



# THOSE WHO CAN, TEACH

*Evolving Teaching and Learning  
Strategies in Ontario's Universities*

**OUA**

Ontario Undergraduate Student Alliance



# ABOUT OUSA

*OUSA represents the interests of over 140,000 professional and undergraduate, full-time and part-time university students at seven institutions across Ontario. Our vision is for an accessible, affordable, accountable and high quality post-secondary education in Ontario. To achieve this vision we've come together to develop solutions to challenges facing higher education, build broad consensus for our policy options, and lobby government to implement them.*

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# INTRODUCTION

In the minds of students and the general public, the primary activity of a university is the pursuit of learning: a place where teachers teach, and students learn. It seems obvious that the core mission of the university is the transmission of knowledge, and in the popular imagination, simply placing bright eager minds in close proximity to leading professors will enable this alchemical process to happen. However, the reality of the practice and place of learning in today's university is much more complicated.

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The typical student schedule is based around just 15 hours in the classroom a week, with the expectation that complete learning will involve studying, writing, experimentation, and meeting with peers and instructors outside of the classroom. The educational experience then incorporates a number of different elements, delivered in a variety of forms. Further, there is growing recognition of the role of less formal learning opportunities provided through extra-curricular activities, volunteering, or learning blended with work.

In addition to the complexity of the learning process itself, society more than ever is debating the value of a university education and how to measure it: in the context of increasingly constrained public resources, the public is demanding concrete evidence of how the public investment in universities is contributing to the development of citizens ready to meet the challenges of tomorrow's labour market. Learning outcomes, standardized testing, and an employability focus all have the potential to shape the conversation on how teaching and learning happens and is evaluated within Ontario's universities.

As universities respond to changing demands and attempt to integrate innovative pedagogies, students are uncertain about what their education will look like and where it will take them. While there are challenges, OUSA suggests that there are also opportunities to improve quality and productivity in Ontario's university system. It is our hope that the recommendations within this submission can help attain this goal, and preserve the mission of universities to combine teaching and research for the benefit of students.

# EXECUTIVE SUMMARY

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While teaching and learning can warrant any number of papers and books, for the purposes of this submission OUSA has decided to focus on the following areas specifically. Each of these areas represents an opportunity to fine-tune the educational experience for Ontario's students and contribute to Ontario's reputation abroad.

## TRAINING OF FACULTY

OUSA encourages resources and strategies that help faculty develop strong teaching skills in order to help students succeed and to more effectively communicate their research to both their peers and pupils. The province should also encourage more interest in the scholarship of teaching and learning at our universities, recognizing that a key knowledge export from Ontario could be effective practices in instruction and learning.

## FACULTY COMPLEMENT

Ontario needs to take a look at more than just how faculty are trained, but also different types of instructors and how they spend their time. Contract academic staff are undertaking an increasing proportion of instruction time in Ontario's universities, and overall, the number of credit hours is decreasing for full-time tenured faculty. Conversely, the proportionate number of students per credit and administrative duties are increasing. The role of, and reliance on, contract academic staff has to be rethought—or we risk a generation of academics with stalled career and financial prospects and a generation of students taught by a revolving door of academic staff. Teaching focused faculty, and the conversion of contract staff to teaching focused positions, can present an efficiency gain for universities while contributing to strong educational experiences. Provincial support will be essential in a cultural shift that sees universities and academia fully appreciating and embracing these types of positions.

## PEDAGOGY

We must explore new types of learning and instruction if we wish to make our legacy one of quality students and experiences. While some may excel in a lecture style environment, today's students and faculty may thrive within a variety of learning environments. Modern technologies, teaching materials, and ultimately workplaces may benefit from new learning spaces and practices. OUSA encourages employers, governments, students and universities to work together to integrate existing practices and explore new ones within (and beyond) Ontario's classrooms.

## LEARNING OUTCOMES

Universities, governments and students are under increasing pressure to demonstrate value and performance in post-secondary education. Some aspects of the social and academic missions of universities can be difficult to quantify, and some things may never be simplified. However, OUSA suggests that some learning outcomes, evaluations and performance measures for students, faculty and universities can be used to improve the experience of education for all, and can strengthen outcomes for students, those that work at universities and the Province as a whole.



# TRAINING OF FACULTY

University professors are expected to conduct research and publish their findings, and in order to do so, professors use research skills developed through many years of graduate work. Along the way, professors are faced with many internal and external pressures to ensure their research is of a high calibre – high-quality and high-impact research findings and articles earn grants, rewards, and publishing in prestigious academic journals, while those of lower quality do not. Additionally, research responsibilities become professionalized in faculty members through engagement in a scholarly community of peers. However, no such community exists in the world of university teaching.<sup>i</sup>

Professors are expected to devote a similar amount of time to teaching as they do to research –typically a split of 40 per cent of time spent on teaching, 40 on researching and 20 per cent on service - yet they receive absolutely no formal training in education. Derek Bok, former president of Harvard, noted, “It’s astonishing that [...] universities do not teach their future teachers. Academia is the only professional system that doesn’t instruct newcomers in how to do what they will spend most of their time doing.”<sup>iii</sup> This sentiment is shared strongly by students who have had experiences with ineffective and unengaged professors.

Balancing the dual roles of teaching and research is a difficult task, and training in teaching receives much less support than the mission of research at most universities. We cannot expect quality teaching from these individuals without teaching them how to instruct others. The decision of the province to recently increase primary and secondary teacher education indicates the growing importance of preparing instructors. It would be unthinkable for a teacher to step into an elementary or secondary classroom with no formal training in pedagogical methods—and yet this is too often the reality in our university’s classrooms. While some instructors do improve quickly with experience, gaining confidence and knowledge as they go, others are soured by initial failure and never push themselves to improve.

Existing faculty training programs are sorely lacking in intensity and available resources. According to a recent series of Higher Education Quality Council of Ontario (HEQCO) surveys, a majority of new faculty orientation programs at Ontario universities are one day or less in length.<sup>iii</sup> New faculty members were also asked about which topics were covered at faculty orientation. Between institutions, the most-covered topics were introductions to the Vice-President Academic or Provost (88 per cent) and policies and procedures (81 per cent). Further to this, 25 per cent of new faculty orientation programs did not devote any time whatsoever to discussing classroom teaching and educational technologies.<sup>iv</sup>

## TEACHING AND LEARNING CENTRES

Ontario universities must shift from the increased emphasis on being ‘research intensive’ in order to secure public funding. While Ontario universities fund teaching and learning centres to various degrees, often the culture of teaching and learning on Ontario campuses has become ancillary to the pursuit of excellence in research. In order for teaching to be regarded with similar prestige, post-secondary institutions and the government of Ontario must actively endorse the importance of (and improve the stature of) teaching.

Teaching and learning centres are spaces (or sometimes simply staff) dedicated to helping faculty improve their pedagogical skills, expose them to new teaching technologies and techniques, and provide them with strategies for engaging students with disabilities, mental health issues, or diverse backgrounds. These centres vary in size and mission across the province, with some conducting regular workshops and intake training, while others simply aim to provide on demand resources and consultation. In most cases, these services are optional and engagement is at the discretion of individual faculty.

Teaching and learning centres cite a number of challenges in organizing and executing events designed to orient instructors to institutions, provide professional development in new pedagogical tools, or otherwise improve teaching. Reasons for these challenges include limited human resources, a lack of time, and a diminished value for teaching in comparison to research.<sup>v</sup> In essence, they often either lack the capacity or faculty willingness to expand their reach of programming.

