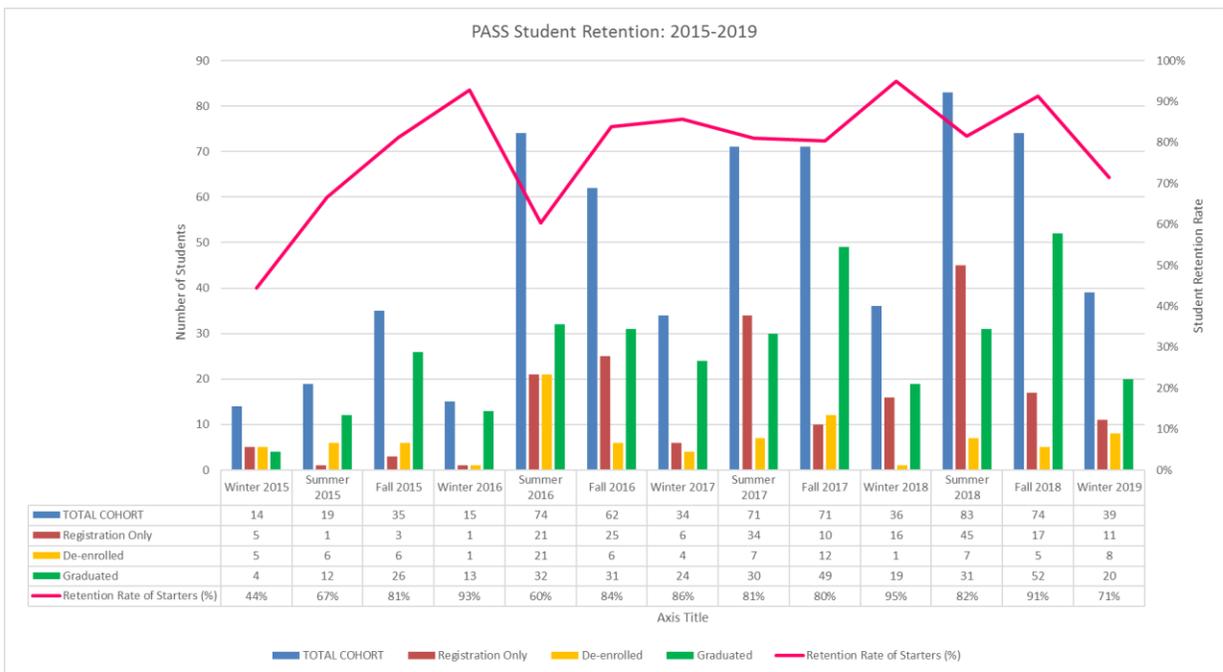
PASS has now been run 13 times, and the data generated by the PASS program is sufficiently large that the program can be measured both quantitatively and qualitatively for its effectiveness. One metric we use to assess PASS is to compare it with the Bounce Back Retention Program (BBRP) at San Diego State University, on which the PASS program is modelled. The 2011 report on the BBRP⁷ compared three groups of students among its at-risk population: students who had graduated from the BBRP; students who had started the BBRP, but failed to complete the program; and students who were invited to join the BBRP, but did not take part in the program. While for BBRP, 65% of students who started the course completed it, for the thirteen versions of PASS, the completion rate has been consistently over 75%. In 2018/2019, the PASS Program was offered three times (summer, fall, and winter), with a total of 123 students enrolled and 104 completing the program, leading to an 85% completion rate for this academic year.

⁷ Hanger, M. A., Goldenson, J., Weinberg, M., Schmitz-Sciborski, A., & Monzon, R. (2011). The Bounce Back Retention Program: One-Year Follow-UP Study. *Journal of College Student Retention: Research, Theory & Practice*, 13(2), 205–227. <https://doi.org/10.2190/CS.13.2.d>

Table 24: PASS Completion Rates in the 2017/18 and 2018/19 Academic Years

| <i>Session</i> | <i>Students Enrolled</i> | <i>Students Completed</i> | <i>Retention Rate</i> |
|----------------|--------------------------|---------------------------|-----------------------|
| Summer 2017 | 37 | 30 | 81% |
| Fall 2017 | 61 | 49 | 80% |
| Winter 2018 | 20 | 19 | 95% |
| Summer 2018 | 38 | 31 | 82% |
| Fall 2018 | 57 | 52 | 91% |
| Winter 2019 | 28 | 21 | 71% |

Chart 13: PASS Student Retention: 2015 to 2019



In each iteration, RGASC staff have worked closely with the Office of the Registrar to refine the referral, intake, and record-keeping processes. Students’ responses to the Program have been monitored closely and the curriculum, modes of instruction, and assessment tools have been revised accordingly.

The Office of the Registrar also take completion of the PASS program into consideration when assessing whether a student’s suspension status will be lifted. Students may be referred to the PASS program with notification that their suspension lift is conditional on the successful completion of PASS; in 2018/19, 10 students with such a conditional suspension lift were enrolled in PASS, 8 of whom successfully completed the program.

Data Analysis on the Impact of PASS on Academic Performance

In 2017/2018, the RGASC asked the Assistant Director, Divisional Research to use ROSI data to analyse the impact of PASS on annual grade point averages (AGPA). The pre-PASS and post-PASS AGPAs were compared for three cohorts, consisting of students who had completed PASS, partially completed PASS, and those who registered, but did not attend any PASS sessions. In all three groups, it was observed that the AGPA increased after PASS. In addition, a significant number of students had their academic status change from probation or one-year suspension to good standing after completion of PASS.

Qualitative Feedback from PASS Students

At the end of each cycle of PASS, all students are required to attend an exit interview with one of the program instructors. Before the interview, the students are asked to provide a written response to a number of questions regarding their experience as participants in the PASS program. Below is a selection of student comments from the 2018/2019 academic year:

Study skills development and habit formation

“Attending Pass, alongside my other courses this semester, I began to notice a rise in my assignment and test marks, because I learned essential skills that I was able to very easily translate into my courses this semester.”

“I have learned a lot of new skills that I was unaware of when I came into the program. From the instructors that took part in all the sessions to the assignments given to us, it was a friendly experience while going through a scary time.”

“I would say that my experiences as a participant in the PASS program were informative and effective in building better scholastic habits in me. I found that, in establishing a rote physical pattern every week, and in completing so much course work—broken up as it was—helped to establish lasting behaviours that I hope to continue to implement in my next session.”

Improvement in student confidence and motivation

“PASS has helped me contextualize my mistakes and learn from them, rather than make me feel bad about myself. Instead, it helped boost my confidence through fun and engaging activities all while helping myself learn new skills.”

“My experience participating in PASS has been beneficial. I think it was a much needed class to show me that even though I am on probation, I have all these different tools to help me with school, and that does not define what kind of student I am.”

