

Note from the UW Internal Steering Committee:

The University of Waterloo community is deeply appreciative of the generous time, expertise and care given by our external review team.

We acknowledge that our request to conduct a broad review of “The Student Experience” was a significant undertaking. We provided a [comprehensive overview](#) in advance of their arrival on campus and made as many relevant campus stakeholders available in person over the course of their 2 day visit. Prepared with an upfront understanding of the breadth of the review and time limitations, the review team was able to quickly grasp our unique campus culture and learned as much as possible about our student experience, from both inside and outside the classroom.

We gratefully accept their observations and ideas for consideration related to our ongoing planning to improve our student experience.

**Final report of the external review of student experience
at the University of Waterloo**

April 26, 2019

Reviewers: Serge Desmarais, former Associate Vice-President Academic, University of Guelph
Nathan Hall, Director, Learning Sciences and Health Professions Education Graduate Programs, McGill University
Nancy Johnston, former Vice Provost, Students and International Pro Tem, Simon Fraser University; President, World Association for Cooperative Education (WACE)
Ann Tierney, Vice-Provost and Dean of Student Affairs, Queen’s University

REVIEW PROCESS

This report results from a two-day site visit to the University of Waterloo (March 21-22, 2019) in response to an invitation from the Vice-President, Academic & Provost, Jim Rush, to assist the University in their holistic review of the student experience. Specifically, the External Review Team was asked to “help gather students’ perceptions and provide recommendations to the University.” All relevant documentation and logistics for the visit were organized and supported by the Office of the Associate Provost, Student, along with the Internal Steering Committee.

Our visit began with a meeting with President and Vice-Chancellor Feridun Hamdullahpur, and Vice-President, Academic & Provost James Rush, followed by a meeting with members of the Internal Steering Committee, which included the Associate Provost - Student, Associate Vice-President, Academic, Associate Vice-President - Graduate Studies and Postdoctoral Affairs, University Registrar, Associate Provost - Co-operative and Experiential Education, Vice President of the Federation of Students, and President of Graduate Student Association.

In our two-day visit, our team engaged with all the units broadly responsible for undergraduate and graduate student admission, support and experience. Our process was supported by a three-member University Liaison Team (Nancy Heide, Kirsten Muller, and Shawn Wettig) who provided context, guidance, and support. Participants in all our meetings provided open and candid comments that gave us a full appreciation of the University's efforts to support graduate and undergraduate students as well as their perspectives on past and current challenges and possibilities for future enhancements.

GENERAL COMMENTS

The self-assessment document we received from the Steering Committee indicates that the University of Waterloo attracts students who "have demonstrated academic excellence and are eager to extend their education through conventional and experiential learning, as well as cutting-edge research." Our review certainly supports this self-assessment. Indeed, the University of Waterloo engages its students in impressive high-impact teaching practices, with a strong focus on experiential learning led, to a great extent, by the University's commitment to Co-op education. Faculty and staff care deeply about providing students with the knowledge and skills required for future success. The University of Waterloo is also committed to providing students with academic and non-academic support, including a strong focus on student wellness.

Despite the many positive elements of the student experience at the University of Waterloo, our review supports some themes highlighted in the self-assessment document regarding factors that likely affect the observed decline in undergraduate students' satisfaction from their entry to the University to the completion of their degrees. Some degree of dissatisfaction is also apparent when speaking with graduate students but, given the nature of the graduate student experience, the reasons reported for this sense of discontentment deviate from those conveyed by undergraduate students.

Our report begins by a review of themes we believe underpin the primary sources of dissatisfaction of all students at the University of Waterloo. We then turn to a review of issues that are more strongly associated with the experience of undergraduates followed by a section that highlights the challenges experienced by graduate students. In each of these sections, identified challenges are described followed by specific recommendations that may help alleviate the issue.

THEMES AND SHARED ISSUES ACROSS UNDERGRADUATE AND GRADUATE PROGRAMS

1. *Sense of community and sense of connection*

There is no doubt that the University of Waterloo attracts high achieving undergraduate and graduate students who have a clear sense of purpose when they arrive on campus. First year undergraduate students are provided with resources, programs, and services to assist them in their transition to University including orientation, advising, and transition support. The same is true for newly admitted graduate students who generally receive a short period of orientation with information about available resources, albeit to a far lesser extent than is the case for undergraduates. The question that we raise is whether this period of orientation or the format of the orientation is enough to create a sense of community for UW students? Research into the factors that influence student success clearly indicates that *a sense of community* is important for persistence and success at university. In his recent article *From Retention to Persistence*, Vincent Tinto notes:

“While believing one can succeed in college is essential for persistence to completion, it does not in itself ensure it. For that to occur, students must come to see themselves as a member of a community of other students, faculty and staff who value their membership -- that they matter and belong. Thus, the term “sense of belonging.” The result is often expressed as a commitment that serves to bind the individual to the group or community even when challenges arise. It is here that engagement with other people on the campus matters. But more important still are students’ perceptions of those engagements and the meaning they derive from them as to their belonging.”