However, when focus groups of experienced faculty members were asked about the resources available to support teaching and learning, many instructors indicated that they wished teaching and learning centres had been available at the start of their career.<sup>vi</sup> These faculty members cited teaching and learning centres as an “invaluable resource, particularly if sessions had focused on the fundamentals of teaching.”<sup>vii</sup> The experienced faculty members made specific mention of student engagement practices, pedagogical training, and sharing of best practices for assessing students.<sup>viii</sup>

***Recommendation: The government should designate funding improving instructional support centres so as to encourage a positive institutional culture and innovation in teaching.***

***Cost ~ \$11 million annually***

For the above reasons, OUSA proposes that the Ontario government directly allocate funds to support university teaching and learning centres. Students suggest that an average increase in funding of \$500,000 at each university, a total annual investment of \$11 million, would empower these centres to increase the prestige of high-quality teaching on Ontario campuses. OUSA believes that funding should be specifically allocated when institutions can demonstrate that funding will go towards any of the following:

- Encouraging participation and mentorship from award-winning instructors and other faculty members who have a strong emphasis on quality teaching;
- Scholarship of Teaching & Learning (SoTL) research;
- Developing strategies for institutional input and placing the centre in a central position to the institution’s decision-making processes;
- Concrete plans for faculty implementation of new classroom pedagogies and technologies;
- Building learning communities and collaborations between academic departments;
- Measuring and assessing educational impact of services, programming and training related to teaching and learning.





## PROFESSIONAL DEVELOPMENT FOR FACULTY AND INSTRUCTORS

***Recommendation: Funding must be dedicated by the provincial government to support mandatory professional educational development for all instructors (including teaching assistants). Funding should be conditional upon institutions reaching agreements for professional development with their faculty as part of collective agreements. Cost ~ \$1 million dollars annually***

At present, centres for teaching and learning encourage better teaching practices, but offer few mandatory training opportunities for educators at the post-secondary level. In fact, only 12% of institutions have any mandatory new faculty orientation.<sup>ix</sup> Individual institutions have made commendable efforts to improve the support offered to instructors; however, real progress will only be made when the Province recognizes the need to improve teaching and responds with the first step of significant investment in these support centres.

At most teaching and learning centres, it is often up to the instructor to approach the centre for advice on improving their teaching.<sup>x</sup> As a result, the teachers who most require support from these centres are may be among those who seek it the least, due to a lack of interest in seeking support or a lack of awareness that they may need it. At this point, centres for teaching and learning are viewed as a place of last resort instead of a valued resource.

Any increased support for teaching and learning centres must partially fund intensive teaching and learning workshops for all junior faculty members who will be instructing undergraduates. Most centres currently lack the funds or the institutional will to provide these high-quality and high-impact workshops. OUSA is recommending that the Ontario government prioritize faculty training in conjunction with increased funding for teaching and learning centres so that new faculty members institutionalize a strong culture of teaching

and learning from the start, and actively import strong teaching practices into their own classroom. Junior faculty workshops should also introduce teaching and learning centres as places for continual support, and not simply as places for ‘bad teachers.’

The time devoted to high-quality faculty training programs must expand to allow for a holistic introduction to university-calibre teaching. OUSA recommends that new faculty programs be at least one week in length, and take on the format of an intensive retreat, where new faculty are immersed in the culture of university teaching and are provided with intensive feedback on their teaching practises from faculty mentors. Two important outcomes of new faculty orientations are placing teaching and learning at the forefront of a new instructor’s mind and emphasizing a stronger institutional culture of quality teaching and learning.

Arguably, the need for development is only going to increase as the technical skills required for teaching in universities increase also- such as online learning management systems, classroom technology, and digital resources . These require skills that can only be developed through exposure to new techniques—a reality not that different from the upgrading required by other professionals.

A recent HEQCO study found that the average cost of a new faculty orientation program in Ontario is approximately \$279/new faculty.<sup>xi</sup> The survey also added the total costs across all Ontario universities that offer junior faculty programs and found the total to be \$96,700. OUSA believes that increased system funding of only \$1 million would be sufficient to provide an intensive training and orientation for all new faculty members across the province. This low-cost investment will mean greater emphasis on teaching quality and richer learning outcomes for students. In order to best facilitate change, additional funding should be leveraged to encourage institutions to negotiate participation in instructor training as part of their collective bargaining process.

## ***necessary skills for classroom instructors***

SETTING A COMFORTABLE AND INCLUSIVE CLASSROOM ATMOSPHERE

EXPLAINING CONCEPTS CLEARLY

ENCOURAGING PARTICIPATION FROM STUDENTS

FACILITATING GROUP DISCUSSION

MARKING ASSIGNMENTS FAIRLY AND EFFECTIVELY

ADDRESSING ISSUES OF DIVERSITY IN THE CLASSROOM

USING EFFECTIVE AND ENGAGING PEDAGOGY

RESPONDING TO ISSUES OF ACADEMIC INTEGRITY

TEACHING FOR ESL STUDENTS

PROPER USE OF TECHNOLOGY, SUCH AS BLACKBOARD OR E-MAIL

INSPIRING INTEREST AND PASSION FOR THE SUBJECT

DEALING WITH CHALLENGING CLASSROOM SITUATIONS OR STUDENTS

MAXIMIZING USE OF CLASS TIME

SENSITIVITY TRAINING

MENTAL HEALTH TRAINING

ANTI-OPPRESSION TRAINING

# FACULTY COMPLEMENT

Unprecedented enrolment growth over the past decade has placed considerable strain on the instructional capacity of Ontario's universities, leading to substantial increases in faculty-to-student ratios system wide. Moreover, existing faculty have been encouraged to devote more time and focus to the pursuit of research goals at the expense of the teaching component of their obligations. In 2011, the Ontario undergraduate education system was only delivering about 45 per cent as much faculty teaching per student as it did two decades prior. When calculated, this represents a decline of four per cent a year.<sup>xii</sup> Given fiscal constraints, universities have been forced to respond to rapid enrolment growth in ways that are not conducive to the provision of a sustainable and high-quality instructional environment.

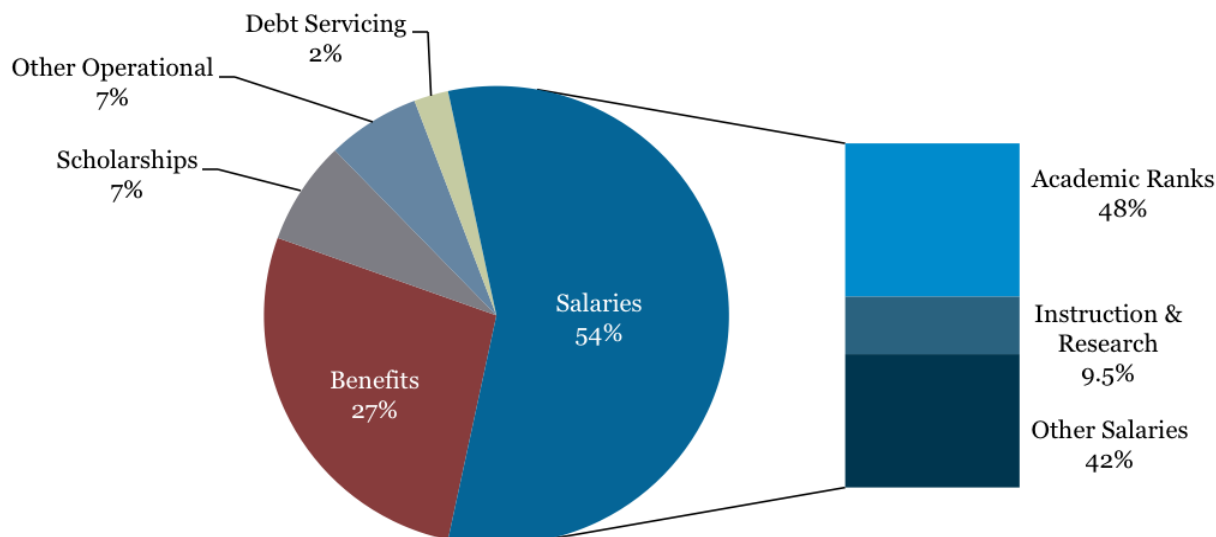
While faculty shortages are presenting a significant challenge to the quality of higher education in Ontario, the portion of operating budgets devoted to academic salaries and pensions is increasing. Additional funding intended to benefit students by improving the quality of instruction has, in reality, been used to maintain the salaries and benefits of existing faculty and administrators rather than new faculty, a practice

that only further contributes to faculty shortages and rising costs in the post-secondary sector. In the context of increased enrolment, this has led to an increased reliance on non-tenured contract faculty. Students are concerned that this negatively impacts quality of education.