“It was incredibly informative, but without the pressure of a normal academic environment. Everyone in the program was in the same boat as me, and it was quite comforting. The instructors and program assistants didn’t feel authoritative or judgmental, which was a nice surprise.”

“The instructors and assistants really provided me with a lot of guidance and support with my return to U of T which makes my continuing journey at U of T appear less daunting.”

Student engagement

“Through the program I was also able to get a sense of what FSGs are. I have never attended an FSG session since I have started university, but now I know I must attend them because through FSGs one is able to form bonds with peers, engage in academic lessons, and gain experience of the material that is being thought.”

“I also benefited from a comfortable introduction to the RGASC. While the skill centre is mentioned during presentations around UTM, it wasn't until I joined the PASS program that I realized how much of a help the RGASC can be in a non-academic capacity in addition to the more obvious academic mentoring and support. I leave the PASS program having earned the confidence that the skill centre will be available as a strong tool for me to utilize, and gain both academic and non-academic advice from to help fulfill my personal and career goals.”

“If I had been through this course at the start of my university tenure, then I believe it would have led me to be much more successful early on. Which is why I think this should be a mandatory course for all students.”

Changes to the PASS Program in 2018/2019

A Permanent Space for the PASS Program in the New RGASC

The move of the RGASC to the New North building enabled the PASS program to establish a permanent space for both the delivery of the sessions and the associated administrative tasks such as grading. In previous years, the PASS classes and FSGs were delivered in rooms across campus, which were often far removed from where the PASS files were stored and where Program Assistants (PAs) and RGASC staff were based. As a result, PASS sessions took place in rooms that were not always conducive to the types of learning activities that were planned and a lot of time was lost in both booking rooms and moving between rooms.

The new location offers a dedicated learning space for all sessions, which has resulted in less administrative burden in trying to book multiple rooms across campus and then updating students on associated room changes. In addition, the amount of time PASS students spend at the RGASC is substantially increased, which has enabled PASS instructors and PAs to make direct referrals to other services offered at the centre. It is hoped that the increased familiarity with RGASC staff and the facilities at the centre will lead to students visiting more often after completing the program.

The closer proximity of the PA office to the location of the PASS sessions has resulted in PAs having easier access to student work and resources from previous sessions, both of which can be used to supplement the content of the current class. The PASS instructors have also been able to reallocate PA activities during the sessions with greater ease; as well, the close proximity of the PASS classroom to the PA office and the office of the

program instructors has led to more opportunities for unplanned co-facilitation and mentoring than when PASS sessions took place outside of the RGASC.

In the old location of the RGASC, the PASS PAs were allocated limited space in the office of the Program Manager, which was also shared with the Facilitated Study Group PAs. In the new location, the PASS PAs have a dedicated space with multiple workstations and direct access to the student files. The benefit of this change is that more PAs can be scheduled for administrative tasks at the same time, which has provided more opportunities for collaboration and mentoring of junior PAs by their more senior counterparts. In the Winter 2019 iteration of PASS, it was observed that junior PAs were able to manage more administrative responsibilities than in previous cycles of PASS and it is felt that the greater opportunities for support and training was a contributing factor.

Accommodations Protocol for Students Registered with Accessibility Services

In the Fall 2018 term, multiple students self-identified as being registered with Accessibility Services and disclosed their need for classroom accommodations for the PASS program. A focused discussion was initiated with both the Office of the Registrar and Accessibility Services regarding the appropriate accommodations for students on suspension. In response to these discussions, a formal accommodations protocol for students registered with Accessibility Services was established. The PASS consent form was adapted to offer students the opportunity to self-disclose their accommodation needs, which then initiated communication with Accessibility Services regarding strategies for making these accommodations.

Writing Specialist Support

In Fall 2018, a part-time writing instructor was hired to work specifically with the PASS program to continue the existing writing activities, but also to provide hands-on support for the second hour of the Week 5 session when students focus on writing a thesis statement related to research they conducted in Week 4. The use of a part-time writing instructor for this role allowed full-time staff members to focus on other areas of their portfolio, and enabled a more consistent source of writing support for the PASS students. In the Fall term, the writing instructor was present throughout the Week 4 and 5 classes and met with students in a one-on-one consultation after the exit interview. Many students said that having the ability to work with a writing instructor in a hands-on manner over multiple weeks helped them to feel more confident in the writing process.

“Working Toward Success” Document

In Winter 2019, the PASS instructors began working with the Assistant Registrar, Student Communications to develop a document to address the questions that PASS students have in regards to academic planning. The document responds directly to questions raised in the Winter 2019 PASS Reconnect session, which were focused on what to do during suspension, supports while on suspension, and best practices when returning from suspension. The document was first distributed to PASS students as a resource during the Winter 2019 exit interviews, and it is hoped that in future iterations of PASS it will be posted to Quercus as required reading and could be used by Academic Advisors when meeting with PASS students.

Future Directions

Numeracy Unit for PASS

In PASS exit interviews, students with an interest in science and math programs have communicated that while they value the writing component of the PASS program, a unit on numeracy would also be beneficial. The PASS instructors plan to work with the Numeracy Specialist at the RGASC to develop the content for a seventh week of PASS focusing on the development of numeracy skills. This numeracy unit would be aligned with the content that is currently being delivered in regards to problem solving and critical thinking, so all students, regardless of their program, can apply the material to their academic studies. The development and delivery of the proposed Numeracy unit is contingent upon the availability of funding which has not yet been secured.

Referrals from Accessibility Services

There appear to be a growing number of students in the PASS program who are registered with Accessibility Services. In 2019/2020, we will take a more proactive approach to the relationship between the PASS program and Accessibility Services by establishing a referral process that Accessibility Advisors can use to direct at-risk students to the PASS program. Time will be committed to meeting with the Accessibility team at set points in the year to discuss the content of the PASS program so they can accurately share its benefits to students who may be trending towards probation or suspension.

Developing a Sustainable Approach to Addressing Student Wellness

In previous iterations of PASS, representatives from the Career Centre, the Office of the Registrar, and Health and Counselling Centre (HCC) have been invited to lead presentations to the students on each of their service areas. In Fall 2018 and Winter 2019, HCC was unable to send a staff member to each Week 6 class, and this seems unlikely to change in the future. In 2019/2020, the PASS instructors will work with the HCC team to develop a sustainable approach to addressing student wellness in the PASS program without having to depend on staff members to lead sessions. Possible options include the use of HCC volunteer mentors to co-facilitate sessions, greater use of online resources and activities, and PASS instructors delivering relevant content developed in consultation with HCC staff.

Expansion of PA Training

In 2018/2019, FSG Program Assistants and facilitators were required to complete online modules on sexual violence and mental health as part of their mandatory training. In 2019/2020, all PASS PAs will be required to complete the same training, in addition to training on the Accessibility for Ontarians with Disabilities Act (AODA). It is felt that as PASS continues to evolve and stronger partnerships are made with departments like Accessibility Services, the training of the PAs will also need to evolve and grow so they are properly equipped to support all incoming PASS students.

