# Quality in the Balance: Undergraduate Education in Ontario at Risk

OCUFA RESEARCH PAPER SERIES

ONTARIO CONFEDERATION OF UNIVERSITY FACULTY ASSOCIATIONS

May 14, 2007

# **Executive summary**

Despite well-publicized initiatives by the Ontario government, the quality of undergraduate education in Ontario remains at risk.

In its 2005 *Reaching Higher* plan, a five-year, \$6.2-billion initiative to boost student financial assistance, enlarge the post-secondary system, and improve its quality, the McGuinty government defined quality as reaching "the highest standards in [the] student learning experience." The government promised that *Reaching Higher* would enhance student experience by giving universities enough funds to hire more professors, thus increasing contact between faculty and students — the critical determinant of student engagement.

Ontario's current funding level for post-secondary education, however, guarantees there will be no improvement in student-faculty ratios, because inflation-adjusted, per-student funding remains well below what it was before the major spending cuts of the Progressive Conservative government in the 1990s. Not surprisingly, recent surveys of first-year students show Ontario universities scoring 40 per cent lower on student engagement than their betterfunded peers in the United States.

Ontario universities are addressing their budget crunch by hiring an unprecedented proportion — more than half of new faculty hires — of low-paid faculty on short-term contracts who, in spite of their dedication, cannot hope to give students the continuity, and the research opportunities, that tenure-stream faculty can.

As a result, Ontario is falling even further behind peer jurisdictions, in spite of *Reaching Higher*. In 2003-04 Ontario had a student-faculty ratio of 27 students to

each full-time professor, while its American peer institutions had a 15 to one ratio. Since then, faculty hiring has not kept pace with enrolment increases, resulting in a further deterioration of Ontario's student-faculty ratio. The most ambitious multi-year quality agreement between a university and the Ontario government still only seeks to improve the student-faculty ratio in that particular university by a mere five per cent, which — provided all the universities followed suit — would *still* leave the ratio worse than it was before *Reaching Higher* was announced.

To improve student-faculty ratios, Ontario needs 11,000 more professors by the end of this decade, and adequate funding is the key: American state governments fund each full-time student at a rate that is 35 per cent higher than does Ontario. If federal funding is included, American institutions receive 65 per cent more government support than Ontario universities.

OCUFA strongly urges the government to:

**1. Increase funding to give students the quality education they need** Approximately \$300 million in additional operating funding is needed annually by 2009-10 to accommodate undergraduate enrolment increases at *current* student-faculty ratios. More funding is needed to bring that ratio to competitive levels. (A further \$600 million in operating funding is needed to support the government's announced graduate education expansion.)

### 2. Implement a plan to recruit full-time, tenure-stream faculty

Since enrolments will continue to increase for the foreseeable future, the government must act to ensure that universities can hire tenure-stream professors and not solve their budget problems by hiring contract faculty.

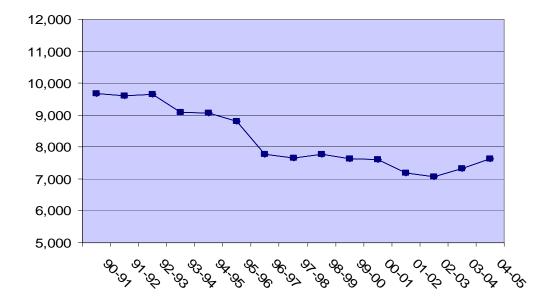
### 3. Ensure internationally competitive student-faculty ratios

To prosper in the global, knowledge economy, Ontario needs to offer students an education comparable to, if not better than, that provided in peer American jurisdictions. Ontario's post-secondary strategy should include actions to achieve a 15-to-1 student-faculty ratio.

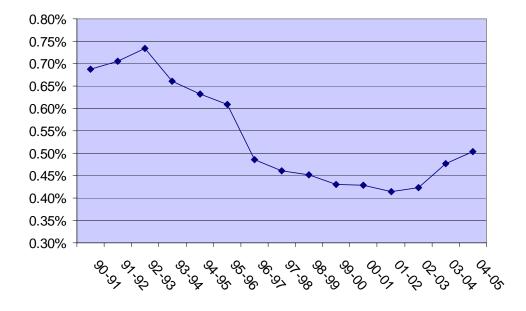
# The legacy of under-funding in Ontario

*Reaching Higher* represents a significant step towards reversing the downward spiral in funding and, hence, quality that occurred under Ontario's Progressive Conservative government of 1995-2003. Although spending on universities increased in the last two years of that government, an initial cut of \$272 million to operating grants to universities in 1996 – and subsequent years of reduced levels of funding – meant that per student funding and university operating funding as a percentage of GDP deteriorated significantly until 2002-03.