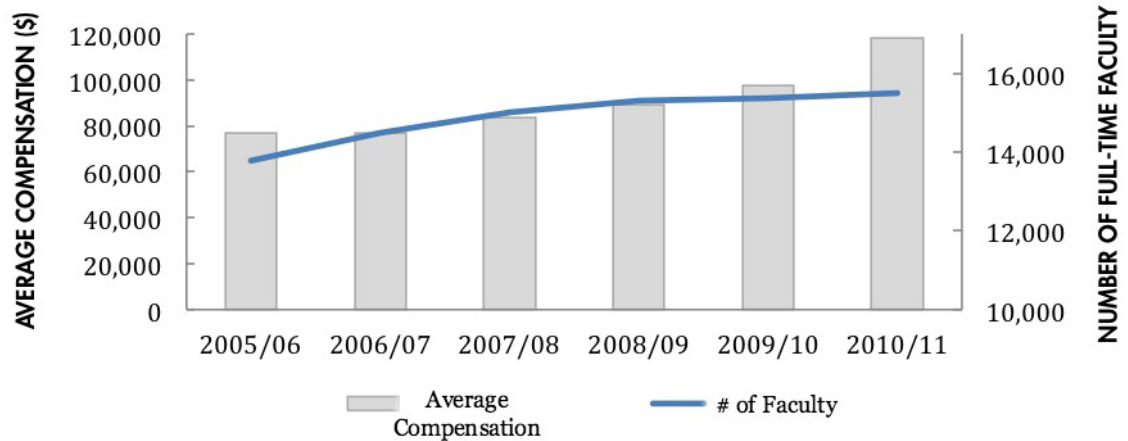
During the 'Reaching Higher' investments of the mid to late 2000s, over \$6 billion was invested into the Ontario post-secondary education system. Of these new dollars, nearly 70 per cent went to salaries and benefits for faculty and administration, and nearly half of that went to existing faculty.<sup>xiii</sup> While recent trends have seen that proportion decline somewhat, existing faculty are still undertaking compensation negotiations from the position of those historic increases and laying claim to significant portions of tuition increases. Not only is this unsustainable, it limits the funds available for addressing students' key concerns about the quality of education.

In recent years, the price of education has increased; but while students have made an increased commitment to finance Ontario's post-secondary system, the perceived quality of the education they receive has declined. The ratio of full-time equivalent

**FIGURE ONE: TOP SOURCES OF INCREASED EXPENDITURE FROM GENERAL OPERATING REVENUE, 2007-8 TO 2011-12**



**FIGURE TWO: NUMBER OF FULL-TIME EQUIVALENT FACULTY IN ONTARIO COMPARED WITH AVERAGE COMPENSATION**



students to full-time faculty has increased from 18:1 to 27:1 over the last two decades.<sup>xiv</sup> Meanwhile, the average instructional load for full-time professors has actually declined over the same period, decreasing from an average six half-courses per year in 1988 to four in recent years. Student responses to this recent trend are clear: the majority of students surveyed by OUSA in 2011 stated they would prefer their university to hire six sessional instructors rather than two top research-oriented professors.<sup>xv</sup> While class sizes are certainly not the only measure of quality, it is clear that students do feel that the higher student-faculty ratio negatively affects the impact and outcomes of their undergraduate learning experience. And while students do not want to give the impression that research is not important, their decision to consistently choose more instructors over top-tier researchers is indicative of how students often do not see, or understand, the inclusion of leading research in their classroom experience.

As mentioned above, the number of part-time contract faculty in Ontario has rapidly increased to compensate for declining instructional capacity in the current environment of limited funding. While comprehensive data from Ontario detailing the proportion of part-time faculty does not exist, post-secondary stakeholders assert that dramatic increases are in fact occurring.<sup>xvi</sup> During a recent labour negotiation, faculty at Wilfrid Laurier University stated that contract academic staff were undertaking just over 50 per cent of teaching at the institution while accounting for less than five per

cent of the institution's budget. A recent report from the Canadian Broadcasting Corporation suggests that that trend is largely consistent system-wide.<sup>xvii</sup> In the above chart (FIGURE 1) you can see that other instruction and research comprises less than 10% of the university budget. This category generally encompasses contract academic staff, non-academic researchers and teaching assistants. Despite increased expenditures on academic faculty, most funding has been devoted to existing faculty salaries rather than the hiring of new tenure-track faculty. Meanwhile, increased enrolment has placed increased stress on the teaching capacity of universities, resulting in reliance on contract lecturers and part-time faculty to bear the burden of the undergraduate teaching load.

OUSA's concern with this method of addressing increased teaching loads centers on considerations of both quality and quantity. Firstly, non-tenure track faculty are often less experienced in their field, have less experience teaching, and may be balancing multiple positions at various institutions, making them largely unavailable to consult with students outside of the classroom. Further, part-time and contract faculty have poor job security, are often under-compensated and report low levels of job satisfaction.<sup>xviii</sup> Due to the nature of sessional faculty appointments (and not merits of these individuals, many of whom could and should attain permanent positions), OUSA does not believe that increasing non-tenure track faculty is a sustainable option for addressing faculty shortages.

# *helpful tangent:*

## HOW RESEARCH CAME TO DOMINATE THE AGENDA

Research (or, more broadly, the furthering of knowledge) has undeniably been central to the mission of universities since they were first formed. The pursuit of resources for research, perceived prestige, advancement systems and the large role that universities play in total research in Canada have all contributed to expansion of that mission however, and research has become a pursuit that has overshadowed other important functions of the university in the minds of faculty and administrators alike. Students maintain that there is an important role for research in the individual student experience as well as the broader social impact of universities. However, they are concerned at the degree to which the pursuit of research is keeping leading faculty out classrooms, is overshadowing teaching, or is encouraging universities that are not best equipped to pursue research dollars to do so.

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After reducing transfer payments for post-secondary education in the mid-1990s, the federal government decided to direct funding into research initiatives at Canadian universities, creating the Canada Foundation for Innovation, the Canada Research Chairs and expanding the federal granting agencies. The infusion of federal money for research incentivized institutions to emphasize research in their strategic plans and spending.<sup>xix</sup> Between 1999 and 2004, federal funding for research more than doubled.<sup>xx</sup> The 2014 federal budget continued this trend by committing to an additional \$1.5 billion in new research funding, but no increase to the education and social transfer earmarked for universities.<sup>xxi</sup> Ontario's 2014 provincial budget's two major investments in post-secondary education came in the form of money for maintenance and research.

A longer term examination of research funding has found that it has increased its share of university budgets from 14 to 21 per cent in Ontario, while the proportion of the total budget consumed by operating expenses has decreased from 82 to 75 per cent, indicating that proportionally more resources are being devoted to research and fewer to the day-to-day operations of the university.<sup>xxii</sup>

This increased research funding has several implications for undergraduate students. Indirect costs of research, including faculty time, grant applications, and reporting requirements, draw institutional resources away from teaching and learning activities. Unfunded, indirect costs of sponsored research have been estimated by the Association of Universities and Colleges of Canada (AUCC) to be nearly \$2 billion nationally. While a federal Indirect Costs Program (ICP) exists to help mitigate the unfunded costs of research, some estimate that ICP funding only covers one half the estimated indirect costs of conducting research.<sup>xxiii</sup> In addition, matching requirements of much federal funding, including the Canadian Foundation for Innovation, have placed a funding burden on the Province and institutions, diverting resources from other operational areas in this time of strained finances.

Further, considerations of tenure, hiring and school rankings rely heavily on research records and current funding models overemphasize research funding while at the same time lacking incentives that reward excellence in teaching techniques. An overall higher student-to-faculty ratio, combined with a burdensome research agenda and other administrative priorities, have left faculty with very little time to spend on teaching and mentoring students. The inequity between teaching and research is widely accepted by both student groups and faculty, and presents a significant challenge to the quality and calibre of learning occurring at Ontario's universities. Furthermore, faculty time constraints and lower faculty-student interaction are systemic issues that cannot be resolved through provincial/federal programs designed to combat indirect costs of research. Real solutions must address the expected balance of teaching and research and the chronic underfunding of universities to increase the faculty complement at Ontario universities.