<https://www.insidehighered.com/views/2016/09/26/how-improve-student-persistence-and-completion-essay>

The students, faculty and staff with whom we met did express a concern about the lack of a sense of community at the University, especially after first year for both undergraduate and graduate students. For undergraduate students, residence living creates a community for the more that 80% of first year students who live in residence but, clearly, that sense starts to erode after first year which, in part, leads to the lower satisfaction scores of surveys such as CUSC and NSSE. Our review of graduate students’ concerns highlights similar issues and, given their complexity, we describe them in greater details in the section of the report that focuses on the graduate student experience. The barriers to the sense of community that were noted by faculty staff and students included:

- The competitive nature of the Co-op programs. This competition exists at every stage. Competition to maintain academic eligibility for the Co-op program, competition for jobs that exist as well as a sense of competition between those students in Co-op and those not.

- The timing of the first Co-op placement, which requires students to focus on resume building, applying and interviewing for Co-op positions right from the start of their first academic year. This process detracts from the time students need to build networks on campus, creates stronger interpersonal bonds, and feel a deeper sense of connection with the University.
- The fact that students alternate terms on campus and off due to work terms means they do not have a period of sustained connection to a cohort of students, and to the campus community as a whole, during much of their time at UW.

Members of the student government mentioned several initiatives associated with new student orientation aimed to establish a greater sense of identification with the University and many of these sound promising. We were also impressed with the work done collaboratively between athletics and the admission office to brand admission to the University with their athletic team identification as Waterloo Warriors. These initiatives have been shown to create a sense of connection to the university, but their impact is not immediate. Developing this form of university identity takes time and persistence.

Recommendations

1. **Our review suggests that students tend to identify more with their faculty or department than with the University as a whole. This identity-relevant sense connection is not unusual but, if that is the case, we recommend that the University consider doing more, or invest, in targeted strategies to create a sense of cohort either within the faculty or department. It is also important for students to find places they can connect to if they do not connect within their faculty or department. The key is that each student finds a sense of connection and belonging whether that is within residence, within their program of student in a club or group, a sports team or other.**
2. **While we suggest that the University should consider ways to build a sense of campus community in a variety of ways, we also note that many students come and go from campus when they are on work placements and that continued connections with these students is also key to maintaining a true sense of community. Hence, we recommend that efforts be made to maintain connections with these students throughout their work experiences, either virtually or through regular messaging.**

2. Rigor and care can co-exist

Many we spoke to talked about the academic rigor of the academic programs and the intensity of the workload. The level of academic rigor evokes a sense of pride to some extent by faculty, staff, and students but we also heard that the academic pressure caused students to feel isolation, a sense of being overwhelmed at times, and a sense that the University does not care for them as individuals. The incoming student association called the student culture

“industrious” and all students we spoke to talked about the student body as hard working and studious. Consistent with this perception that the students are on their own to manage through tough programs, the CUSC data show that only 42% of graduating students were satisfied or very satisfied with the concern shown to them by the university. We develop some of these issues in greater details in the undergraduate program section of the report.

The faculty deans and student services personnel with whom we met were highly focused on supporting students. They were proud of the academically capable students who attend Waterloo and their engagement in their academic journey. However, the students we met – undergraduate and graduate students alike – often noted that the university doesn’t do enough to support students, especially those with mental health or accessibility issues. Similarly, students observed that the university creates an intense competitive environment through its timetable, course demands, degree of inflexibility, and academic structure. Students talked about professors still using the “look to your right, look to your left” adage to suggest the demands of university would weed out those not able to compete.

The university has many academic advisors across its programs. Advisors in some faculties and programs described specific initiatives to reach out to students in classes, especially in first year. They also suggested that, at least after first year, the bulk of the interaction with students is around petitions, appeals, and reactive advising when students are in academic difficulty or crisis. Advisors suggested there is neither enough time nor resources to do more proactive and developmental advising in all faculties. While there was general sense that advisors wanted to do more to connect with students and help them through academic difficulties and indecision, we still heard some critical comments suggesting that the problems students are encountering “have been self-induced; they are not engaged in class; are always on their phones” or “if they are not willing to put in the work they will have a hard time - it’s not our job to drag them through.” While it is true that students need to invest a lot of work in their own success, the transition to university with the increase in the quantity of work and the expectations around quality requires that even strong students receive support from faculty and staff. Comments like the ones highlighted above are not helpful and will likely counteract the University’s aspiration to increase student satisfaction.