The following chart shows that funding in 2004-05, on an inflation-adjusted basis, was \$2,600 per student less, or 21 per cent lower, than it had been in 1990-91. The second chart illustrates the decline in the proportion of GDP devoted to operating funding for universities. In 2004-05, it was 27 per cent less than it had been 15 years previously, in 1990-91. At its lowest point in the period, it was 40 per cent lower.



### Per-Student Funding Declined by \$2,600 in 15 years



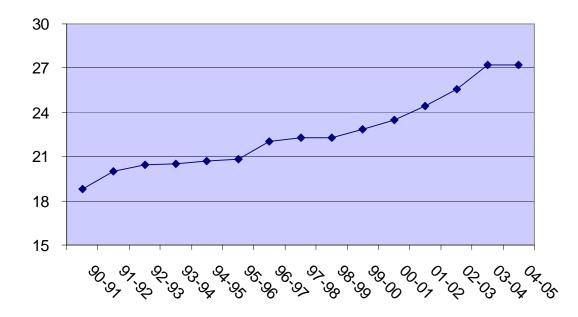
### University funding relative to GDP dropped precipitously

### Funding cuts led to dramatically worsened student-faculty ratios

The relative state of the student-faculty ratio is a measure of quality because it affects such critical matters as the number of courses available to students; class size and the consequent effect on the ease and amount of interaction between professors and students both in class and outside; and the opportunities for student participation in research. The impact of these downward funding trends on quality can thus be demonstrated most clearly in changes in the ratio of students per full-time faculty member.

As the following chart illustrates, in the decade following the funding cuts made by the Progressive Conservative Government of the day, the student-faculty ratio deteriorated by 31 per cent. Compared to 1990-91, the difference is almost 45 percent.

### Student-faculty ratios grew steadily worse 1



Funding cuts meant university resources and facilities deteriorated

Despite a significant injection of capital funding , Ontario universities are still well short of the funding needed to ensure that buildings are in a state of good repair and that investments in new facilities and equipment are sufficient to keep up with enrolment increases and changing requirements. According to the Council of Ontario Universities (COU), universities have too little space, and the space available is in a less-than-desirable state of repair.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Student to faculty ratios cited here are based on faculty headcounts and Full-Time Equivalent (FTE) enrolments as reported by the Council of Ontario Universities (COU), *Facts and Figures*, and *Compendium of Statistical and Financial Information*, various years. 2005-06 faculty headcounts are as reported on COU member university Common University Data Ontario (CUDO) websites. 2005-06 FTE enrolments are as reported by MTCU. There are other methods of calculating student-faculty ratios that may be used. <sup>2</sup> Council of Ontario Universities, various sources: *Inventory of Physical Facilities of Ontario Universities*,

<sup>2004-05;</sup> Facts and Figures, 2004-05; Resource Document, 2007; Ontario Universities' Facilities Condition Assessment Program, October 2005.

In 1995-96, the space for classrooms, teaching and research labs, and related academic office space was 10 per cent less than was required for the number of students and faculty at the time. In 2004-05, the available space was 23 per cent less than needed. Total available space declined from 87 to 73 percent of the space required. If the space needed to house faculty – if their numbers were restored to levels proportionate to 1995-96 – is taken into account, the decline in available space is even greater.

In 2004-05, two-thirds of the available space was in facilities more than 30 years old, compared to one-third a decade previously. Over the course of the 10 years following 1995-96, total capital funding provided to universities from the Ministry of Training, Colleges and Universities (MTCU) and its predecessors was less than 30 per cent of the amount spent by universities on facilities renewal and on new buildings and related infrastructure. As a result, more than half of the facilities at Ontario universities are in a state of poor repair, requiring investments of about \$1.8 billion in maintenance, repair, and update and renovation.