An Ontario Confederation of University Faculty Associations (OCUFA) survey from 2012 found that 73 per cent of surveyed faculty members feel their workload has increased since 2007, and a further 39 per cent felt that their workload was unmanageable.<sup>xxiv</sup> The effects of this trend on the quality of instruction are clearly reflected in reports by faculty that they had to make negative changes to their pedagogy, such as reducing the number of writing assignments, interacting with students outside of the classroom less, and resorting to more multiple-choice tests in order to cope with increasing workload pressures. Faculty shortages are compromising the quality of instruction by forcing faculty to utilize ineffective pedagogical practices at the expense of the student experience.

## TEACHING FOCUSED FACULTY

***Recommendation: New teaching-focused faculty should be hired, in the tenure-track stream, to reduce student-faculty ratios and to increase quality of teaching.***

***Approximate Savings ~ 108 Million Dollars***

As detailed earlier in this section, it is clear that current numbers of faculty in Ontario's post-secondary system are not capable of meeting the instructional demands of current class sizes. The most sustainable solution to this problem is to hire more tenure-track faculty, ensuring high quality instruction for all students. In fact, if every university in Ontario were to convert 10 per cent of their full-time faculty positions into teaching stream appointments teaching three full course equivalents per academic year, OUSA estimates that the system could increase its productivity equivalent to a new investment of \$300 million in new faculty.

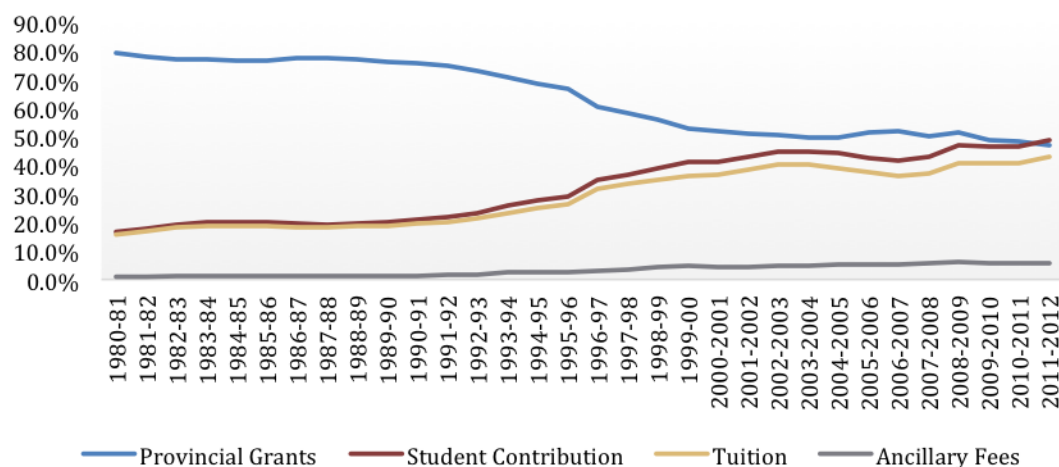
Further, Ontario's post-secondary system is currently employing an incredibly expensive and inefficient instruction model. Much of Ontario's undergraduate education is delivered by full-time faculty who are expected to devote as much time to research as to teaching.<sup>xxv</sup> OUSA recommends that new tenure-track faculty be hired in a teaching-focused stream, allowing these faculty members to focus more resources on instruction while still pursuing research free from the extreme pressures to achieve scholarly excellence that faculty regularly experience. Tenure-track teaching-focused faculty will drastically improve students' university experience by lowering class sizes, increasing the instructional capacity of institutions, and by providing high-quality and focused instruction.

In an environment of shrinking resources, the most realistic option for preventing losses to the quality of education is to rethink how we use existing resources. The broad trend of reduced course-loads for faculty in favour of greater emphasis on research is unsustainable and an ineffective allocation of faculty resources. Encouraging faculty at the institutional level to assume a teaching-focused role and others to pursue a more traditional research-focused path would help solve many inefficiencies within the current system. Some faculty would be free to take on larger course-loads while others could continue the research initiatives of the institution. While faculty teaching loads are negotiated at the institutional level, and not through collective agreements, the government could have a role in setting floors and ceilings on teaching loads, as well as defining best practices.

While system-wide data that accounts for all of the necessarily variables is limited, figures from twelve Ontario universities that publish Full-Time Equivalent (FTE) counts that include both full-time and part-time faculty members allows us reflect on the costs of instruction at these institutions. Between these universities, 11,995 full-time equivalents taught 21,686 courses in the fall term of 2009-10. Each faculty member bore a teaching load of approximately 1.8 courses per term. Calculations reveal that with operating expenditures at these universities totaling approximately \$4,080,543,000 in the same year, each course taught at these institutions cost approximately \$188,169 per credit course.<sup>xxvi</sup> Holding salaries constant between traditional tenured faculty and teaching-focused faculty, it would approximately cost half as much for teaching-focused faculty to teach the same number of courses.



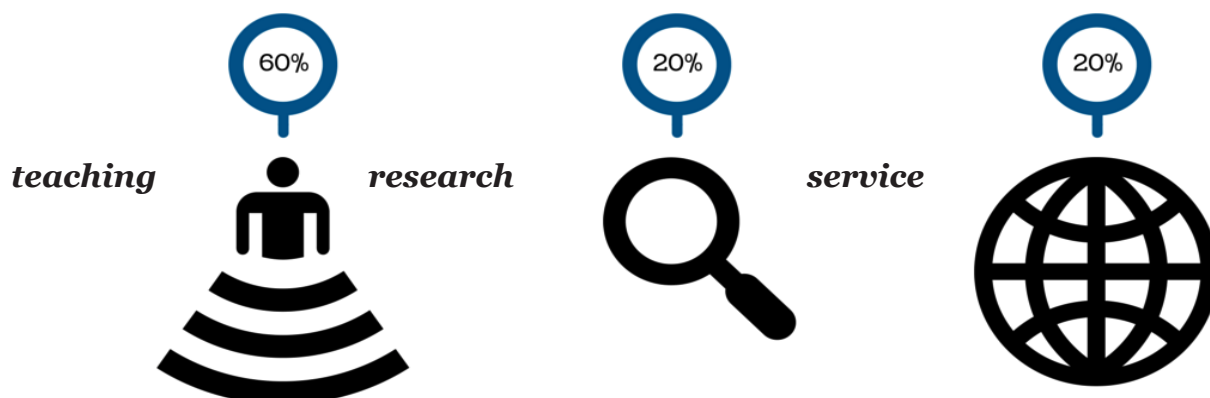
**FIGURE THREE: STUDENTS AND GOVERNMENT CONTRIBUTIONS TO ONTARIO UNIVERSITY OPERATING BUDGETS, 1980-2012**



Constrained government funding and rapidly increasing tuition begs the question of how we can encourage universities to be more productive without the input of new resources. OUSA advocates for a vision of productivity that does not come at the expense of quality for students, nor fair working conditions for faculty. For this reason, we suggest a move away from the current norm of workloads that have faculty devoting 40 per cent of their time towards research, 40 per cent towards teaching and 20 per cent towards service to the university community in favour of a model in which teaching-focused faculty allocate 60 per cent towards teaching and 20 per cent towards research and service, respectively.

This will allow some professors to take on a greater responsibility for teaching while assuming slightly fewer research obligations. As students become the primary contributor to university operating budgets, it's important to focus those resources in areas that benefit them the most – and unfortunately, research rarely impacts students in a direct way. The creation of teaching-focused positions will create substantial cost savings all while lowering class sizes, and maintaining research productivity, making the system more productive while remaining sensitive to fiscal constraints.