Other faculty and staff clearly recognized that students at UW have high expectations of themselves and they are often disappointed by their early marks as they are used to being at the top of their high school classes. For some, university may be the first time that they have ever failed or done poorly on an assignment or test. Advisors recognize there is an adjustment that must take place and that doing so can be hard for some students. Advisors felt they could play an important role in assisting students deal with these challenges and find the right path if only they had more time. Given that good academic advising can positively impact students’ impression of how the university cares about them as individuals, hence enhancing their sense of satisfaction, increasing this source of student support would help create a more caring environment.

For both undergraduate and graduate students, reaching out early to those who are struggling and identifying paths forward for students who may be in crisis or have lost their way academically can make a significant difference. Of course, solutions will need to be different for undergraduates and graduate students given the significant differences in their programs. Universities and programs have rules and regulations and we suggest that the focus should be less on enforcing those rather than finding a path forward for students.

On a positive note, there was a general sense that the addition of the central advising resource Paige Doherty, Student Success Officer, was a helpful initiative and one that should continue. Paige's position works to bring advisors into a community of practice and provide professional development opportunities, and with this support, the advisors felt more supported as they do their best to assist students.

Recommendation

- 1. The University should endeavour to create a positively-focused culture whereby faculty, staff, and students alike acknowledge that the undergraduate and graduate students coming to U Waterloo are all academically well-qualified and that the University expects them to be successful and graduate. With its high recruitment standards, the UW should emphasize its expectation that students will succeed, and that the University will provide resources to support this goal. Rigor and care can co-exist. Consider adopting an approach that would change the adage "look to your left, look to your right... one of you won't be here next year", to "look to your left, look to your right, these are the people you will walk across the stage with four/five years from now."**

3. *Communication, consistency and coordination*

In several groups we heard concerns with communication, consistency, and coordination, all of which have potential impacts on student dissatisfaction. Issues differ to some extent for graduate and undergraduate students, but the origins are the same and are associated with the unintended consequences of messaging and branding and the inconsistency of communication regarding resources for support.

The first source of concern is associated with the nature of recruitment messages. Many students, particularly undergraduates, felt the focus of recruitment messaging is almost exclusively on STEM disciplines and, specifically, on Co-op programs within STEM disciplines. The message they received at the recruitment stage focused on the great careers they would have following graduation as a result of the excellent placements they would obtain throughout their degrees. In contrast to this narrative, several Co-op students we met indicated they struggled to find placements, were directed to jobs not in their field of study, or ultimately had to find their own placements, sometimes with the same employers where they had summer

jobs before attending university. This led to significant disappointment for some students after they experienced their first cycle of Co-op interviews and placements.

There is no doubt that many students excel in the Co-op program. Staff members who work in that department provided us with detailed analysis and student satisfaction reports, which highlight the program's success, its importance to student recruitment, and its critical position to the brand of the university. But the dissatisfaction we heard from disappointed Co-op students whose experiences did not meet their initial expectations could surely influence their reporting on university wide satisfaction surveys.

A related, but different, perspective was provided by students not in Co-op, either by choice or because of academic limitations, who described feeling left out of messaging or less important to the university. The term used at the university to describe students not in a Co-op program is "regular," which some students perceive as pejorative. Consistent with this issue, we found that undergraduate and graduate students in programs other than mathematics and engineering also felt left out of the Waterloo messaging, not just in recruitment but in how the University talks about itself. For instance, students we met who are currently enrolled in the psychology program and the planning program indicated that while their programs are ranked very highly in Canada and abroad, this reputation is never talked about or celebrated at Waterloo.

A second communication issue that we believe affects student satisfaction is the insufficient communication about the support resources available to both graduate and undergraduate students. Like many universities, there is a strong focus on communicating during orientation and to assist first year students. Indeed, students indicated significant information overload at the time they begin university and noted that it is nearly impossible to remember all the details provided. Although students acknowledge the importance of receiving a primer on resources available as they enter university, they also noted the need to access relevant information when they truly need it. For instance, sending information on study resources close to the exam period or information on advising as the course selection time approaches is seen as far more effective than receiving such information at the start of the year. We should note that the situation is somewhat different for graduate students. Masters and PhD students receive some information upon entry but nothing to the extent provided to undergraduate students, an issue that was identified as problematic by the graduate students we met.

Students also expressed some concern that they are not aware of the services provided by their student associations. The University and its student associations, both graduate and undergraduate, should devote efforts to create a more comprehensive communication strategy to inform students of the services and programs they offer. On an extremely positive note, the meeting with the Federation of Students revealed that the Federation feels that relationships with the University administration are at an all-time high so there is clearly goodwill to work together. This could be an important area for collaboration.

A final communication issue pertains to the consistency and coordination challenges resulting from the University of Waterloo highly decentralized structure. We recognize that faculties and programs have their own discipline-specific curricula and practices and that students often identify more with their faculty or department than with the university as a whole. However, the lack of centralization can result in inconsistent information and support. This view is consistent with reports from the students we met who described an environment where access to information about support systems as well as approaches to advising, support, accommodation, and other student services differed significantly depending on the faculty in which the student is enrolled.