4) Program for Accessing Research Training (PART)

PART is a research training program that is made available to all UTM students. It is offered once a week throughout the Fall and Winter terms and then in a more compressed format as a “Summer Institute” in the last week of April and first week of May when there are very few other programs competing for students’ attention. For the past few years, PART has included eleven distinct training modules and an information session on how to apply for an ROP course. Each training module comprises four hours of classroom instruction and a homework exercise or assessment. Instruction includes both conceptual discussion and hands-on practice of research methods.

PART programming is divided into three kinds of research methods: Core, Quantitative, and Qualitative. Students who complete all three Core modules, at least two of the Quantitative or Qualitative modules, and a Reflective Writing Exercise receive a CCR annotation as either a Qualitative Methods or Quantitative Methods PART participant.

The tables below present PART attendance and CCR data for 2018/2019.

Table 25: PART Attendance 2017-2019

| <i>Module</i> | <i>Fall/Winter 2017/18</i> | | <i>Summer 2018</i> | | <i>Fall/Winter 2018/19</i> | |
|---|----------------------------|-----------------|--------------------|-----------------|----------------------------|-----------------|
| | <i>Registered</i> | <i>Attended</i> | <i>Registered</i> | <i>Attended</i> | <i>Registered</i> | <i>Attended</i> |
| Transcribing and Coding | 10 | 3 | 17 | 13 | 19 | 5 |
| Statistics | 21 | 15 | 34 | 46 | 18 | 3 |
| Research Ethics | 50 | 31 | 48 | 47 | 23 | 23 |
| Preparing for an ROP | 26 | 10 | N/A | N/A | N/A | N/A |
| Leading a Focus Group | 15 | 9 | 11 | 12 | 21 | 2 |
| Lab Protocols | 39 | 18 | 32 | 41 | 7 | 2 |
| Research Design in the Sciences | 45 | 15 | 39 | 65 | 14 | 5 |
| Research Design in the Social Sciences* <i>added in 2018</i> | N/A | N/A | 13 | 4 | 8 | 0 |
| Research Design in the Humanities* <i>added in Fall 2018</i> | N/A | N/A | N/A | N/A | 5 | 2 |
| Data Analysis | 19 | 15 | 29 | 40 | 20 | 5 |
| Conducting Literature Searches | 41 | 21 | 42 | 75 | 12 | 11 |
| Conducting Interview | 16 | 9 | 24 | 37 | 13 | 1 |
| Conducting Archival Research | 16 | 4 | 12 | 4 | 15 | 3 |
| Annotated Bibliography and Literature Review | 42 | 23 | 44 | 82 | 13 | 11 |

The 2018/2019 PART Program (excluding Summer) had a total of 188 registrations and 73 attendances⁸, whereas in 2017/2018, it had a total of 340 registrations and 173 attendances. In other words, actual PART attendance numbers declined quite dramatically this past year.

The PART Summer Institute was held for the fourth time in the last week of April and first week of May 2019. This approach was once again popular with students, with 228 registrations and, somewhat surprisingly, 247 attendances; again, it should be noted that this is a significant decline from the 466 attendances at the 2018 PART Summer Institute

Table 26: PART Fall-Winter 2018-2019 CCR Status

| <i>Stream</i> | <i>Number of Students</i> |
|---------------|---------------------------|
| Qualitative | 3 |
| Quantitative | 1 |
| Total | 4 |

Table 27: PART 2019 Summer Institute CCR Status

| <i>Stream</i> | <i>Number of Students</i> |
|---------------|---------------------------|
| Qualitative | 11 |
| Quantitative | 7 |
| Total | 18* |

***4 students completed both streams**

PART Participant Feedback

A total of 47 students provided feedback on the PART Program. In general, the participants' perceptions of the program were very positive. In response to the statement "I found this module intellectually stimulating," 87% of respondents agreed or strongly agreed. Similarly, 93% of respondents were either slightly or extremely satisfied with PART, and 98% were somewhat or very likely to recommend PART to another student. Over 93% of respondents agreed or strongly agreed with the statement "The module provided opportunity for 'hands-on' experience in terms of research, case studies, or real-world situations."

Future Directions

Participation rates in the PART program continue to be disappointing. We will discuss strategies for increasing student attendance at the next PART Advisory Committee meeting. We will also get feedback from the Committee on whether we should cancel PART during the year and replace it with an additional Fall and/or Winter Institute during Reading Weeks or other times of the year when students have fewer competing demands on their time.

⁸ Each PART "attendance" represents a student who attended all of the required classes and completed the assigned homework for a given module. Each module includes four hours of instruction, with the exception of Research Ethics which includes two hours of instruction.

Part Four: Course Teaching

At present, the RGASC does not offer its own credit-bearing courses. This year, however, the RGASC has been involved in two courses:

- 1) UTM118H: The Science of Learning
- 2) EDS325H: Supplemental Instruction in Higher Education

1) *UTM118H: The Science of Learning*

In 2017/2018, RGASC faculty and staff collaborated to design and teach UTM118H: The Science of Learning, an experiential learning course offered as part of the utmONE program run by the Centre for Student Engagement. Like all utmONE courses, UTM118H is designed to support students' transition to university, provide students with a solid foundation for further success, and help students develop transferable academic skills such as critical thinking, note-taking, and critical writing.

All utmONE classes were capped this year at 55 students and therefore (unlike many first-year courses) allowed for personalized communication with faculty and the inclusion of interactive learning activities. Each utmONE course is interdisciplinary in nature and focuses on a different theme.

The focus of UTM118 is on “the science of learning.” The official course description reads as follows:

This interdisciplinary course encourages students to take ownership of their education through a focus on the process of learning how to learn and by cultivating the habits of mind for lifelong achievement and success. Student will explore theories of learning and research on the strategies students should employ to reach deep understanding. Science of Learning is designed to help students develop their critical thinking, university-level oral and written communication, critical reading, and other foundational academic skills. As part of this course students will participate in a series of tutorials that will introduce them to essential elements of a holistic student experience (such as career exploration, health and wellness, and co-curricular engagement).

The course learning outcomes for UTM118H are for students to be able to do the following:

- Propose solutions to address academic challenges commonly faced by university students.
- Apply collaborative learning strategies and reflect on their usage.
- Identify and critically evaluate academic source material.
- Plan, write and revise academic texts in which ideas are informed and supported by appropriate sources.
- Use self-assessment and reflection as a tool to fuel academic success.

The focus of UTM118H is on active learning. Students spend the majority of their time in each class practicing the academic skills to which they are introduced through short lectures on peer-reviewed scholarship that defines specific skills and presents research demonstrating how and why specific approaches to skills development are effective.