### TEACHING FOCUSED FACULTY



## RECOGNITION OF TEACHING AND ASPIRING INSTRUCTORS

***Recommendation : Strategies for reducing the compensation disparity between tenured and non-tenured faculty should be investigated, including limiting post-retirement teaching contracts, compensation ceilings, and reducing the reliance on non-tenure-track faculty.***

As previously mentioned, reliance on contract academic staff or other non-tenure, non-permanent employees can have an impact on the educational experience of students. Not only do these faculty have less time for their students due to multiple commitments spread over several institutions, but they are rarely afforded work space in which to interact with students. These instructors are often either unfamiliar with the particular culture at an institution, or they have received training duplicated over several employers. In the first scenario, new instructors are unable to reach the full potential of a faculty member well versed in a campus and its particular processes, while in the latter there has been expensive waste as they are repeatedly trained in several (and sometimes conflicting) campus' administrative and academic approaches. High turnover in, and low contact with, contract academic staff can limit the academic growth potential for students who intend to conduct independent research, work on a capstone project like a thesis, or even those that need an academic reference for graduate school.

In addition to concerns about waste and a negative impact on educational experience, one must consider the impact of resigning a generation of faculty to precarious, low-income employment. Increased reliance on contract academic staff, whether out of comfort or necessity, limits those instructors who can hope to attain tenured or even stable employment. Lengthening the period of the 'entry-level' portion of an academic career arc encourages potential faculty from underrepresented groups or with limited financial and social cache to self-select out of such careers –meaning that society loses out on important voices. Role models

are an important part of students choosing to attend university, as well as persisting and succeeding. If students from poorer socioeconomic conditions or marginalized populations do not see themselves reflected in academic staff then that may have an impact on their participation and success.

Further, faculty engaged in precarious labour situations have less time to research and publish, diminishing the social good of universities and inhibiting their own careers. Finally, higher student debt and lower income than those experienced by aspiring faculty in the past impact the ability of current faculty to begin building their personal lives by delaying major investments such as homes, cars, or pensions and forcing them to choose between starting families or careers.

Strategies for reducing the reliance on contract faculty, and enabling universities to hire new full-time faculty to teach students should be investigated. These could include limiting post-retirement teaching contracts to ensure that retired professors do not draw a pension and also collect a salary, and establishing compensation ceilings for existing faculty to ensure that more funding is available for the hiring of new recruits.

***Recommendation: Quality teaching must have equal consideration with research performance for all decisions relating to hiring, promotion and tenure.***

Teaching and research are often said to be of equal value, but in reality most institutions heavily favour research in decisions related to hiring, promotion, and tenure. One study showed that faculty estimate “evaluation of teaching is rated around 20-30 per cent in salary, promotion and tenure decisions, compared to 60 per cent or more for research.” Many collective bargaining agreements have provisions allowing research performance to compensate for moderate shortfalls in an employees teaching record. This is particularly troubling given that both student satisfaction and engagement are so strongly linked with student success.<sup>xxvii</sup>

To ensure that teaching quality is weighted equally with research in relation to hiring decisions, it is essential that the sector come together to arrive upon a mutually beneficial solution to the issue. If government action is required it is preferable that it stem from a broad consensus across the PSE sector. For this reason, OUSA proposes that students, the government, institutions, and faculties come together to discuss why and how our institutions should hire the faculty who will be teaching undergraduate students.

These consultations should result in a workable framework as well as a commitment from all to abide by its terms. This framework should be applied in all considerations in promotion, tenure, or hiring. While there are many measurements for research success, this working group should develop appropriate and consistent measures for measuring readiness for instruction and ongoing teaching performance – whether through more effective evaluations, observation, or some other measure.

The role of the students in these career phases should be emphasized within any framework. Students should participate as part of the bodies overseeing decisions of hiring and tenure, and student evaluations of teaching should play a greater role in career progression as well.

***Recommendation: University funding should utilize system-wide policy levers to incentivize quality teaching through a variety of initiatives, including specialized funding for teaching chairs, standards and rewards for meeting defined teaching-loads, envelopes for pedagogical innovation, and specific support for technology support units.***

Recommendations by experts across the sector consistently express the need to renew focus and re-energize teaching quality at Ontario's universities. OUSA believes that envelope funding is an ideal way to institutionalize teaching quality on Ontario's campuses. A variety of separate envelopes could be created to provide financial incentive to encourage high-quality teaching. Technology support units, teaching quality enhancement initiatives, public assessment practices, and rigorous performance reviews could all be encouraged through a number of policy levers.<sup>xxviii</sup>

As quality teaching is essential to all of Ontario's campuses, the concern that envelope funding will encourage homogenization and duplication of resources across the system is not applicable here. The use of earmarked funding will instead promote higher standards of teaching quality while also providing funding for programs aimed at improving the instructional capacity of institutions. The creation of teaching chair positions could also be incentivized by the government, which could provide instructors with teaching quality resources, leadership and mentorship, as well as allow for the research and development of best practices and expertise with respect to curriculum changes. Another such initiative would be a teaching quality envelope aimed at incentivizing broader systemic changes in teaching loads. A minimum threshold for the average faculty teaching load could be set, and institutions who meet this threshold could receive additional support for innovation in teaching.<sup>xxix</sup> It is critical that steps be taken to develop a comprehensive set of metrics for education quality, and the government should prioritize the development of these metrics. This would help reverse the decline in teaching loads for professors, and provide institutions with resources to improve teaching quality.

***Recommendation: The government should commit funding to improve the practice of student evaluations of teaching (SETs) in all Ontario universities, and this practice should require public reporting of SET collection as part of the Multi-Year Accountability Agreement or other report-back mechanism.***

A 2008 HEQCO review acknowledges that in general, administration and students believe in the validity and usefulness of student feedback.<sup>xxx</sup> Additionally, the report correctly notes that despite some stereotypes to the contrary, students can be excellent evaluators; exposed to academic content for the first time, they are uniquely sensitive to failures of instruction which peer faculty—being already familiar with the content—may fail to detect.<sup>xxxi</sup>

However the current practice of student evaluations of teachers is not living up to its potential usefulness. When administered appropriately and consistently, SETs can be invaluable in fine-tuning the teaching process. By incorporating meaningful student feedback, courses and instructors can become more effective and more engaging for students. Furthermore, a well thought-out SET can force a student to think critically about his or her own learning experience and learning style.

In addition to the benefits to students, the establishment of a reliable and consistent SETs system can afford university instructors the opportunity to demonstrate excellence in teaching. Under-emphasis on teaching performance in promotion and tenure decisions undermines the government's desire for universities to be bastions of both research and learning. By mandating a consistent methodology in administering and collecting high quality SETs, administrations and the government will gain a measure to examine

improvements in teaching year to year, as well as a means to draw some cross-university comparisons. Meanwhile, faculty gain a respected means to demonstrate and track their teaching abilities.

Unfortunately, SETs are not presently being administered appropriately or effectively. The content and structure of the instruments used to collect student feedback vary widely between universities, programs, or classes, and are variable in terms of depth or breadth of information sought. Moreover, owing in part to collective bargaining obligations, the content of student feedback and the extent to which it is reviewed and received is often hidden. The result is disillusionment on all sides: students do not recognize the value of SETs and will give unhelpful or trivial responses (if they respond at all), and faculty become convinced that students are incapable of giving fair or high quality assessments, and so resist SETs for fear of being judged according to unreliable or vindictive feedback.

These deficiencies can be addressed through government intervention. Rather than continuing to permit an ad-hoc approach to SETs, the government should mandate and fund a system of processes that standardize and improve SETs to the point where they hold the confidence and buy-in of students and faculty. This will ensure a reliable, high quality system of student feedback that will improve student awareness, student learning, faculty accountability, and teaching practices.

Accountability reporting arrangements, such as the MYAAs, could include a requirement that a sufficient number of evaluations have been administered, or that the institution has received a sufficient response rate. Separate measures could even respect the extent to which student feedback is reviewed or implemented, where appropriate.