One example clearly illustrates this point: The recent release of the Student Mental Health report, described to us as a thorough University exercise and a comprehensive report with a series of very thoughtful recommendations, was criticized by some students for the inconsistency of its application across the campus. Student representatives on the Report's implementation committee reported that there seems to be little follow up or clear progress in some faculties with respect to the recommendations, while others are more engaged in ensuring they are implemented. There was a concern there was no university directive to implement the recommendations and that some faculties were approaching them as suggestions. They expressed similar views around accommodation issues for illness or extenuating circumstances. We believe that a student-centric approach to such policies and a clearly defined implementation plan with a timeline to meet certain recommendations should help reduce implementation differences across faculties and departments.

Recommendations

- 1. While Co-op is clearly the brand for the University of Waterloo, the recruitment office should be prepared to address the fact that not every student gets a placement and they should not exclusively focus on the high-profile placements (such as Google) that very few students ultimately achieve. Similarly, recruitment and other university communications should highlight arts and other programs and not focus exclusively on Co-op and STEM as not all UWaterloo students are in Co-op programs.**
- 2. The development of the centralized student services centre is a physical message to students that they can get service in one area or be directed to the right services from one place. A virtual communication that centralizes key information for students is linked to the identity of the centre might be helpful.**
- 3. That the university identify key issues, policies, and practices it wants to address uniformly across all faculties and that a clear communication and implementation plans be developed for these key initiatives. One approach is to consider faculties as the columns of an institution, each with its own disciplinary perspective and approaches, but to consider key fundamental documents and policies as the rows that cut across all faculties. In this sense, the University communicates that there are certain issues, such as mental health support, that it would expect to be addressed**

similarly regardless of the program of study. This approach would contrast with curricular issues, which would be addressed differently within each faculty.

Final Observation

We were surprised by the little commentary we received around indigenous issues, diversity, inclusion, internationalization, and accessibility. We note that many of the issues above can be disproportionately felt by those who come from unrepresented student populations or who feel marginalized in some way. We would urge attention to these issues.

UNDERGRADUATE PROGRAMS

In the section above we identified some key overall themes that applied to both the Graduate and Undergraduate Student Experience. In this section we take a deeper dive into some of the themes as they relate to undergraduate students. From our review of the documents and surveys provided to us by the Steering Committee, along with the presentations made to the External Review Team, it was easy for the Review Team to note the many positive aspects of the UW undergraduate experience. We were impressed by the strong dedication of the staff and faculty engaged in the many units responsible for student engagement and support. Below, we focus on five areas for change, in no particular order, which the Review Team determined would have the greatest positive impact on the undergraduate experience from year one through to graduation.

1. Addressing the “expectation gap” and perceived lack of continuous care

In the previous section, we highlighted the potential conflict between academic rigor and student support and care. Our review indicates that undergraduate students at UW experience a lack of alignment between the recruitment promise and the reality of their experience which, if unaddressed, results in feelings of being unsupported by the institution, often through to graduation. Here, we highlight the specific aspects of the undergraduate student experience that result in potential dissatisfaction.

As noted, students at UW feel very proud to have been admitted to the University, especially given its high standards and excellent reputation. They were persuaded by the recruitment messages and promises of an exciting learning community and, for Co-op students, the prospect of working in high quality jobs in areas they could never expect to gain employment on their own. The first-year experience was generally reported as good and supportive, especially by students of the affiliated Colleges and those in Residence. They felt they could go to their Residence Don or Advisor for help and were beginning to develop a sense of community with residence and academic peers. In second year, most students we met reported feeling an almost complete drop in this level of support. Following first year, residence students leave the housing environment to live in the community, and the ongoing transitional struggles begin to take their toll as the competitiveness of the campus takes a firm hold. This culture of inter-student competition permeates various academic processes, such as obtaining their first

Co-op job, managing lower grades than they have experienced in the past, and even for some, being ranked by GPA in their classes. Many reported feeling a lack of support from fellow students as they were now actively competing with them for both grades and jobs, which tends to reduce their sense of belonging and community. Some students reported feeling misled then cut adrift by the institution with some reporting feeling that disconnection through to graduation. Others reported finding their way “on their own,” through various means, and ultimately developed a sense of belonging at UW. Many however reported struggling to find the support for dealing with their persistent issues relating to a type of student classism they experienced (if not a STEM or Co-op student; see next section) and the relentlessly (and often celebrated) competitive culture that dominates the academy. Both issues are elaborated upon later in this section.