# Reaching Higher promised to restore quality

*Reaching Higher* recognized the counter-productive character of the "penny-wise, pound-foolish" funding of the previous decade and took heed of the calls for investment by the Rae Review in 2005 and the Institute for Competitiveness and Prosperity since 2002. Both commented on Ontario's relative standing internationally in post-secondary education and recommended substantial increases in funding for post-secondary education as a productivity-enhancing, competitive strategy. *Reaching Higher* set out a series of objectives for "access", "quality" and "accountability". To increase access, the government announced increased funding for student financial assistance; a two-year tuition freeze; changes in student loan programs to increase levels of support and broaden the range of eligible students; and the establishment of tuition grants for eligible students.

To further increase access, *Reaching Higher* also announced ambitious plans to expand the colleges and universities system to ensure that it could accommodate "significant" increases in enrolments. It included the laudable goal of expanding opportunities for, in the words of *Reaching Higher*, "under-represented groups such as francophones, aboriginals, people with disabilities, and those who would be the first in their family to attend college or university." (Funding to facilitate entry for these target groups is to rise to \$55 million annually by 2009-10.) Except for the government saying it wanted to increase graduate enrolments by 12,000 in 2007-08 (14,000 by 2009-10) and wanted 25 per cent more medical education spaces, few enrolment projections were offered.

As for "quality" the government defined it as achieving the "highest standards in teaching, research and student learning experience...." It said that increases in operating grants were to fund enrolment growth, expand graduate education and create new faculty positions. It asserted that such investments would result in improvements to the student learning experience by increasing contact between faculty and students, by providing better student services, and would result in higher quality research. The government's 2006 Budget expanded on this by acknowledging the pressing need for "high-quality classrooms, libraries and laboratories; and better learning environments."

Among other quality initiatives – such as capital funding for graduate and medical school expansions, a new Ontario Research and Innovation Council, and

improved college-university transfer possibilities for students – the government also announced its desire to see an increase in the number of faculty so that universities could accommodate increased enrolments and to improve student success. (Just to maintain student-faculty ratios in an era of increasing enrolments would require more faculty. But Ontario needs to *improve* its studentfaculty ratio because that critical ratio affects the quality of student-faculty interaction in and outside the classroom.)

*Reaching Higher* promised a cumulative total of \$6.2 billion dollars to be added to funding for all areas of post-secondary education by the end of 2009-10. According to the table of forecast funding, reproduced below, \$4.3 billion dollars were promised to colleges and universities, with the remainder allocated to student financial assistance and training and apprenticeship initiatives.

	2004- 05	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10	Cumul -ative Total
Student Financial							
Assistance	150	192	241	282	314	358	1,537
Operating Grants to							
Colleges and Universities	50	447	732	932	958	1,156	4,275
Training and Apprenticeship and Other Initiatives	-	44	62	86	87	87	366
Total New Investment	200	683	1,035	1,300	1,359	1,601	6,178
* Increase over 2004-05 ba expenditures provided for th graduate fellowships and fa Source: Ontario Ministry of	ne Ontario iculty rese	Student	Opportuni	ties Trust	Fund, end	•	

The government did not identify what proportion of the increased operating grants would be allocated to universities, but as the COU's estimates in the following table show, the 2009-10 increase will be \$771 million.<sup>3</sup>

University portion of Op (\$ Millions)	<b>iversity portion of Operating Grants</b> (COU estimate) Millions)						
	2004- 05	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10	Cumu -lative
Above 2004-05 base*		322	467	584	603	771	2,747
Annual increase		322	145	117	19	168	771
Annual change		12%	8%	5%	1%	5%	35%
* excludes \$25 million allocated in 2004-05 for Ontario Research Chairs							

The third component of the *Reaching Higher* strategy was to establish agreements between the Ministry and each university that would set out the objectives each institution would achieve with its additional funding. Interim accountability agreements (IAA) were negotiated for 2005-06. Three-year multi-year accountability agreements (MYA) were negotiated for the following three years to 2008-09. The definition of the "quality learning environment" in these MYAs includes a list of features that characterize the state of student-faculty engagement – such as faculty hiring and class size, the number of instructional faculty with PhDs, the extent of library and electronic resources, the creation of supportive agencies, and the type of learning models.

Finally, the government created the Higher Education Quality Council of Ontario (HEQCO), an arm's length body that would establish a quality framework and facilitate quality improvements. Among the activities HEQCO is expected to undertake is research, including collaboration and consultation with stakeholders. It is charged with advising the Ontario government on post-secondary education planning, consulting with the government on appropriate

<sup>&</sup>lt;sup>3</sup> COU, Progress Report: University Access, Accountability and Quality in the Reaching Higher Plan, November 2006.

targets, and monitoring progress towards those goals. As yet, HEQCO's strategic plan has not been approved by Cabinet.