In 2018/2019, the RGASC offered three sections of UTM118H, with each section led by a different RGASC faculty member (Andie Burazin, Tyler Evans-Tokaryk, and Michael Kaler). A total of 139 students completed UTM118 in 2018/2019: two sections were offered in the Fall and one in the Winter, with final enrolment ranging from 42 to 52. As was the case with the pilot version of this course, many of the individual lectures (for example, on Note-Taking or Academic Writing or Problem-Solving) were taught by guest lecturers from the RGASC who are specialists in these areas.

The expansion of UTM118 from one section to three was successful and we will be offering four sections of the course (three in the Fall and one in the Winter) next year.

2) *EDS325H: Supplemental Instruction in Higher Education*

This new experiential learning course was approved in 2017 and offered for the first time in Fall 2018. All EDS325H students had “internships” with the RGASC in which they worked 100 hours per term as facilitators for the Facilitated Study Group program. RGASC staff worked with the course instructor to develop the course content, coordinate the internship component of the course, assess students’ work in the internship, and conduct guest lectures on Supplemental Instruction for the course. Complete details on the launch of EDS325 are included in the [discussion of the FSG Program](#) above.

Part Five: Collaborative Programming

This final section of the Report focuses on those collaborative initiatives that have not been addressed above. Here, we address the RGASC's increasingly important work with UTM's many different student organizations, provide an overview of our involvement with numerous campus-wide initiatives involving game-enhanced learning, and identify the contributions we have made to UTM committees and working groups this past year.

1) *Accessibility Services*

Since the hiring of our Program Strategist in 2016, the RGASC has been able to collaborate more extensively with Accessibility Services in an effort to provide the best possible support for students with disabilities. Most of the support we provide to students registered with Accessibility Services comes in the form of one-on-one appointments, workshops, and training of Accessibility peer mentors.

One-on-One Learning Strategy Appointments

The RGASC offers support in the form of weekly one-on-one learning strategy appointments to students registered with Accessibility Services. Two full-time, permanent RGASC staff members provide this support, with the Program Strategist taking most appointments and the Program Manager providing additional coverage when needed. Appointments typically focus on helping the students to develop effective study skills and habits, primarily through modelling. Common areas of focus include note-taking, reading comprehension, memory strategies, exam and test-taking techniques, and study planning. In 2018/19, the Program Strategist booked 190 hours of learning strategy appointments with Accessibility Services students, although due to cancellations and students failing to turn up, only 94 hours of appointments were completed. In contrast, in 2017/2018, 162 hours of appointments were scheduled, and 93 hours of appointments were completed. Despite an increase in the number of appointments booked, the utilization rate of appointments decreased to 49% from 57% in the previous year, which may suggest that the process for booking and confirming appointments needs to be reviewed.

Accessibility Services On-Demand Workshops

RGASC writing instructors collaborated with Accessibility Services to design and deliver two workshops on time-management and test-taking skills. A total of 24 students registered with Accessibility Services attended these two workshops, which were both run in the Fall term. In 2019/2020, the Program Strategist will be creating and delivering a series of workshops for Accessibility students, which will focus on six study skills topics. We believe that a clear schedule of workshops throughout the academic year will enable more students to get the learning strategy support they seek sooner than if they had to wait for a one-on-one appointment. In addition, the workshops should help to foster a sense of community and enable the sharing of good academic practice through collaborative activities. Since the Program Strategist will be delivering the workshops, there will also be greater consistency in the strategies that are being shared in the workshops and the one-on-one appointments.

Updated Referral Process to the RGASC

In Fall 2018, RGASC staff met with the Director of Accessibility Services to review the process for the referral of Accessibility students to and from the RGASC. The referral form was updated and a referral process document was produced for circulation among staff in both departments. A clear delineation was made between referrals for a) appointments for study skills support, which take place at Accessibility Services and b) appointments for writing and numeracy support, which take place at the RGASC. In addition, a clear process was defined that outlined the actions RGASC staff and instructors should take when a student discloses their diagnosis or need for accommodations during an appointment.

Summer Academic Skills Institute

The Summer Academic Skills Institute (SASI) transition program aims to support mainly incoming students registered with Accessibility Services by helping them develop the academic skills and strategies that they will need to make a successful transition to postsecondary education. As part of SASI, this year RGASC staff organized and delivered over 10 hours of programming over two days to 31 students along with the support of two faculty members, one librarian, four Accessibility Services advisors, and 21 peer mentors. In the subsequent student satisfaction survey, all of the respondents said the sessions highlighted skills they believe will help them achieve university success, 90 per cent said they would benefit from additional programming like SASI, and 90 per cent said they felt more confident about succeeding at university thanks to their attendance at SASI.

Accessibility Services Peer Mentor Learning Communities and Game Cafés

Following SASI in August 2018, the RGASC and Accessibility Services agreed to work together to provide Accessibility students with a series of activities throughout the year to build on the skills developed in SASI. The agreed-upon initiative, known as Peer Mentor Learning Communities (PMLCs), was comprised of a series of peer facilitated sessions on specific learning skills, and also a game café to help build a sense of community among Accessibility students. It was agreed that peer mentors would lead the PMLC activities, and so a Program Assistant was jointly hired by the RGASC and Accessibility Services to train and supervise the peers. In 2018/2019, three learning skills sessions and one game café were run, with 20 students attending the skills sessions and the same number of students attending the game café. In addition, 10 peer mentors were trained in supplemental instruction facilitation techniques.

The biggest challenge with this initiative was that it was difficult for the Program Assistant to connect with all of the peer mentors for meetings and training. During the Program Assistant debrief process, it was suggested that not being able to train all of the peer mentors before the start of the Fall term led to a weak understanding of the PMLC framework and therefore a lack of consistent commitment from the peer mentors. In 2019/2020, the RGASC will propose that all peer mentors be trained to deliver PMLC activities so more peers are equipped and fully aware of these additional opportunities before SASI in August 2019.

2) UTMSU, Academic Societies, and Clubs

The RGASC works collaboratively with the UTMSU Executive, Academic Societies, Clubs and Associations to provide a variety of skills development and training opportunities through UTMSU-promoted associations and events. The RGASC has collaborated on and supported at least 30 different student initiatives and many more individual activities and events. Collaborations in the table below include academic initiatives proposed by clubs and associations and approved and funded by the “Club’s Funding Initiative”, which distributes funds from a central pool of money to clubs sponsored by the Office of the Dean and the RGASC.