For Co-op students in particular, the challenges of securing their first (and sometimes even second) Co-op job was quite unexpected as a placement statistic of 96% was the dominant message they had received during recruitment. Many students reported returning to a job they had before university or finding their first jobs back home through their own connections (and suspect these jobs from part of the 96% placement rate statistic). As well, the nature of the jobs, especially at entry level, need to be made clear. Understandably some of the more exciting and unique positions are those that are widely promoted (e.g., working in the Silicon Valley) but students need to know these will not likely be the type of jobs many first and second year students will secure.

Recommendations

- 1. Reframing, or balancing, the recruitment messages in first year to better prepare students for the realities they are likely to face. The Co-op unit might benefit if additional communications early in the Co-op cycle resulted in setting appropriate expectations for students early in their program since research has shown that violated expectations are a strong predictor of dissatisfaction. More accurate expectations would also reduce the likelihood that students will experience their personal difficulty in accessing a good Co-op placement as a personal failure.**
 - 2. Addressing the (real or perceived) decline in resources, support, and care following the first year of studies. This recommendation is even more important for transfer students or international students who report a lack of support as a significant cause of dissatisfaction.**
- 2. *Confronting an unstated but clear “class system” at UW: if you are not a STEM or Co-op student, you are not (as) worthy***

In the first section of the report, we described how messaging can influence students’ perceptions of their own sense of worth, or value, at the University of Waterloo. How students are categorized, and the unintended consequences that were reported, is an issue seen as being quite problematic. Undergraduate students, in particular, report experiencing a very clear hierarchy system at play within the University, with an unstated, but clear higher status

attributed to students by both their program of study and their participation or non-participation in the Co-op program. Privilege is reported to be afforded to those students studying in the STEM disciplines and to those participating in the Co-operative education program. The results for those in the privileged classes are a positive sense of affiliation with programs that are valued and celebrated by the institution. The unanticipated consequences of the high regard afforded those program areas, are the feelings of disenfranchisement shared by those not enrolled in STEM, or Co-op, programs and worse still neither.

Non-Co-op students are referred to as “regular” students. Certain terminology, and how the University describes and celebrates itself, re-enforce a type of class system which does not serve several sub-sets of students very well. UW will need to determine how to maintain the positive sense of belonging that those in the “valued” programs feel while affording similar sense of value for others that are currently feeling a part of the community.

Recommendations

- 1. Reviewing terminology used that might re-enforce the sense of student hierarchy that may impact student perceptions and satisfaction.**
- 2. Publicly celebrating students and their achievements from all areas, not just Co-op and STEM. While the external branding used by the University of Waterloo regarding these two areas of strength has been very effective, it has some unintended negative consequence for some students who are not in these programs. The institution would benefit by showcasing accomplishments from other areas and types of students internally and externally.**

3. *Managing the relentless workload and schedules*

Academic semesters and Co-op semesters often run in quick consecutive successions and the job search process for Co-op students tends to occur concurrent with academic studies. This tight and inflexible scheduling process sets up a never-ending set of pressures that can persist for a student’s entire academic career.

Students report undertaking a heavy course schedule in tandem with the job search every four months with no real breaks between the end of exams and the move to a new job and, often, the need to find a new home in a new location. This continuous cycle causes a persistent level of stress that accumulates over several years. Students reported “needing a breather” and “a chance to reflect” or “to just have fun,” but they noted that there was neither the time nor culture of support for such periods of respite.

Recommendations

- 1. Efforts should be made to review and revise any policies and practices that exacerbate scheduling challenges for students.**

2. **We also recommend that the number of Co-op terms required, especially the timing of the first Co-op term, be reviewed.**
3. **While we recognize the complexity of doing so, we recommend that the University consider ways to create a break, such as a reading week, in summer term.**
4. **In the same vein, we recommend a review of the exam schedule and the Co-op start dates.**
5. **Finally, we suggest that the University make efforts to acknowledge the pressure experienced by students that that it actively addresses and promotes related support services and activities.**

GRADUATE PROGRAMS

As was the case for the undergraduate programs, our team was asked to explore factors that impact graduate students' satisfaction and sense of community. The main theme that emerged focused on graduate students' relationships with their supervisors including the frequent mismatch between expectations and reality. Other issues included a lack of clear communication, the challenges associated with accessing resources, and the challenges associated with lack of financial resources. These issues are developed below.

1. *Clarifying supervisory expectations*

Overall, comments provided by graduate students during direct consultation sessions regularly applauded the quality of supervision provided by their thesis advisors, with students consistently reporting that various additional challenges they faced as graduate students were mitigated in their case by the support and opportunities provided by their advisor. Given the faculty training in instruction and supervision provided by CTE (e.g., with courses 9801, 9803 addressing detection and assistance with mental health issues in supervisees by way of equity and diversity training), and the GSPA task force to continue to improve supervisory relationships/practices, it is not surprising that students, both in person and in the CGPSS ratings, consistently reported feelings of satisfaction with the quality of supervision they received.