# The lost opportunity to set new goals for quality education

*Reaching Higher* held out the promise of improved quality in university education, but the commitment seems to have been misplaced along the way. An emphasis on measurable outcomes was given priority over the inputs – resources and faculty – that make the formative difference. Quality emerges in the classroom, and in student-faculty interaction. Rather than focusing on "key performance indicators" (KPI), the keys to quality are class size, student-faculty ratios and adequate government support.

# Accountability agreements and key performance indicators

The KPI program was implemented under the previous government in the name of accountability. Universities are required to report graduation rates, the employment rates of graduates six months and two years after leaving university, and default rates on student loans. Accountability agreements retain those KPIs and add others, including student retention and the results of the National Survey of Student Engagement (NSSE) and the Canadian Graduate and Professional Student Survey (CGPSS).

As OCUFA has reported elsewhere, there are serious limitations to KPIs.<sup>4</sup> They do not necessarily measure quality in any meaningful sense, and they do not take account of other factors that influence outcomes. Labour market conditions, for example, are beyond the control of universities but have a direct effect on post-graduation employment and the ability to service student debt. If funding is

<sup>&</sup>lt;sup>4</sup> The Measured Academic: Quality Controls in Ontario Universities, May 2006; Performance Indicator Use in Canada, the US and Abroad, May 2006.

dependent on meeting threshold measurements, KPIs are also punitive rather than constructive. Instead of providing an incentive to address substantive questions of quality, KPIs have the perverse effect of encouraging institutions to focus on attaining the prescribed standards.

The accountability agreements introduced as part of *Reaching Higher* go beyond a single-minded obsession with KPIs. There is some recognition that, from a quantitative perspective, it is difficult to demonstrate a clear link between measurable characteristics of incoming students and other measurable results once they complete their undergraduate studies. Universities do not all have identical missions. They serve different populations, with different needs and ambitions, and the composition of their student bodies will differ. Just as it makes sense to tailor institution-specific programs for attracting and retaining under-represented population groups, each institution is responsible for designing its own programs for meeting the diverse needs of the region in which it is located and enhancing the learning experience of its students.

No two MYAs are identical. Commitments in such areas as computer access, student advising, learning models, and library resources vary. Given differences between institutions, some variability is to be expected. Although each MYA indicates faculty hiring plans for 2006-07, very few actually also identify targets for student-faculty ratios, class size and the number of instructional faculty with PhDs. Even if there is no reason for all universities to have the same targets, it is surprising that there is such spotty commitment to improvement in these key components of quality.

Accountability agreements suffer the same myopia as KPIs, albeit to a lesser degree. They are silent on the question of whether there are sufficient resources and personnel actually to ensure the attainment of the objectives outlined in the agreements. If it is because an institution, or university system, is under-funded that it is not performing as demanded, reorganizing internal programs and processes by themselves are insufficient strategies. There is no substitute for adequate funding. Without question, *Reaching Higher* does represent a significant investment in Ontario's universities, but attention to measuring outcomes overlooks factors, such as faculty hiring, which can have an immediate impact.

### What contributes to quality?

Particularly for a province as diverse as Ontario, it is impractical to impose a onesize-fits-all definition of quality. It is possible, however, to identify the conditions that make higher quality attainable. Among these, of course, are the resources available to professors and students to perform at the leading edge – the number and breadth of library holdings, sufficient and up-to-date laboratory space and equipment, adequate and well-equipped classroom space to facilitate the best models of pedagogical interaction, and the facilities and opportunities to ensure that learning is a well-rounded experience.

Making the most of those resources depends on the quality of the interaction between students and faculty. While Ontario universities might be able to maintain relatively respectable scores compared to selected U.S. peers in certain NSSE categories, they scored noticeably lower than their U.S. counterparts on student-faculty interaction. The average amount by which Ontario universities scored lower in the 2006 survey was 40 per cent for first-year students and 25 per cent for fourth-year students.

It is hardly an accident that Ontario universities also fare poorly on comparisons of their student-faculty ratios and levels of public funding with their counterparts in the United States. In contrast to a 2003-04 Ontario student-faculty ratio of 27 students to each full-time professor, U.S. peer institutions had a 15 to one ratio.<sup>5</sup> As the following table shows, state funding per full-time equivalent student, including research funding, was 35 per cent higher than that provided by Ontario to its universities. If federal funding is included, the level of public funding for U.S. peer institutions is 65 per cent higher than in Ontario.