Table 28: RGASC Partnerships with UTMSU Executive

| <i>UTMSU Initiative</i> | <i>Description of Activity</i> |
|--------------------------------------|--|
| UTMSU Orientation Week | <ul style="list-style-type: none"> • Academic Skills Workshops and FSG training for Societies and Clubs • Clubs funding orientation • Escape room event |
| UTMSU Academic Advocacy Week | <ul style="list-style-type: none"> • Academic Skills Workshops: Academic Integrity, Citation, and Paraphrasing • Instagram booth collaboration |
| Academic Integrity Modules (Quercus) | <ul style="list-style-type: none"> • Collaborated with UTMSU, Academic Integrity Office, UTM Library, UTM HCC to create and produce a complete set of modules focused on Academic Integrity and resources available at UTM. Additional details are provided in section 3 below. |
| UTMSU De-stressor Events | <ul style="list-style-type: none"> • UTMSU Club Collaboration De-stressor Event: Exam Preparation • Pop-up Academic Writing Support • Tabling to promote RGASC activities |
| UTMSU Societies and Clubs Training | <ul style="list-style-type: none"> • Academic Skills Development • Training and Information Sessions |

Table 29: RGASC Partnerships with UTMSU Academic Societies

| <i>Academic Society Name</i> | <i>Description of Activity</i> |
|---|---|
| Psychology Association of Undergrad Students of Erindale | Academic Skills Workshops: Multiple Choice Exam Preparation |
| Historical Studies Society | Workshop: Essay Writing |
| Sociology & Criminology Students | Academic Skills Workshops: Annotated Bibliography and Thesis Statement development |
| The Society: Sociology and Criminology Undergraduate Review | Workshop: Journal Editing held once per fall/winter terms |
| English and Drama Society | Open Mic Poetry Night in collaboration with UTM Zero Waste and UTM Mental Health Roundtable |
| ICCIT Council | Ad Summit sponsorship and support |

Table 30: RGASC Partnerships with UTMSU Clubs and Associations

| <i>Club / Association Name</i> | <i>Description of Activity</i> |
|-------------------------------------|---|
| Boss Women UTM | A self-defence workshop to promote physical growth and development, while teaching a valuable life skill |
| Tamil Students' Association | A cultural dance event |
| UTM Global Brigades | A Sustainable Feminine Hygiene workshop to empower women, break stigma about female menstruation, and promote sustainability. |
| UTEHKSA (Hong Kong Student Assoc.) | A networking event and tournament in the RAWC |
| Enactus | 4 independent workshops improving critical skills and bringing together student, academic and business leaders to improve the quality of life and standard of living for people in need |
| Syrian Students' Association | A Syrian board game café |
| Mental Health Round Table | An Open Mic Poetry Night in collaboration with Zero Waste UTM and the English and Drama Student Society |
| Ad Summit UTM | Conference focused on creative advertising (collaborating with iCube, the ICCIT Department, DVSSS, ICCIT Council) |
| Project Include | Coding events to provide students without any prior knowledge of code the opportunity to learn more about the STEM Fields regardless of socio-economic class, race, or age |
| EGO and UTMAanime | Orientation activity held in the Presentation Room at UTMSU during Orientation |
| EGO | Board game based de-stressor events run in partnership with Hart House |
| Cobra Muay Thai | Martial arts club |
| Association of Palestinian Students | Guest speaker educating students on the history of Palestine along with its current climate |
| DEM Association | Participation in debating events |
| Lebanese Club | De-stressor events |
| Students Offering Support | Board game based de-stressor events |
| UTM Pre- Medical Club | Health and medicine careers fair |
| Creatives for Change | Event introducing students to influential professionals from the creative industry. |
| UTM K-Bang | Language Exchange/Korean Lessons to teach students of any level Korean and help Korean speaking students learn English |

3) Academic Integrity Initiative (RGASC, Academic Integrity Unit, UTMSU)

Academic integrity e-modules were created over the past year in collaboration with the UTMSU and the Academic Integrity Unit in the Office of the Dean. The aim of the modules is to support undergraduate students

- in understanding the meaning of academic integrity and academic misconduct at UTM;
- in developing strategies to avoid academic misconduct; and
- in recognizing and accessing UTM resources to maintain academic integrity.

The e-modules primarily target new undergraduate students and were designed to engage students with practical examples, graphics, and videos. The e-modules are housed in a Quercus Sandbox and organized as follows:

| |
|--|
| Your Quick Guide to Academic Integrity |
| Introduction |
| Module 1 – Academic Integrity and Academic Misconduct |
| 1.1 – What are Academic Integrity and Academic Misconduct |
| 1.2 – Plagiarism and Unauthorized Aids |
| 1.2 – Plagiarism and Unauthorized Aids Quiz |
| 1.3 – Forgery, Concoction, Impersonation, and Other Forms of Cheating |
| 1.3 – Forgery, Concoction, Impersonation, and Other Forms of Cheating Quiz |
| 1.4 – Summary |
| Module 2 – Academic Integrity Resources |
| 2.1 – Six UTM Resources to Support Your Academic Career (Video) |
| Module 3 – The Process of an Academic Offence |
| 3.1 – The Process of an Academic Offence (Video) |
| 3.1 – Academic Offence Process Quiz |
| Module 4 – Final Test and Outro |
| 4.1 – Final Quiz |
| 4.2 – Summary |
| 4.3 – More Academic Integrity Resources |
| Credits |

The e-modules have been designed to be embedded within UTM courses, with the current version being appropriate for 100-level courses. Should instructors decide to use these modules, it is recommended that they be assigned either within the first two weeks of class or before the first major assessment, and it is suggested that they be incentivized with a small participation mark (e.g., 2%). However, course instructors can of course use them as they see fit.

A soft launch of the e-modules began in mid-April 2019, when feedback on the current version was collected from a variety of stakeholders. This feedback will be used to ensure that the e-modules are easy to navigate, visually appealing, and practical for students of all

disciplines. After the soft launch and incorporation of feedback, e-modules can be piloted in courses, allowing us to collect additional feedback on the student and instructor experience.

We hope to make a publicly accessible version of the academic integrity e-modules available on the RGASC website. We will consult with Instructional Technology at the UTM Library to explore this option.

4) *Game Enhanced Learning*

Game-enhanced learning (GEL)—i.e., the use of board games as pedagogical tools—has a wide range of benefits. Research on applications of this game-based approach consistently shows that they help students deepen their understanding of the core curriculum content and increase motivation and engagement with the course. In addition, games can contribute to the process of building communities of students, creating social networks that can evolve into learning communities and promote positive models for social engagement that in turn can boost students' resilience. We continued this year several projects launched during 2018/2019 that explored the potential benefits of game-enhanced learning on the UTM campus in both a pedagogical and social context. The rationale for the use of games was supported by four assumptions:

- 1) ***Learning is collaborative.*** This is based on the Constructivist proposition that knowledge is constructed socially. A learning community will emerge spontaneously, as students collaborate within the social space of the boardgame.
- 2) ***Learning is active and experiential.*** The dynamics of boardgame participation helps students become actively engaged in their learning as they become more immersed in the gameplay.
- 3) ***Learning is meta-cognitive.*** The game experience creates for each student a framework in which they can construct an authentic narrative incorporating self-reflection, based on the concept of situated cognition—i.e., that the context and nature of an activity will shape understanding.
- 4) ***Learning proceeds through scaffolding.*** The integration of knowledge modelled within the game and the acquisition/mastery of game strategy through the various stages of gameplay will follow a learning curve that can also be understood as a scaffolded structure. This is based on the concept of cognitive puzzlement—i.e., that inconsistency and conflict will stimulate learning and problem-solving.