Nevertheless, graduate students consistently expressed a desire for greater clarity as to what was expected of themselves and their advisors in various domains. For example, students reported confusion and frustration over whether it was the responsibility of their advisor to inform them of the various offices and organizations on campus that could assist with writing support, financial issues, social activities, professional development, mental health issues, and other logistical needs. Students also expressed a lack of clarity concerning the appropriate timeliness of supervisor feedback (e.g., how long to expect one's advisor to review a thesis draft), how regularly supervisors should meet with their advisees, and optimal ways in which to communicate personal challenges to their advisor. These issues were reported as especially salient for international students who may be unclear as to cultural norms with respect to contacting or requesting support from their advisor.

Graduate students further noted that whereas teaching assistantships are typically accompanied by clear written agreements, research assistants are inconsistently provided formal written guidance as to lab protocols, work hours, requisite professional development, etc. Students also reported faculty advisors to typically adopt a task-completion approach to research objectives (especially in math and engineering) and were less aware of the time required by graduate students to complete tasks, thus contributing to conflict and misunderstanding. It is also of potential relevance that whereas overall ratings of university satisfaction were highest for master's non-thesis students (completing primarily coursework), ratings were lower for master's thesis students and lowest for PhD students, decreasing in accordance with increasing lack of structure (e.g., thesis vs. coursework) and duration of thesis supervision. CGPSS data further showed master's thesis students to report lower levels of satisfaction with their training opportunities for academic publishing and career preparation (e.g., non-academic careers); training that is often expected to be provided by one's thesis advisor.

Recommendations

- 1. We recommend that contractual agreements like those created for teaching assistantships be provided for research assistantships to improve clarity of student responsibilities. Our recommendation is consistent with the newly mandated campus-wide initiative at McGill University requiring "Letters of Understanding" between all supervisors and incoming students by Fall 2020. These documents will make explicit specific student and advisor responsibilities and behaviours and will be agreed upon prior to admission (see, McGill "[clarifying expectations](#)" initiative).**
- 2. In the same vein, we recommend that templates of Letters of Understanding be available on program websites to highlight programmatic attentiveness to the role of supervisor support and clarity of expectations for students to facilitate informed recruitment of interested graduate students prior to application (for e.g., [McGill Integrated Program in Neuroscience](#)). Letters of Understanding may be used to make explicit expected modes of supervisor interaction (e.g., frequency of meetings, email summaries by students after meetings of discussions and decisions, policies concerning in-person vs. virtual meetings), research protocols (e.g., specific guidance concerning publication authorship, data ownership/storage/sharing, publishing after graduation, mentorship of other supervisees, lab maintenance responsibilities), financial support (e.g., to attend conferences or workshops, to compensate thesis costs, RA funding amounts and duration), and other student responsibilities (e.g., submitting documents drafts for review within specific timeframes prior to deadlines, seeking external funding) as well as supervisor responsibilities (e.g., timeliness of feedback on thesis, manuscript, funding application drafts).**
- 3. We also suggest that the University initiates a process whereby a minimum number of in-person meeting be scheduled with advisors to facilitate clarity of expectations,**

mitigate limited social contact in graduate students after coursework is completed, and better identify or prevent lack of progress or mental health issues.

4. For more systematic oversight, we recommend that Graduate Program Chairs should be meeting more regularly with Associate Deans of Graduate Studies within faculties to remain updated on supervisor responsibilities and resources for students.
5. We recommend that, whenever possible, the University allow students the opportunity to select their own advisor (as compared to a student selecting an advisor based on online profiles). This recommendation is based on findings from research showing doctoral students who are not afforded the opportunity to choose their thesis supervisor to be substantially more dissatisfied with their training ([Ives & Rowley, 2005](#)) and at significantly greater risk of attrition ([Lovitts, 2001](#)).
6. Consistent with views shared by students during consultation, we recommend that the University explores ways to expand mandatory and continued training for faculty across ranks to better prepare them to identify mental health concerns and educate them as to on-campus resources for students (e.g., writing support, student organizations). Research supports this recommendation (see University of Guelph initiative involving trained faculty volunteers, [Farr, 2018](#)) as does a [recent report](#) by the Mental Health Commission of Canada that called for greater professional development resources for faculty to better enable them to be more effectively involved in issues related student stress and mental illness.

2. Competition for resources

The quality of the student health plan and abundance of varied academic support services was consistently cited by graduate students as clear strengths of graduate experience at the University of Waterloo. Information we received indicates that the numbers of graduate students utilizing mental health resources is proportional to the size of the student body. However, graduate students often reported feeling in competition with undergraduates for both academic and mental health resources on campus. Whereas graduate students do not appear to choose Waterloo for its expertise in experiential learning or Co-operative education opportunities, they nevertheless appear to experience disappointment upon settling into their programs of studies and recognizing the institutional priority to support the undergraduate Co-operative education experience may be at the expense of graduate student needs. Graduate students thus tended to view the academic and personal supports available to them on campus as a zero-sum scenario in which they competed with, and typically lost out to, undergraduates. This sense of inequity contributes to graduate students' disenchantment with some reporting feelings of regret in not having pursued graduate studies elsewhere. A staff member from AccessAbility Services did confirm that their unit focuses specifically on undergraduates; a concern underlying the current comprehensive restructuring of internal timelines and resources to better meet the needs of graduate students.