	Federal grants & contracts	Prov/State operating grants	Prov/State grants & contracts	Prov/State total	Public funding		
COU peer list	5,206	7,552	846	8,398	13,605		
In \$CDN at PPP <sup>6</sup>	6,477	9,395	1,053	10,448	16,925		
Ontario	2,517	6,567	1,164	7,732	10,248		
US + / - Ontario	157%	43%	-10%	35%	65%		
Source:	e: Council of Ontario Universities, Compendium of Statistical and Financial Information, Ontario Universities, 2003-04.						
National Center for Education Statistics, Integrated							

#### Funding per Full-Time Equivalent Student Ontario and US peers, 2003-04<sup>6</sup>

Postsecondary Education Data System.

For Ontario universities to become competitive with American peer institutions – much less the envy of the world – the government must pay serious attention to raising levels of support and improving the student-faculty ratio. Ontario voters agree. An April 2007 OCUFA poll shows that most respondents believe that students are not getting the quality they deserve. Eighty-one per cent support smaller class sizes and 94 per cent consider a wide array of programs across all disciplines an important element. Ninety-six per cent think that Ontario must

<sup>&</sup>lt;sup>5</sup> The latest Maclean's University survey compares Canadian NSSE scores. Ontario NSSE scores on Student-Faculty Interaction are taken from university NSSE benchmark reports. NSSE peers for each university are designated according to the Carnegie classification system. The peer universities used for NSSE benchmark studies are not necessarily identical to the peer group used for student-faculty ratios. The latter peer group is as designated by COU, *Comparing Ontario and American Public Universities*, December 2000.

<sup>&</sup>lt;sup>6</sup> State operating funds include "state appropriations"; provincial operating funds include Ontario MTCU and other ministry non-ancillary operating funds as reported by COU. Federal funds include appropriations. Grants and contracts include all other non-capital funding, including research funding. US figures are multiplied by the Organisation for Economic Cooperation and Development "Purchasing Power Parity" data for 2003, i.e., by 1.244.

raise the quality of university education to keep up with innovation, and that Ontario should be a leader in research.

The question, then, is whether the increases in funding and the current patterns of hiring full-time, tenure-stream faculty are sufficient to attain the desired quality objectives. Since *Reaching Higher* was announced in 2005, developing trends put the improvement of quality in doubt.

# *Reaching Higher* two years later: The troubling reality of Ontario's university system

Funding levels through 2009-10 are premised on anticipated enrolment levels. Barring an increase in funding to match future enrolment increases, the quality of education received by Ontario university students stands to deteriorate. They will be educated in crowded, sub-standard facilities, and they will face everincreasing class sizes.

# **Enrolments surpass expectations**

Enrolments have increased more than anticipated in the forecasts used for *Reaching Higher*. COU estimates that the increase in enrolment by "eligible" students for the coming 2007-08 year will be 27,000 more than were contemplated when the plan was developed. That figure is expected to reach 45,000 by 2009-10. Neither of these figures includes the potential increase in enrolments by "ineligible" students for whom universities do not receive operating funding, but who require all the same resources and faculty time as eligible students.<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> "Eligible" students are students enrolled at a university for whom the institution receives operating funding from the province. "Ineligible" students typically include international

There is no reason to expect that the enrolment increases anticipated by COU will not become a reality. Actual enrolments usually exceed the forecasts. In fact, the number of applicants from secondary schools seeking to enter undergraduate studies in the fall of 2007 has increased by more than five per cent from the previous year. In each of the previous two years, 2005 and 2006, the number of applicants was three per cent greater than the previous year. Ontario Ministry of Finance demographic forecasts show the size of the key 18-24 year age group will continue to increase through 2009-10. Barring a decline in the level of credentials required by employers, the demand for skills and education in the "knowledge economy" and the provincial government's own efforts to raise participation levels will ensure that enrolments at Ontario universities will continue to require more resources and faculty than provided under *Reaching Higher*.

## Ontario's aging university facilities need improvement

The annual capital funding allocation for facilities renewal is currently \$26.7 million per year. Even if the \$15 million in one-time funding from federal sources announced in Ontario Budget 2007 were to be added to this amount, it would still be well below the \$450 million annual expenditure required to bring university facilities into an excellent state of repair.