GEL-related Activity for 2018/2019

Feedback from several meetings with faculty throughout 2017/2018 (especially within the GEL Community of Practice) demonstrated that the current level of interest in GEL activity among faculty and staff, while noteworthy, was still insufficient to build a realistic capacity for GEL activities at UTM. Several of the faculty in the COP emphasized that in order for GEL to have a significant impact in both the pedagogical and social context, a more radical and long-term approach would be needed. That is, an infrastructure needed to be put in

place that would create a scalable and sustainable approach to building capacity for GEL on the campus. This approach would need to involve the following elements:

- building new partnerships through regular game-related events across the campus; a key strategy for this would involve creating a mentorship base that could act in the future as a resource for supporting GEL initiatives within courses.
- establishing a home site that that would act as a “clearing-house” for coordinating game-related initiatives across the campus and at the same time house a sufficiently large amount of game resources and literature.
- developing tools and methods for measuring the social and pedagogical effectiveness of game-related activities.

Boardgame Cafés

Boardgame Cafés were launched this year by the RGASC to spread awareness of the social benefits of board game play and to start building a community of interested students and staff. During the year, 23 game-related events were held; a total of 990 attendances were recorded at these events.

Table 31: Boardgame Café Event Attendance

| <i>Date</i> | <i>Event</i> | <i>Attendance</i> |
|---------------|------------------------------------|-------------------|
| Aug 8, 2018 | Exam Jam Summer (UTMSU) | 20 |
| Aug 30, 2018 | Head Start (RGASC) | 75 |
| Sept 7, 2018 | Orientation (CSE) | 75 |
| Sept 27, 2018 | Be Well UTM (HCC) | 30 |
| Oct 10, 2018 | Management Midterm De-stressor | 5 |
| Oct 17, 2018 | Game Café 1 | 40 |
| Oct 26, 2018 | SOS Club Event 1 | 20 |
| Oct 31, 2018 | Game Café 2 | 100 |
| Nov 12, 2018 | Game Café 3 | 35 |
| Nov 14, 2018 | International Education Week (IEC) | 25 |
| Nov 26, 2018 | Game Café 4 | 60 |
| Nov 27, 2018 | Meet-A-Friend (UTMSU & HCC) | 30 |
| Dec 3, 2018 | SOS Club Event 2 | 25 |
| Dec 6, 2018 | Exam Jam 1 (CSE & HCC) | 35 |
| Feb 1, 2019 | SOS Club Event 3 | 30 |
| Feb 14, 2019 | Game Café 5 | 75 |
| Feb 27, 2019 | Game Café 6 | 90 |
| Mar 13, 2019 | Game Café 7 | 35 |
| Mar 22, 2019 | AccessAbility Game Night | 25 |
| Mar 27, 2019 | Game Café 8 | 80 |
| Apr 1, 2019 | SOS Club Event 4 | 25 |
| Apr 4, 2019 | UTM Pre-Med Club | 20 |
| Apr 5, 2019 | Exam Jam 2 (CSE & HCC) | 35 |

The location of the main Boardgame Café events was the CCIT atrium. Most of these events were held between 12 pm and 4 pm in hopes of attracting students during their lunch time. Boardgame Café attendees were offered pizza to incentivize them to stay for an extended period of time. Over the course of the year, many of these people attending these events became regulars. During the year, the RGASC was approached by the following organizations and clubs wishing to participate in the Boardgame Café or to act as co-sponsors:

- Hart House
- Health & Counselling Centre
- UTMSU
- Erindale Gaming Organization,
- UTM Anime Club
- UTM E-Sports Club
- Club of Newcomers and Explorers of Canada & Toronto (CoNECT)
- Students Offering Support Club (SOS)
- Peer2Peer
- UTM Chess Club
- Math and Computational Sciences Club (MCSS)
- UTM Pre-Med Club
- Accessibility Services Peer Mentor Program
- Community on Campus

The involvement of these organizations at Boardgame Café events allowed the RGASC to expand its gaming social network. At each event, students were invited to volunteer with or participate in future programming. By the end of the year, the following lists had been generated:

- Contact list of students wishing more information about Boardgame Café events: **123 students**
- Volunteer list of students interested in helping to run the Boardgame Café: **14 students**
- Volunteer list of students interested in acting as “Playtesters” for Faculty-designed boardgames, or test out games with a potential application within a course curriculum: **10 students**
- Volunteer list of students interested in helping to run a game-based FSGs: **2 students**
- Volunteer list of students interested in facilitating Role Playing Game events within the Residence: **6 students**

These volunteer lists have already been used several times during this past year to support GEL within an academic context. By the end of the academic year, the Boardgame Café events were regularly staffed by an average of 6 – 10 volunteer game “facilitators”. The students on the contact list were regularly notified about upcoming events through a social media platform called “Discord”. A number of the volunteers have acted as playtesters, providing valuable feedback for student projects generated in Steve Szigeti’s CCT419 course (“Exploring User Experience, Cultural Theory and Gamification through Board Games”) during the Fall term. These students were also involved in providing support for the Residence PAL training in August, which has as its focus the use of game-related activities to build learning communities in the Residence.

To measure the social impact of these Boardgame Café events, a short survey form was used and distributed at each event. The survey asked about demographics and students’ perceptions of the social impact the Boardgame Café events had on them. The questions all used a Likert scale of 1 – 5, with 1 representing “Strongly Disagree” and 5 representing “Strongly Agree.” The results from 53 survey responses were:

- “Playing games has increased my confidence in being social”: **3.88**
- “These events gave me opportunities to broaden my friend circle”: **3.86**
- “My Game Café experience helped me engage with new people”: **3.76**
- “My Game Café experiences encouraged me to go to more events on campus”: **3.78**
- “My Game Café experiences helped me to relax”: **4.3**

GEL Online Resources

Considerable time and effort was devoted throughout 2018/2019 to building and maintaining a GEL page on the RGASC website. The primary purpose of this page is to showcase what has been done in other institutions and at UTM, in order to promote GEL in an academic environment. Sections have been devoted to documenting GEL initiatives in courses such as ECO 200, the PASS program, and the AIRLab. There is also a bibliography of research that has a focus on GEL. As well, there is a “Ludography” or catalogue of games within the RGASC collection (approximately 200 games), as well as those currently held by other organizations on the campus, that can be used within a social or academic context. Each game in this Ludography is linked to a review, in order to provide potential borrowers with some idea of the game’s potential usefulness and level of difficulty.