Recommendations

- 1. Continued updating of protocols for academic support services to meet the programmatic needs of graduate students is encouraged to facilitate access to suitable accessibility accommodations, writing support, etc.**
- 2. We recommend that graduate students be permitted to book sessions longer than 1 hour with the Writing and Communications Centre due to graduate writing needs typically being more complex and larger-scale than undergraduate writing tasks (e.g., theses and manuscripts for publication vs. mid-term exams or final papers).**
- 3. We further recommend that writing support services be additionally extended for international graduate students for whom thesis writing tasks are further confounded by English language competencies.**
- 4. We urge the University to develop a smartphone app specifically for graduate students. Our consultations indicated that the existing app has limited utility for graduate students since it was designed principally for undergraduates.**
- 5. Remote/online access to both academic and mental health resources was also suggested by graduate student representatives to facilitate their need for more intensive, long-term support, particularly when conducting off-campus research or internships. Our discussions with members of Campus Wellness served to bolster this recommendation. We were informed that graduate students require more intensive mental health services than undergraduates due to differing background factors (e.g., longer-term programmatic challenges, family issues). Additional mental health staff dedicated specifically to providing longer-term therapies for graduate students would also be advisable.**

3. *Financial issues*

Our team noted the impressive extent to which the University's Graduate Studies and Post-Doctoral Office provide timely financial support to graduate students in need (e.g., bursaries for parental leave, sick leave, etc.), as well as timely access to information on financial issues such as opportunities for Tri-Council fellowship holders, or students funded by research assistantships supported by Tri-Council grants to faculty. We acknowledge that existing institutional policies to provide minimum funding levels for doctoral students across faculty also serve as an important contributor to financial security in graduate students that is not always afforded by comparable institutions. However, CGPSS results show consistently low ratings of satisfaction with respect to quality of financial advice for master's non-thesis students, who are also more likely to require student loans (50%). This finding is corroborated by reports from campus stakeholders that course-based master's students struggle the most financially, potentially due to not having thesis advisors to provide support and guidance. CGPSS data also show that approximately half of master's thesis students report not receiving funding from their department to attend scholarly conferences. Meetings with doctoral students additionally highlighted persistent dissatisfaction with lack of financial clarity in admissions letters and insufficient minimum funding levels.

Recommendations

Given consistently observed empirical links between structured financial support (e.g., research assistantships vs. debt) and program satisfaction, persistence, and psychological health in graduate students (for a review of relevant publications, see [Sverdlik, Hall, et al., 2018](#)), we recommend a series of strategies that may help graduate students understand the extent of the funding available along with the sources of support:

- 1. Institutional efforts to increase and/or clarify the extent and types of financial support provided to graduate students is strongly recommended. For example, application letters may be improved by using simpler language (for international students) and clearer language that specifies the amount of funding received after tuition fees are subtracted.**
- 2. Graduate admissions and program websites should endeavour to provide clearer and more explicit tuition costs, living expenses, and funding levels provided to students, as well as specific financial challenges to be faced by international students (e.g., relocation, visa issues).**
- 3. It is further recommended that graduate supervisors, or designated staff within each department, have regular candid discussions with potential applicants and supervisees to outline available financial support (e.g., through the development of detailed RA contracts, clarifying support for conferences/thesis expenses in Letters of Understanding) and forestall more serious financial challenges (e.g., food insecurity, housing issues).**

4. *Communication issues*

Although graduate students did consistently report receiving substantial resource-related information in preliminary orientation sessions, they described the amount of information provided at once as they enter their graduate program to be overwhelming and not easily recalled later and at specific times of need. Graduate students also consistently indicated a lack of awareness of available supports on campus and were unclear as to what individual or office was responsible for informing them of support resources. In this regard, it is possible that inconsistent graduate representation or support staff to deliver advising across departments/faculties exacerbates this issue. We were told that some departments have staff that provide graduate advising and that other department have graduate student representation that offer similar advice. However, other departments appear to have no such support for graduate students and no graduate representation. Students regularly commented on the need for a centralized resource providing graduate students across campus with timely and useful information concerning academic and personal resources on campus given that the current Student Portal was reported to have limited utility for graduate students as a centralized digital resource. Graduate student association representatives also reported an unfortunate lack of engagement with graduate students who consistently reported having little

knowledge of the types of services provided by their associations and being reticent to reach out to their representatives.