***Recommendation: The government should investigate and encourage best practices in the design and implementation of SETs using the “stop, start, continue” survey model.***

Research has been done that demonstrates how SETs can be effective and reliable. Many of these investigations point to best practices in feedback form design and timing. One study published in *Assessment & Evaluation in Higher Education* found that the “stop, start, continue” (SSC) method of evaluation design is effective in provoking feedback of more depth, and increasing student engagement with the teacher evaluation process.<sup>xxii</sup>

This method of qualitative inquiry “asks structured questions that collect student views on what educators should no longer do (stop), should consider adding (start), and features that should be retained (continue).”<sup>xxxiii</sup> When compared to feedback forms that asked more open-ended questions, responses from forms using the SCC model were more constructive and better communicated across different courses. In developing a standard model to implement across the province, the government should investigate the SCC model for feasibility and possible use.

***Recommendation: The practice of SETs should evolve to include a wider use of formative evaluations as well as summative.***

SETs are overwhelmingly used summatively, that is, to review a course and instructor once the semester or year has ended. While this is useful, summative evaluation practices should be used in tandem with formative evaluations. SETs collected earlier, near the middle of the term, can provide feedback that can be incorporated immediately to improve the course and the experiences of the students. Feedback collected in the SSC format, for example, can provide clear suggestions that can be adopted relatively easily, ensuring ongoing improvements to the learning experience.

STOP



START



CONTINUE



# PEDAGOGY

20 /

***Recommendation: The government must work with and support institutions to develop collaborative and active learning opportunities across disciplines.***

Within traditional lecture-style classes there are few formal opportunities for consistent student participation. Students are expected to learn the material presented by the faculty, and demonstrate that they have learned the material through essays, exams and labs or, increasingly, multiple choice and scantron. In very few parts of this process are students required or encouraged to interact with their peers or faculty in person, meaning that the traditional lecture-style classes miss a valuable opportunity to enhance student success.

Student interaction with peers has been shown to positively influence overall academic development, knowledge acquisition, analytical and problems solving skills, as well as boost student self-esteem.<sup>xxxiv</sup> Additionally, increased opportunities for peer interaction within the classroom bring students into contact with students from diverse backgrounds, which have also been positively correlated with desirable post-secondary outcomes.<sup>xxxv</sup>

There are a multitude of engaging pedagogies centred on active and collaborative learning principles, such as classroom-based problem solving, peer teaching, service learning, discovery learning, inquiry-based learning, project-based learning, case-based learning, and various forms of electronic technologies such as clickers and simulation software. Other promising instructional practices are supplemental instruction, peer tutoring, reciprocal teaching, attributional retraining, concept-knowledge maps, and one-minute papers. Research indicates that the greater the repertoire of teaching methods, the more effective the learning experience- especially when teaching approaches are aligned with student abilities and preferred learning styles and learning aims.<sup>xxxvi</sup>

## SUPPLEMENTAL INSTRUCTION



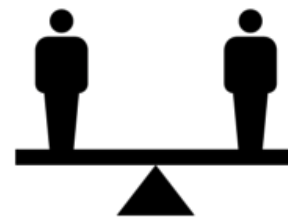
## ONE MINUTE PAPERS



## CONCEPT MAPS



## PEER TUTORING



## RECIPROCAL TEACHING





## ***Community and Peer Based Learning***

Community-based learning is an idea that has been proposed as an effective way to facilitate collaborative learning at the first-year level.<sup>xxvii</sup> One example of a learning community starts with co-registering (or being co-registered) in classes and tutorials so that they discuss topics and attend lectures with a consistent group of peers.<sup>xxviii</sup> Some large universities in the United States have already adopted models where students co-register in blocks of 25 to 30.<sup>xxix</sup> They attend larger sized lectures, but stay together for discussion in smaller group. This is similar in principle to tutorials, but the difference is that this discussion group stays consistent between classes or in a group that may even extend to residence or living communities.

Collaborating with others on academic work and problem solving prepares students to deal with the messy, unscripted situations they will encounter daily during and after university and substantially increases the amount of time and effort students spend learning.<sup>xl</sup> Peers are noted to be one of the strongest influences in student cognitive, behavioural, affective, and psychological development and one can argue that in increasingly diversifying Canadian campuses an important source of facilitating dialogue between the different social strata.

## ***Problem-Based Learning and Inquiry-Based Learning***

The problem-based learning (PBL) and inquiry-based learning model has gained a strong foothold in health science education.<sup>xli</sup> This teaching model, employed by the Faculty of Health Sciences at McMaster University, is a more recent Canadian example of the benefits of collaborative learning. PBL is, broadly, any learning environment in which the solving of specific problems drives the structure and process of learning. In 2005, the PBL program won the Alan Blizzard award for innovation in teaching and learning, partly due to its success in helping students collaborate and communicate with one another. In fact, one of the goals of the program was to foster community-based learning.<sup>xlii</sup> In an open letter, one student recalled the impact PBL had on his learning experience. As he describes, "I can see now that I am a much more mature learner than many students I know from other faculties."

Through testing active and collaborative learning approaches, it has been found that students learned more effectively through cooperative group work. One study found students were more likely to have "characterized the classroom environment as friendly, nonthreatening, fun, and dynamic" and "[report] a sense of belonging and camaraderie because they regularly interacted with peers and learned from each other."<sup>xliii</sup>

The government and our institutions should place a priority on the value of undergraduate student learning and encourage the widespread adoption of these progressive and more effective educational philosophies. With provincial support for similar collaborative learning opportunities, prospects for collaborative learning could be extended to students from all faculties and programs, and could manifest in experiences that contribute to overall program outcomes; including research endeavours, case studies, or entrepreneurial ventures.

***Recommendation: The government should place a higher priority on university capital projects designed to promote collaborative and active learning.***

Some institutions have shown incredible leadership through the provision of learning space tailored to support collaborative learning. These spaces make use of tables and chairs that can be reconfigured for multiple group configurations, have multiple displays (be they whiteboards, projectors, or blackboards), and allow the instructor to take a facilitator role by moving amongst the groups or observing and directing from the center of the room as opposed to the front if they wish. For example, learning commons space has been established in a number of university libraries across Ontario. Some of these spaces have been constructed with funds provided by the recent federal and provincial infrastructure programs, such as the Lakehead Learning Commons.

Should collaborative and community-based learning become more prevalent, it is vitally important that universities are able to provide adequate meeting space to all students who need access to it. This space should be extended beyond the traditional sphere of the library. To enhance student success, scholars have recommended changing the way we design our campuses to emphasize principles of flexibility, rich stimulating environments, places for group learning, having all resource available, and active and passive places.<sup>xliv</sup> Since the classroom is the one place where students are certain to meet, it has been proposed that making classrooms the locus of campus community is a sure way to facilitate engaging classroom environments<sup>xlv</sup>

For schools seeking to show leadership through the promotion of collaborative and community based learning, efforts to provide the necessary infrastructure should be supported provincially. This will not only provide institutions another incentive to move to a collaborative teaching model, but would give them the resources to do it effectively.

***Recommendation: Universities must actively promote the use of alternative assessment methods.***

In the transformation of our understanding of effective teaching philosophy from passive to active, there is a corresponding consideration on the effectiveness of the assessment of learning outcomes.

By changing the methodology of our teaching practices, we are effectively changing the way the information is being sent to and received by the student and how they are processing the data. This progression of our teaching pedagogy calls into question the widely used archaic methods of measuring student performance, and whether our assessment tools should aim to modernize in the same way teaching and learning is within the academy.

There is strong support for a re-evaluation of the types of measurement and assessment tools that students experience, considering the overemphasis that is currently placed on multiple choice 'Scantron' exams in first-, second-, and many third-year classes. Our institutions should complement the efforts to teach in an active capacity by increasing the options for testing students in an active style, which could be flexible to students' individual strengths and needs. This poses serious concern for students who are not setup to best perform in the traditional assessment criteria of university.