Future Directions

- Continue to expand the volunteer groups to promote GEL initiatives. A CCR proposal is currently being developed to provide recognition for the efforts of these volunteers.
- Continue to improve the effectiveness of the GEL web page. For example, more context needs to be provided for the Ludography.
- Continue to provide support for GEL initiatives in UTM courses.
- Expand the PASS course curriculum to include numeracy support using a GEL approach.

- Train the Peer Mentors in the Accessibility Services Peer Mentor Program to facilitate Boardgame Cafés on an ongoing basis.
- Continue to expand the GEL training and provide resources for the LLC and PAL program in the Residence. This will include training GMs (Game Masters) to facilitate regular RPG (role-playing games) events within the Residence.

5) Special Projects, Committees, and Working Groups

RGASC faculty and staff represent the Centre's interests on numerous committees and working groups at the University of Toronto, including the following: Academic Technologies Committee; CTSI Advisory Committee; Experiential Learning Working Group; Forum on Student Orientation/ Orientation Transition Working Group; Graduate Professional Skills Curriculum Committee; LEAF Grant Committee; Student Life Professionals Network at UTM; University of Toronto Supplemental Instruction Working Group; University of Toronto Writing Centre Directors' Group; UTM Academic Affairs and Campus Council; UTM Foundational Numeracy Skills Working Group; UTM Foundational Writing Skills Working Group; UTM Teaching Development and Innovation Committee; UTM Teaching Development Travel Grant Committee.

Appendix A: RGASC Advisory Committee Membership (2018/2019)

| <i>Seat</i> | <i>Individual</i> | <i>Term Expiry</i> |
|--|-----------------------|--------------------|
| UTMSU Representative | VP University Affairs | N/A |
| Undergraduate Student | Claudette Gasparro | 2020 |
| Graduate Student | Ilapreet Toor | 2020 |
| Teaching Assistant | Abdullah Farooqi | 2020 |
| Humanities Instructor | Michelle Troberg | 2020 |
| Social Sciences Instructor | Joe Leydon | 2020 |
| Sciences Instructor | Christoph Richter | 2020 |
| Management / Prof. Schools Instructor | Catherine Seguin | 2020 |
| Office of the Dean | Fiona Rawle | N/A |
| Manager, Orientation, Transition, and Engagement | Jackie Goodman | N/A |
| Librarian | Paula Hannaford | 2020 |
| Undergraduate Advisor: Social Science / Humanities | Sharon Marjadsingh | 2020 |
| Undergraduate Advisor: Sciences | Diane Matias | 2020 |
| Office of the Registrar | Michelle Kraus | 2020 |
| RGASC Staff / Faculty Member | Dianne Ashbourne | 2020 |
| RGASC Coordinator | Cliona Kelly | N/A |
| Director, RGASC | Tyler Evans-Tokaryk | N/A |

Appendix B: RGASC Research and Scholarship 2018/2019

The following is a list of recent news and successes accomplished by RGASC staff and faculty, including peer-reviewed pedagogical research, conference presentations, and more! For more details on RGASC faculty and staff academic accomplishments, see the “Recent News & Successes” section of the RGASC Website (which is updated regularly and has an archive of older items): <https://www.utm.utoronto.ca/asc/recent-rgasc-news-successes>.

- **Andie Burazin** discussed “Transitioning into First-year Mathematics Courses” at Mentor College, Mississauga (March 2019).
- Jessie Richards, **Dianne Ashbourne**, Lisa Endersby, Ellen Watson, Jacqueline Hamilton, and Deborah Chen shared preliminary findings from a national research project and working group examining experiences of early-career educational developers during a session entitled “Building bridges instead of walls: Drawing on collective wisdom to navigate the contradictions of educational development as an early career professional” in February 2019 at the [Educational Developers Caucus](#) Conference.
- Sherry Fukuzawa and **Michael deBraga's** paper "[Graded Response Method: Does Question Type Influence the Assessment of Critical Thinking?](#)" was published in the *Journal of Curriculum & Teaching* (February 2019).
- Monica Paabo, Amanda Brijmohan, **Tom Klubi**, **Tyler Evans-Tokaryk**, and Ruth Childs published their research on [the impact of the RGASC's Facilitated Study Groups on students' academic performance](#) in the February 2019 issue of *The Journal of College Student Retention*.
- **Michael Kaler's** contribution to a festschrift honoring Michel Desjardins of Wilfrid Laurier University has recently been published: “Praises and Rebukes in the gnostic Revelation Dialogues,” in Alexander Damm, ed., *Religion and Education in Antiquity: Studies in honor of Michel Desjardins* (Brill, Leiden, 2019), p. 212-224.
- **Andie Burazin** presented “General Discussion on the Topic of Service Courses” at [BIRS Workshop: First Year Mathematics Repository Workshop](#), in Banff, Alberta in February 2019.
- **Michael Kaler's** article, “Who is us? Thoughts on Nag Hammadi and the modern recreation of gnosticism” was published in Eric Crégheur, Louis Painchaud and Tuomas Rasimus, ed. *Nag Hammadi à 70 ans, qu'avons-nous appris ? Nag Hammadi at 70. What Have we Learned?* (Bibliothèque copte de Nag Hammadi, «Études» 10, Leuven, Peeters, 2019), p. 31-42.
- Tyler Holden and **Andie Burazin** received a [UTM Teaching Development & Innovation Grant](#) in January 2019 for the teaching project “MAT133Y Renewal.”
- [An article profiling UTM118: The Science of Learning](#), a course taught by **Andie Burazin**, **Michael Kaler**, **Tyler Evans-Tokaryk** and many other members of the

RGASC team, was published in January 2019, in the Centre for Teaching Support and Innovation's digital newsletter, [Re:Think](#).