The only capital funding for new construction and equipment promised as part of the *Reaching Higher* package is \$550 million to fund the expansion of graduate and medical programs. No funding was provided to accommodate increases in undergraduate enrolments. The funds for graduate expansion are themselves insufficient for the anticipated enrolments. If it was expected that reductions in the number of undergraduate enrolments would free space for conversion to use

students who do not have permanent resident status and those who are enrolled in programs that do not receive operating support from provincial funds.

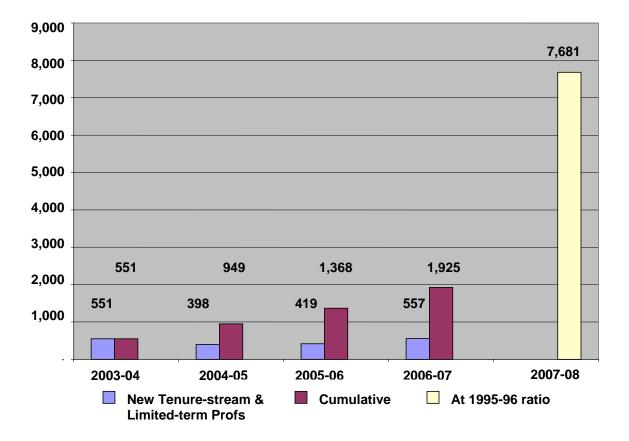
in graduate programs, the continuing rise in undergraduate enrolment poses a two-fold problem. Inadequate capital funding for graduate expansion produces a space and facilities crunch for graduate studies; increasing numbers of undergraduates without increasing the amount of space and facilities will result in a critical situation for undergraduate programs.

# Faculty hiring is lagging demand

Trends in the hiring of full-time faculty are not promising. OCUFA first reported in 2005 that Ontario universities would need to hire 11,000 new faculty by 2010 if the provincial government wished to make Ontario the North American leader in post-secondary education. Its latest report in 2007 on the expansion of graduate programs supports those findings.<sup>8</sup> Even to meet the relatively modest goal of achieving 1995-96 student-faculty ratios, more than 1,900 additional faculty qualified to teach graduate students would be required by fall of 2007 to meet the increases in graduate enrolment. Almost 6,000 *more* would be required by fall 2007 to give undergraduate students the same quality of contact with faculty members as students enjoyed in 1995-96.

According to data for 2003-04 and 2004-05 from Statistics Canada and for 2005-06 and 2006-07 from the accountability agreements between the universities and the MTCU, the total net hiring of full-time faculty since 2002-03, as shown in the chart below, has been only 1,925 to cover increased enrolment of both graduate and undergraduate students, well short of the need. Even with the initial impetus of *Reaching Higher*, student-faculty ratios worsened by two per cent in the one year between 2004-05 and 2005-06.

<sup>&</sup>lt;sup>8</sup> Closing the Quality Gap: The Case for Hiring 11,000 Faculty by 2010, April, 2005. Quality at Risk: An Assessment of the Ontario Government's Plans for Graduate Education, March, 2007.

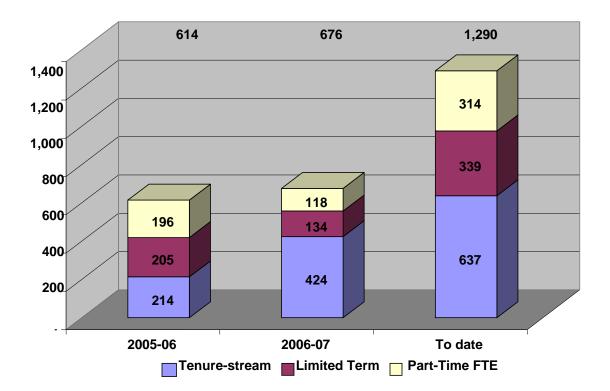


### Hiring of full-time faculty since 2002-03 is woefully inadequate

Had adequate numbers of faculty been hired in the past to refresh the academic ranks as members retired and enrolments grew, there would be less reason to ask if the quality of undergraduate education was in jeopardy. Each multi-year agreement indicates the amount of net new hiring – over and above replacements for retirement – to be in place for the fall of 2006. If the same number of full-time faculty are hired for the fall of 2007, 2008, and 2009 as were hired for 2006, the student-faculty ratio will still be worse than it was in 2002-03.