The movement toward learning outcomes in program design and review offers hope in the area of student evaluation. Universities (such as the University of Guelph) that have extended course and program level learning outcomes to the assessment of individual students have had positive results in both effectiveness and accessibility for students to their own evaluation.<sup>xlvi</sup> Most institutions that have explored outcomes based assessment consciously assess (but allow for flexible assessment methods), along dimensions including; literacy, numeracy, global understanding, sense of discipline specific historical development, moral or critical maturity, understanding multiple forms of inquiry, and both depth and breadth of understanding.<sup>xlvii</sup> These assessments aligned with outcomes are particularly empowering to students,

as students are often called upon to help determine assessment methods.

***Recommendation: The government should provide incentives for universities to develop a first-year seminar program with the aim of providing at least one small class experience to each first-year student.***

***Recommendation: The government should provide resources to universities so as to allow any student the opportunity to access foundational success and academic skills programs.***

Student engagement at the first year level has an enormous impact on student success. Programs focusing on the first year experience have been positively correlated with a variety of desirable outcomes, such as higher persistence and graduation rates.<sup>xlvi</sup>

First-year seminars have taken a wide variety of forms across the institutions that have utilized them. Some are an orientation to university style learning, while others are subject-based and presided over by faculty members. The common thread throughout these programs is that they teach not only course content, but facilitate closer interaction between students without university experience and faculty or staff who are familiar with success strategies.

The National Survey of Student Engagement (NSSE) findings show additional benefits for students who participated in a first-year seminar. Controlling for a variety of student and institutional characteristics, findings show that those in a first-year seminar were more challenged academically, reported more active and collaborative learning activities, interacted more frequently with faculty, perceived the campus environment as being more supportive, gained more from their first year of university, and made greater use of campus services.<sup>xli</sup>

First-year seminars have been identified as a useful strategy in increasing first-to-second-year retention because “the instructor also serves as the students’ advisor, to strengthen the likelihood of connecting to an advisor relationally as well as in terms of easy availability.” Moreover first-year seminars can assist in “creating a sense of community in the classroom, providing a ‘home’ for first-year students struggling to navigate a ‘new environment, which can enhance their satisfaction with the campus climate.”<sup>li</sup>

Another advantage of first-year seminar programs is the positive impact they have on students with diverse study skills. First-year seminars have the greatest impact on the least academically prepared students. Students who have taken first-year seminars have shown higher grades and reenrolment rates. Since success in first year has been linked with persistence and success in upper years, the opportunity to increase success in first year is one that must not be missed.<sup>li</sup> Through these interactions, students learn not only what is taught, but also how to learn it—a valuable skill that can carry them through their entire time in university and beyond. For the above reasons, it is important that such an experience come as early in a student’s academic career as possible, and not just in a student’s final year of study.

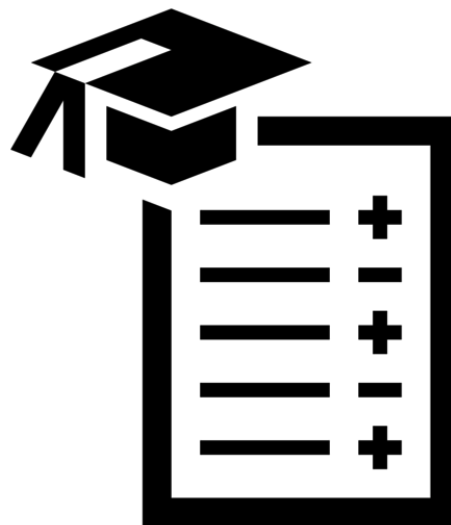
Similarly, foundational success programs—often referred to as “University 101” programs—seek to develop many of the above skills in a very structured way, focusing on how a student might adopt successful habits and strategies when it comes to academics (such as writing or education planning), time-management and use of support resources. OUSA recommends funding be made available so as to provide these services to those who wish to use them without a cost to the user.

***Recommendation: The government should provide incentives for universities to implement a high-impact capstone project available for each student in their final year, should they wish to undertake one.***

Evidence has shown the benefits that capstone or thesis projects can offer senior level students, taking forms such as a thesis project or lab project. A ‘high-impact’ experience at the end of a student’s baccalaureate education provides a forum for the student to demonstrate the full breadth of their learning in a highly intensive capacity. With capstone projects, students have the opportunity to develop “research partnerships and mentoring relationships with faculty” while providing senior students the availability to engage in academic discussions that extend learning outside of class all contributing to the student’s “intellectual growth and satisfaction with their experiences.”<sup>lii</sup>

The opportunity for students to partake in the academic challenge of a final culminating assignment is overwhelmingly valuable. An experience of this calibre requires students to engage in a problem-based/inquiry-based activity that asks them to apply all that they have learned over their four years of university. The Ontario government should adopt the expectation that every undergraduate student has the opportunity to finish their degree with a final cumulative project. Provincial incentives are required to push institutions in this positive direction, either through direct funding or a change in the accountability framework.

## CAPSTONE PROJECTS



***Recommendation: Universities should help students to develop records of skills gained outside of the classroom and encourage exercises that allow students to critically reflect on those skills.***

Many students participate in valuable volunteer, paid, and service activities outside of the classroom. Students undertaking these opportunities are often developing highly useful and transferable skills that can aid them in their studies and careers. If a university education is to be touted as giving students strong social, critical, and analytical skills, then we would be remiss if we didn't seek to help students reflect on those skills that are developed in the broader learning environment. Structured activities that encourage students to think about the competencies they are developing, how they might be applied elsewhere and how to best document their development will go a long way in helping students use these skills as tools in career and life-based problem solving. It also helps employers see documentation of less tangible skills, and perhaps begin to assign some common language to these learning outcomes for the job market.

Co-curricular records are an example of documents that serve as a collection of the skills and competencies that a student develops through extra-curricular activities. A wide variety of activities are captured by these records, including student association volunteerism or paid work, clubs and associations, philanthropy, entrepreneurship, and service learning opportunities that otherwise are not currently eligible for credit.

One example of a strong co-curricular record is the Learning Portfolio pioneered at McMaster University. The Learning Portfolio is an online environment (hosted on McMaster's learning management system) in which students may upload evidence of their learning, both inside the classroom and out, deemed as 'artefacts'. Artefacts may take the form of pictures, videos, awards, certificates, classroom work, or any other evidence of learning in a highly personalized sense. External validation of participation in experiences is not prioritized; instead, personal reflection of learning and future goal setting is highly encouraged throughout the process. Student reflection is encouraged through granting the ability to add reflection pieces to accompany every artefact. Students may also package combinations of artefacts and reflections into unique 'presentations' for specific audiences, including potential employers.

Institutions should explore implementing systems capturing the above principles. Many strong examples and systems exist that provide best practices and document their ability to capture student skill-building outside of the classroom. Further, those students who see the value of outside activity will be better able to apply those skills to in-classroom learning and post-graduation career planning. The provincial government can play a role in the development of these programs by encouraging their use through as part of Strategic Mandate Negotiations, having their presence and participation as a metric in Multi-Year Accountability Agreement reporting, or tie them to performance based funding.

# LEARNING OUTCOMES

More than ever, government, students, and the broader public are looking for tangible measures on the impact of a university education –both personally and socially. This is not to necessarily say that people are questioning the value of university, but rather recognizing that in this fiscal climate and increasingly involved public policy needs, it is important that everyone involved in post-secondary education understands what the goals and outcomes are.

At the outset of this discussion, it is important to recognize that there have always been important, yet difficult to quantify, social benefits from universities. University graduates tend to volunteer more, donate more to charitable causes, and commit fewer crimes than the general population. They also rely less on social programs, and contribute more in taxes due to higher average incomes and employment rates.<sup>liii</sup> On top of this, Canada relies more heavily on universities for research, both public and private, than many other OECD countries. As such, investments (both time and money) can have social and capital impacts that are palpable, if not always immediately apparent, particularly in the short term.

However, much of the discussions around what universities do for students, employers and society at large are centered on things that can be measured. For example, whether or not you agree with the role of universities in employment, we can and do measure post-graduate employment and income. There are tools and measures that will allow students (and employers) to know exactly what a student will be getting from a particular degree. We can begin to grasp the measurable ways in which a student's critical and communication skills are improved by their time at university.