- **Andie Burazin** published the article "[Making Mathematics Mnemonic, But Fun](#)" in December 2018 in the *Journal for Research & Practice in College Teaching*.
- **Kerrie Martin** and two of the RGASC's Program Assistants (**Alex Chee** and **Nicholas Lowe**) presented "Enhancing the Impact and Presence of Supplemental Instruction through Volunteer Leaders" at the [Learning Specialists Association of Canada Eastern Regional Conference](#) in Toronto in December 2018.
- **Xiangying Huo** published the article "[Writing Norms: Monomodality or Multimodality?](#)" in the 2018 Proceedings of Canada International Conference in Education (pp. 35-38).
- **Michael Kaler** and **Tyler Evans-Tokaryk** presented a paper entitled "Working at the Meso Level to Develop Writing Pedagogy at the Micro Level: The University of Toronto Mississauga's Writing Development Initiative as a SoTL lab" at the Research on Teaching and Learning Conference hosted by McMaster's [MacPherson Institute](#) in December 2018.
- **Xiangying Huo** published the article "[Negotiation of Writing Norms](#)" in December 2018 in *The Literacy Information and Computer Education Journal* (LICEJ), 9(4).
- Tyler Holden and **Andie Burazin** published the article "[2018 High School Computer Science and Mathematics Teacher Workshop: A Dialogue in CS and Math Education](#)" in November 2018 in the *Canadian Mathematical Society Notes*.
- **Sheila Batacharya** co-edited a collection entitled "[Sharing Breath: Embodied Learning and Decolonization](#)". The book was published in October 2018 by Athabasca University press, an open-source press. The book launch was held in November 2018 at the [2018 Decolonizing Conference](#) hosted by the Centre for Integrative Anti-racism Studies (CIARS), Ontario Institute for Studies in Education (OISE/UT).
- **Laura Taylor** presented a paper entitled "ELLs in Higher Education: Strategies for Equity" in October 2018 at the [ATESL Conference](#) in Edmonton, Alberta.
- **Michael deBraga** and Robert Reisz (Biology) presented a paper entitled "A new captorhinid and its contribution to our understanding of taxic diversity in the Early Permian cave system of Richards Spur, Oklahoma" at the 78th annual [Conference of the Society of Vertebrate Paleontology](#), Albuquerque, New Mexico in October 2018.
- **Michael deBraga** presented a poster entitled "Encouraging Critical Thinking in a Vertebrate Paleontology Course through Formative Assessment and a Classroom Response System" in the Education Outreach Session at the 78th annual [Conference of the Society of Vertebrate Paleontology](#), Albuquerque, New Mexico in October 2018.
- **Sheila Batacharya** presented "Watershed Memory, Drainpipe Story: A Tour" in September 2018. The tour was part of UTM's Blackwood Gallery festival [The Work](#)

- [of Wind: Air, Land, Sea](#). The presentation was reported on by John Stewart in [Mississauga.com](#).
- UTM Professor Ken Derry organizes regular reviews of books with a pedagogical focus in the journal *Religious Studies Review*. **Michael Kaler**'s [review of Owen Coggins' *Drone Metal*](#) was published there in September 2018.
 - Darja Barr, **Andie Burazin**, Kseniya Garaschuk, Veselin Jungic, and Miroslav Lovric published the article "[First Year University Mathematics Across Canada: Facts, Community and Vision](#)" in September 2018 in the *Canadian Mathematical Society Notes*.
 - Marc Laflamme, Uli Krull, **Michael deBraga**, and Paul Piunno published the article "[The Advanced Interdisciplinary Research Laboratory Course: Refinements, Reflections, and the Introduction of Earth Sciences](#)" in the *Journal of College Science Teaching* in September 2018.
 - **Xiangying Huo** presented "Teaching English as an International Language: Revision of Language Policies" at the [Multidisciplinary Approaches in Language Policy and Planning Conference](#) at Ontario Institute for Studies in Education, the University of Toronto in August 2018.
 - **Andie Burazin** and Miroslav Lovric published the article "[Analyzing Narratives About Limits Involving Infinity in Calculus Textbooks](#)" in the 2018 Proceedings of Research at the Undergraduate Mathematics Education (RUME) Conference.
 - **Jessica Carlos** and Kathi Wilson's paper "[Migration among temporary foreign workers: Examining health and access to health care among Filipina live-in caregivers](#)" was published in *Social Science & Medicine* (July 2018).
 - **Andie Burazin** and Miroslav Lovric published the book chapter "[Transition from Secondary to Tertiary Mathematics Culture Shock: Mathematical Symbols, Language, and Reasoning](#)" in *Teaching and learning secondary school mathematics: Canadian perspective in an international context*.
 - **Tom Klubi**, along with former RGASC Program Assistants **Linda Duong**, **Laura Krajewski** and **Jester Dalusong-Manansala** presented "The Promoting Academic Skills for Success (PASS) Program for At-Risk Students at UTM" in July 2018 at the University of Toronto's [University Professional's Symposium](#).
 - **Michael Kaler** and **Tyler Evans-Tokaryk** presented "Critical Reading Across the Curriculum" in June 2018 at the [Canadian Writing Centres Association](#) conference in Saskatoon, Saskatchewan.
 - **Xiangying Huo** presented "Writing Norms: Monomodality or Multimodality?" at the [Canada International Conference on Education](#) at the University of Toronto Mississauga in June 2018.
 - **Tyler Evans-Tokaryk** and **Michael Kaler** presented "The Challenges and Rewards of Writing Program Assessment: A Report on the Use of Critical Discourse Analysis to Evaluate WAC" at the [Canadian Association for the Study of Discourse and Writing](#) (CASDW) conference in Regina, Saskatchewan in June 2018.

- **Xiangying Huo** presented “Writing Norms: Monomodality or Multimodality?” at the [Canada International Conference on Education](#) at the University of Toronto Mississauga in June 2018.
- In May 2018, **Michael Kaler**’s article [“Neo-Gnosticism At the Movies”](#) was published by the *Journal of Religion and Film*.
- Fiona Rawle, Mindy Thuna, Ting Zhao, and **Michael Kaler** published a paper in the *Canadian Journal for the Study of Teaching and Learning* on the [uses of audio feedback for promoting student engagement and providing support in large first year classes](#).
- **Michael Kaler** collaborated with Louis Painchaud on a contribution to a festschrift honoring Professor Paul-Hubert Poirier (Laval University): “On the pleasures and perils of codex analysis,” in Eric Crégheur, Julio Cesar Dias Chaves and Steve Johnston, eds., *Christianisme des origines: Mélanges en l’honneur du Professeur Paul-Hubert Poirier* (Turnhout: Brepols, 2018), p. 217-230.
- **Michael Kaler**’s paper, “The Intriguing Absence of God in the *Apocalypse of Paul*,” appeared in *Ephemerides Theologicae Lovanienses* 94/2:235-240 (2018).
- **Kerrie Martin** presented “Enhancing the Impact and Presence of Supplemental Instruction Through Volunteer Leaders” at the [International Conference on Supplemental Instruction](#) in Seattle, Washington in May 2018.
- **Kerrie Martin** presented “Effectively Using Senior S.I. Leaders to Build Program Capacity and Sustainability” at the [International Conference on Supplemental Instruction](#) in Seattle, Washington in May 2018.
- Svitlana Frunchak, Ruth-Ann Gordon, **Tom Klubi**, and **Kerrie Martin** presented “Academic and Learning Skills at University of Toronto Mississauga” in May 2018 at the University of Toronto’s [Tri-Campus Academic and Learning Skills Professionals Meet-Up](#).