# Short-term thinking has dominated faculty hiring practices

The accountability agreements indicate that there has been a net increase of almost 1,300 faculty positions in 2005-06 and 2006-07. As OCUFA found with the 2005-06 interim agreements, commitments in the MYAs for recruiting full-time *tenure-stream* faculty to improve quality are uneven.<sup>9</sup> As the chart below illustrates, less than half of the appointments were for tenured and tenure-stream faculty appointments, while limited-term appointments (LTA) of one- to threeyear lengths for "full-time" faculty and part-time appointments of less than one year each accounted for roughly one-quarter of the reported net new positions. Limited-term and part-time positions now represent a much larger proportion of instructional faculty than historically has been the case.



# Faculty hiring has been mostly part-time and temporary

<sup>&</sup>lt;sup>9</sup> Ontario University Interim Accountability Agreements: Where Did the Money Go?, October 2006.

In OCUFA's view, there is no reason why the LTA and part-time appointments should not be full-time, tenure-stream positions. Growth in the population of the age groups that feed undergraduate, and, subsequently, graduate, enrolment, not to mention increasing participation rates, will be sufficient to justify hiring tenure-stream faculty.

There are important reasons for being concerned about the trend towards limited-term and part-time appointments. Universities depend on faculty members working on committees to carry out the tasks of self-governance. Whether these activities are reviewing research policy or developing and updating academic programs, they are integral to maintaining the quality of education offered at each university. If, in addition to their research and participation in these committees, faculty are faced with ever-escalating teaching demands – more students mean more grading, more requests for individual consultation, more emails to answer – the less time there is to spend on committees. Or, in the face of work overload, there are fewer faculty members to do the same committee work.

Tenure-stream appointments provide faculty members with the opportunity to establish a planning horizon that includes research and long-term course development. Especially as the emphasis on preparation for the "knowledge economy" grows, there is a two-fold link between research and teaching: tenurestream professors have more opportunity than LTAs and part-time faculty to bring new knowledge into their courses, and they provide invaluable research opportunities for students.

While more limited, or even no, research expectations for LTA and part-time faculty may afford them more time to excel at teaching, they often find

themselves teaching courses they have not taught before. Their energy goes into preparing the course material rather than updating it with the latest developments in the field. Worse still for part-time faculty, the length of time between receiving a course assignment and its starting date is often so short that they are forced to scramble to prepare a course in mere weeks, or less, with consequent detrimental effects on quality. However much non-tenure-stream professors may love teaching, low pay for part-time teaching positions puts a damper on their morale. For limited term and part-time appointees alike, the itinerant life of moving from university to university, or cobbling together a fulltime job from teaching courses at different institutions, makes it impossible for them to provide the same quality of educational experience for their students as they could if they were tenure-stream faculty.

# Implications for students

Above all, it is students who will be shortchanged in several ways. As indicated in the OCUFA assessment of the Ontario government's graduate expansion plan, there remains a danger that the need to ensure the integrity and quality of graduate education as various graduate programs are created or expanded may redound on the quality of undergraduate education. Quality graduate programs require senior, tenured faculty with active research programs both to ensure that students are abreast of the "state of the field" and to provide appropriate guidance and developmental research opportunities. With smaller seminars and closer faculty-student interaction, more senior faculty may be drawn away from undergraduate instruction as the demand for graduate education rises.

Evidence from the NSSE indicates that student-faculty interaction is a crucial ingredient of student engagement. It is key for determining what students get

out of their courses, and how well they succeed subsequently. The central variable over which universities have control is the number of full-time faculty available to provide instruction and research opportunities to students. The better the student-faculty ratio, the better the quantity and quality of the interaction.

More faculty makes it possible to increase the number of courses from which students may choose; ensure that those courses are focused and up-to-date; and limit the number of students in each class, thereby increasing both the level of inclass interaction and the amount of time available outside class to spend with each student. The greater the number of full-time faculty positions that are tenure-stream, the greater the ability of professors to pursue long-term research programs, which offer more research opportunities for students as well.

But with Ontario's current funding levels for post-secondary education, there will be no improvement in Ontario's student-faculty ratios, much less reaching levels that rival or surpass those in other jurisdictions. The very agreements that deal with funding to reach policy goals, the multi-year agreements, are nothing if not disappointing in the attention paid to addressing class size and studentfaculty ratios. Because the data on class size utilized for the multi-year agreements are not comparable to the data outlined in the interim agreements, it is difficult to assess whether any progress has been made to date. In any case, fewer than a third of the MYAs deal specifically with class size. Where it is addressed, the focus is on reducing the class size and the amount of time spent in large classes by first-year students.