OUSA recommends that the government, universities, and students work to fine-tune tools that better allow students, their families, and the broader public to better understand the education offered by their schools while still respecting the academic and social mission of universities and the less measurable impacts of those missions. In order to guide those discussions, OUSA offers the following recommendations:

***Recommendation: Learning outcomes should be articulated, defined and measured at the course, program and institutional level. These outcomes should recognize student-reported competencies.***

Learning outcomes are valuable resources in helping students understand what they are going to be learning in their educational pursuits and to think critically about the skills they will develop. Having this knowledge available could help students and their families make educated choices in choosing an area of study as well as assure them that their degree will develop valuable skills in support of their future plans.

It is important then to consider both institutional and program level outcomes. At the program level, strong learning outcomes will assure participants that they will attain certain core skills and competencies by studying a particular subject, no matter what university they attend. At the institution level, thoughtful learning outcomes will help the government and students identify which institutions are best promoting student success and effective learning.

In both cases metrics should not be based entirely on expected learning outcomes as part of its design, but should also consider the learning outcomes reported by students as participants in the process. Finding a balance of quality metrics and self-reporting will be important to recognizing comprehensive learning outcomes and will help to keep institutional focus on the student experience.

***Recommendation: Universities should implement a coordinated system of measurable learning outcomes at the program level that could differentiate between courses or modules.***

A strong system for measuring student success will respect autonomy of institutions and different fields of learning while allowing students to similarly understand the differences between programs and to expect particular outcomes.



As we've stated, it is important that outcomes are not overly generalized or output based while still allowing comparison. The TUNING Education Process, developed as an aide in facilitating credit transfer throughout the European Higher Education Area, aspires to that balance -as such, some of its approaches can prove helpful in informing program level outcomes.

The TUNING process applies a set of learning outcomes (what a learner is expected to know, understand or be able to do after completion of learning) to module, course, and program design or evaluation. In the design or assessment process, the TUNING process uses both generic and agreed-upon course specific competencies that a student is expected to develop over a program. Acknowledging that post-secondary education is intended to produce competencies that are job specific as well as transferable, the TUNING process encourages program developers to think of courses as building on each other to create a comprehensive program that understands which competencies are being developed at the course level.

This process distinguishes the following three types of generic competencies to be used as a lens when evaluating learning outcomes:<sup>liv</sup>

#### INSTRUMENTAL COMPETENCIES:

cognitive abilities, methodological abilities, technological abilities and linguistic abilities;

#### INTERPERSONAL COMPETENCIES:

individual abilities like social interaction and cooperation;

#### SYSTEMIC COMPETENCIES:

abilities concerning the application of understanding, sensibility and knowledge - project management, problem solving, etc.

These skills are assessed and incorporated in design and outcomes in varying amounts depending on the goals of module or the level of the course in the overall program design. They are blended with competencies and expected learning outcomes specific to the course, such as these examples from chemistry:<sup>lv</sup>

#### CHEMISTRY-RELATED PRACTICAL SKILLS:

Skills in the safe handling of chemical materials, skills required for the conduct of standard laboratory procedures; skills in presenting scientific material to informed audiences, skills in recording experiments;

#### CHEMISTRY-RELATED COGNITIVE SKILLS:

Abilities to demonstrate knowledge of essential facts relating to specific course design, ability to apply such skills to specific and/or common program problems, data processing skills relating to chemistry data;

#### SYSTEMIC SKILLS:

Working alone or in a team in design, implementation and assessment of an experiment of a chemical nature.

These sets of competencies are useful in both the development and assessment of a comprehensive program for learning, while not being overly proscriptive and allowing a student to know what skills will be developed in a particular module, course, or entire program. Students and institutions should be able to expect certain outcomes of a university education while still being able to shape their experience through the selection of courses. A process similar to TUNING design means that course design consciously identifies competencies in each course and to the degree that their development is expected as part of participating in a course, without focusing on the actual curricula.

For example, English departments will agree that sensitivity to metaphor and other types of figurative language are an important point of learning in the discipline. One department might attend to this competency by making it an area of emphasis in literature survey classes. Another department might choose to offer a class in literary analysis that spends time on the topic. The area of learning is common between the departments, but the means by which they enable students to develop conversancy with it are particular to each instance.

***Recommendation: Universities should develop larger-scale learning outcomes and assessment processes and make the data publicly available.***

Measuring program and course level outcomes is critical to ensuring that goals for teaching quality are being met, however broader assessments of outcomes at the degree and university level are equally necessary to direct quality at the system level. Standardized testing is an area that has been extensively studied and debated in education circles. Concerns with this approach often surround the ideas that teachers will simply “teach to the test” in order to improve apparent outcomes, or that any test sufficiently general to be applicable system-wide must be diluted in what it can possibly measure. While these concerns are valid, the problems they highlight are not insurmountable.

The Collegiate Learning Assessment (CLA) and the Collegiate Learning Assessment Plus (CLA+) have been used widely in the United States and piloted here in Ontario. The CLA is a general skills test that assesses analytic reasoning, written communication, and comprehension. It is administered during a student’s first year then again at the end of her university career.

While it has not been widely popular in the Ontario, there is acknowledgement in the sector that its approach to assessment is valuable and that many of its downfalls have to do not with its approach, but with implementation issues. The advent of the CLA+ has already begun to address some of these difficulties. For example, a major failing of the CLA was the incredibly low response rate for final-year students. Without a sufficiently large sample, it was difficult to glean any insight regarding whether universities were succeeding in making students better thinkers and communicators than they were when they began their studies. In response the CLA+ has introduced a more flexible test administration, allowing outgoing students the opportunity to take the test at more convenient times.

Moreover, though standardized tests cannot generally measure program-specific learning, the general and “soft” skills that they can measure are valuable. As was mentioned earlier in this submission, it is advantageous to students to have a more complete understanding of their own learning beyond discipline-specific knowledge. Standardized tests provide an opportunity therefore to highlight these skills for both students and employers, as well as assess them.

A well-functioning, university-level test system would help the Province identify successes and failures in teaching. With comparative assessments of this type—complete with an understanding of the importance of the skills they measure – the government could monitor strengths and weakness in the learning, and allocate resources accordingly. Such a tool would be invaluable to help evaluate the impacts of pilot programs in teaching innovation.

Large-scale assessments must be based on a rigorous and useful set of large-scale outcomes. The Undergraduate Degree Level Expectations (UDLEs) are too vague and loosely defined. Any regime of standardized testing in Ontario should make use of a different set of expectations to form the learning outcomes that we wish to measure.

One possibility would be a schema of outcomes similar to the Lumina Foundation Degree Profile. This set of learning outcomes describes competencies that students should be able to demonstrate upon completing degrees of different levels. Designed for use in the United States, Lumina’s model outlines learning outcome expectations for Associate, Bachelor’s, and Master’s degrees.

Though this model does not come with a built-in assessment plan, its learning outcome expectations are the ability to do tasks, making them compatible with many assessment methods. For example, a successful bachelor graduate “defines and explains the boundaries and major sub-fields, styles, and/or practices of the field”.<sup>lvi</sup> In this way, standardized assessment measures can be easily designed so that they challenge test-takers to demonstrate these learning outcome tasks. Lumina’s model contains a set of outcomes along the five dimensions of intellectual skill, specialized knowledge, broad knowledge, civic learning, and applied learning.

# CONCLUSION

Teaching and learning remain the most immediate and impactful experience for students, and for many represent the core function of what a university is. Small changes and additional resources in the classroom experience can have significant effects for students, and contribute to making Ontario's post-secondary education system a global leader. As declining enrolment challenges universities in Ontario, we as a province are finding an opportunity to renew focus on enhancing quality and outcomes within our education systems using existing resources in new, quality oriented ways. Not only does this positively impact students already in the system, it allows us to build a reputation internationally in order to build on Ontario's international recruitment strategies.

OUSA humbly submits the above recommendations as a means to building on existing quality initiatives, and to explore some initiatives that students believe will contribute to their educational experience. Further, OUSA believes that some of the suggestions can provide for efficiencies in the system, while others will develop long-term impacts through better students, workers and citizens.

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