Recommendations

- 1. In order to facilitate communication with graduate students with respect to the utility of the various resources available to them on campus, we recommend that each department be supported to have a GSA counselor, as opposed to requesting more of existing GSA counsellors who were reported to already be overburdened with responsibilities within their respective departments. Relatedly, it is possible that supporting multiple GSA counsellors for larger departments could help to provide more useful and timely information to their graduate student constituents.**
- 2. As noted above, we also recommend the development of a smartphone app providing centralized communication of available resources specifically for graduate students in a user-friendly digital format. For example, given emerging findings showing graduate students to experience a spike in mental health challenges after coursework is completed and comprehensive examinations begin (e.g., due to lack of structure, social isolation; see [Stub et al., 2011](#)), email reminders or app prompts for mental health resources upon registration for comprehensive exams may help to increase student satisfaction and well-being during this often difficult transition period.**

5. *Lack of community*

Graduate student representatives regularly cited specific activities that promoted a sense of inclusion and community on campus ranging from admission protocols (e.g., graduate student visits to campus) to graduate association events (e.g., three minute thesis, gradflix, gradtalks) and departmentally organized activities (e.g., “datafest,” “coffee mornings”). The athletics and social programs available to graduate students (e.g., targeting international students on campus during the Winter break) also showed a clear institutional commitment to promoting a strong collective identity and participatory student culture. However, graduate students reported having minimal time to engage socially with their peers (e.g., due to additional teaching or research assistantship work to assuage financial concerns). The situation is even more challenging for international graduate students, or those who did not complete an undergraduate degree at Waterloo, who need to acclimatize to a new environment, culture, or structure. Master’s students enrolled in non-thesis programs also reported feelings of exclusion due to a lack of consistent social contact with a faculty advisor, and this feeling was particularly strong for students in course-based programs that do not have a cohort-oriented structure (e.g., engineering vs. accounting). These issues are corroborated by findings from CGPSS wherein Master’s non-thesis students report lower levels of satisfaction with respect to quality of student life. Doctoral students in some programs additionally reported having their access to community spaces withdrawn upon completing requisite coursework, further exacerbating mental health challenges associated with the lack of structure and social contact that typically accompanies the comprehensive examination phase.

Recommendations

- 1. In addition to competition-oriented social events coordinated by graduate associations and faculties, we recommend that the University provide greater support (e.g., funding, space) for department-level initiatives to draw greater interest and promote greater cohesion among graduate students.**
- 2. We also recommend that efforts be made so that graduate students become more regularly informed of social events, both within their departments and across campus. This could be accomplished in many ways (e.g., via email, app alerts, regular social event newsletters by graduate program directors or departmental GSA counsellors). Graduate student program directors and students also specifically expressed an interest in social events at which faculty and students could directly interact in order to better foster a sense of departmental community and faculty support.**
- 3. Whenever possible, consider ways to provide additional funding and space for graduate student societies, and the Career Action office, to continue developing professional development and outreach programs (e.g., speaker series, “professional skills foundations,” non-academic career workshops) that elicit goal-oriented student participation is also encouraged, with specific funding dedicated to fostering social inclusion of graduate students with disabilities.**
- 4. We suggest that departmental meeting protocols be modified to accommodate input by graduate student representatives (who often felt excluded from departmental decision-making processes), with continued increases in programmatic Co-op opportunities for graduate students also potentially serving to foster a cohort-based sense of community (e.g., psychology Co-op graduate students conducting and analyzing annual internal surveys of student satisfaction).**

FINAL COMMENTS

Our consultation over the two-day period of our visit, as well as our reading of numerous documents made available to us by the Internal Steering Committee and other sources, has clarified both challenges and opportunities to strengthen the University of Waterloo’s student satisfaction and sense of connection with its community. Our review highlighted UW’s sterling reputation as an academic leader and its commitment to enhancing the student experience. Some of our recommendations should be relatively easy to address whereas others, especially those that require enhanced financial commitments, will certainly be more difficult to address and may require a longer-term perspective.

As our report indicates, some of UW’s strengths – academic rigour, the Co-op experience, and the focus on STEM disciplines, to name a few – also create additional challenges for an institution in search of strategies to enhance students’ experience and satisfaction. The sense of competition that attracts excellent students to the University of Waterloo may, in fact, reduce their satisfaction. The sense of hierarchy we noted, whereas students in Co-op or STEM

disciplines are perceived as first-class citizens of the University, will be a particularly difficult issue to address since it may have become a part of the normative assumptions of students who attend the University. Similarly, graduate student experiences are not uniform. Some describe a very positive experience with supportive advisors and departments and sufficient financial resources that enhance their academic, personal, and social experience, whereas others describe a more challenging experience due to their own personal circumstances. As the report notes, some of these issues will require a variety of solutions and we hope that the key findings and recommendations of our report will assist the Internal Steering Committee, Provost, and President as they move forward to address the issues that served as a catalyst to this review process.