Fewer than half of the agreements refer to student-faculty ratios, and the most ambitious commits to an improvement of five per cent. If all universities adopted the same target, the overall ratio would still be worse than it was in 2002-03. The lack of progress on student-faculty ratios places severe restrictions on universities' abilities to improve the knowledge environment by reducing class sizes and enhancing the diversity of knowledge through more course selection.

Furthermore, for undergraduate students, a greater proportion of their courses will be taught by part-time and limited-term-appointment professors. So, in addition to the diminished interaction with faculty because of the resulting larger class sizes, students will also have less faculty support in their postundergraduate pursuits. As more students pursue professional or graduate studies, they will need to rely on references from faculty mentors. This is also true for their job searches. Part-time and limited-term professors are as committed to their students as tenure-stream faculty, but the nature of professorial life in an academic labour market dominated by part-time and limited-term jobs makes it difficult for students and faculty to maintain the mentoring connection.

The contemporary switch in emphasis from quality to quantity essentially runs the risk of reducing post-secondary education to a mass delivery model. Given the number of students and the limits on resources, it is less time-consuming to grade multiple-choice exams than more qualitative assessments. But in an environment where there is an increasing emphasis on the "knowledge economy" and upwards of 70 per cent of jobs will require post-secondary education, neither students nor society will be well-served by such a model.

University education is not just about outputs – the "thousands of students served" – it is also about intellectual, professional, and human development. OCUFA's poll also shows that Ontario citizens strongly value high standards.

# Conclusion and recommendations

The Liberal government's *Reaching Higher* program aimed high, but the reality is that the gap it was meant to address, and subsequent developments, mean that we will have to aim even higher still to meet its lofty goals. If we do not, the loss will be felt for generations.

The deterioration in quality is a result of the previous, Progressive Conservative government's funding cuts, but the Liberal government's implementation of its own vision has been unnecessarily slow and complicated. The negotiating of the multi-year agreements was delayed, and establishing HEQCO has been an extended process.

The government need not have spent so much energy developing metrics and measurements to monitor performance. The more immediate need was, and remains, more full-time faculty. In that regard, the Liberals' 2003 campaign promise to establish a dedicated fund for faculty renewal was a good start.

Fulfilling the promise of *Reaching Higher* will require more than has been promised or accomplished to date. OCUFA recommends the government increase levels of funding to universities and reduce student-faculty ratios.

# 1. Increase operating funding

An estimated \$600 million is required annually by 2009-10 for faculty hiring and other operating costs to cover graduate expansion. A further \$300 million is needed every year to accommodate undergraduate enrolment growth, according to the COU, at minimum. Additional funding is needed to meet higher standards for student-faculty ratios. Ontario must also direct increases in federal post-secondary funding through the Canadian Social Transfer (such as the \$210 million announced in Ontario's 2007 Budget) to the province's post-secondary system, to "top up" *Reaching Higher*'s \$6.2 billion.

# 2. Implement a plan to recruit and retain full-time, tenure-stream faculty

Hiring part-time or limited term full-time faculty to cap student-faculty ratios is, at best, a stop-gap measure, as enrolments will continue to increase. A fund dedicated to faculty hiring is not necessary, provided there are sufficient increases in operating funding and that the universities make transparent commitments to increase their faculty complement. Setting faculty hiring and retention goals must be negotiated with each university's respective faculty association.

**3. Reduce student-faculty ratios and class sizes** Ontario student-faculty ratios lag well behind the rest of Canada, and even more behind ratios at peer institutions in the United States. If provincial competitiveness is related to US jurisdictions, Ontario's post-secondary strategy should include action to achieve a 15-to-1 student-faculty ratio.

### 4. Increase capital funding for new facilities and equipment

To ensure that graduate expansion does not reduce space and equipment available for undergraduate education, capital funding for graduate expansion should be increased to \$1.2 billion. An additional sum must be allocated to ensure that there is no reduction in the facilities and resources for undergraduates.

## 5. Increase facilities renewal funding to \$450 million

The current allocation of \$27 million a year for deferred maintenance is woefully inadequate. It would take \$74 million a year to pay for even minimal repairs and \$450 million a year to restore existing facilities to an optimal state of repair.

In the final analysis, one metric stands above all others: adequate government support will lead to the development of the high-standard university experience our students deserve.