

EMPOWERING ONTARIO:

Transforming Higher Education in the 21st Century



TABLE of CONTENTS

World leaders in innovation and applied learning	3
Principles to guide transformation	3
Introduction	3
Equal, complementary and interconnected	5
Improving access to higher education	6
Expanding options for students	7
Improving the recognition and transferability	
of completed post-secondary credits	13
Embracing world-class, technology-enabled, flexible learning	16
Expanding apprenticeship opportunities for students	19
Maintaining the focus on learning outcomes	20
Strengthening experiential and applied learning	21
The productivity challenge: Rethinking the roles of institutions	
within Ontario's post-secondary system	22
Ensuring long-term fiscal sustainability	25
Conclusion	26

"This is about us being as smart as our students are and being as visionary."

- Hon. Glen Murray

Minister of Training, Colleges and Universities Speech to the Canadian Club of Toronto, March 9, 2012

World leaders in innovation and applied learning

The time for meaningful transformation in Ontario's postsecondary system is now. To meet the needs of the emerging economy, reform must focus on innovation and applied learning that vaults our province ahead of its competition in creating the best-educated, best-prepared workforce in the world. Composed of distinct but equally valued and complementary partners, Ontario's transformed postsecondary system will ensure that all students can reach their full potential through a broad array of theoretical and applied learning opportunities. Colleges will continue to be student focused, specializing in applied learning that leads to good jobs for graduates, addresses labour market needs and affords access to the broadest possible population. Colleges and universities will offer a range of credentials within their systems and collaborate on a multitude of programs that offer students the best of both. Expanded pathways will give students the opportunity to customize their post-secondary experience to match their interests. Online and blended learning, married to leading-edge technology, will enable students to learn anywhere, anytime, and in ways best suited to their learning styles. Students will be better prepared than ever before to meet the demands of the economy, and they will achieve their goals faster and at less cost.

Principles to guide transformation

To fulfil this vision and deliver the best post-secondary education possible. Ontario must:

- Place students first.
- Embrace access opportunities for all qualified students.
- Invest more in student success.
- Focus on learning outcomes.
- Unleash the potential of Ontario's mature college system as an equal and complementary partner to universities.

- Promote greater mobility within post-secondary education.
- Require transparent, evidence-based decisions for every student requesting credit transfer and credential recognition.
- Use leading-edge technology to address the learning, access and service needs of students.
- Ensure that apprenticeship is a recognized, respected part of post-secondary education.
- Bend the cost curve by reforming the system and using technology.
- Reward partnership and collaboration.

Introduction

In his book, *The World is Flat*, author Thomas L. Friedman argues the barriers that used to separate countries - such as commerce and the movement of people - are gone, leaving the world more integrated, mobile and open to competition from all. Only countries that understand how to embrace this new reality will thrive in the world economy of the future. Creativity is always looking for a better home, as the Canadian Urban Institute and Jane Jacobs have argued.

Friedman has now applied this insight to the future of education. In a recent op-ed article, he said:

"Technology and globalization are wiping out lower-skilled jobs faster, while steadily raising the skill level required for new jobs. More than ever now, lifelong learning is the key to getting into, and staying in, the middle class....

That's why I prefer the new mantra floated by Clinton at the Democratic convention, (which Obama has tried to fund): 'We have to prepare more Americans for the new jobs that are being created in a world fuelled by new technology. That's why investments in our people' — in more community colleges, Pell grants and vocational-training classes — 'are more important than ever."

Ontario's post-secondary system should be ideally placed to meet and thrive in the challenges of a flatter world. The graduation rate of the province's high school students has been steadily improving. The province has high-quality post-secondary institutions. Ontario has one of the highest rates of post-secondary credential achievement in the world, largely based on college graduates. Yet too often Ontario's post-secondary institutions do not interact nearly as well as they should to give students what they need for future success – in part, because the college system is seen as a junior player in the post-secondary system, rather than an equal partner, and applied education is not appropriately valued.

In today's world, where innovation is rapid and prized, where labour supplies are shrinking as baby boomers retire, where young people could be permanently unemployable without marketable post-secondary education and training, and where cost-efficiency is critical, Ontario can no longer afford to ignore this barrier to progress. It is unproductive for the province, the economy, and most importantly, Ontario's students.

At the start of his consultations, Training, Colleges and Universities Minister Glen Murray asked the question, "Where does Ontario want to lead?" He answered that question as colleges would: Ontario can take the lead in applied, labour-market-focused education. This is a natural fit for Ontario, which already has a unique and admired college system. It is the right approach to address the province's future economic prosperity. But getting there will require transformation.

Ontario's post-secondary institutions must embrace a system where all education is equally valued and student options and opportunities are at the core, moving away from the vertical hierarchy that is driving students away from choices such as the skilled trades and other applied disciplines – choices critical to Ontario's future economic success.

Applied education and the colleges that provide it have come into their own – students, businesses, communities and other countries have recognized this. The province's

legislative and policy framework needs to embrace this change if students are to be well prepared for the future and the economy is to avoid the "people without jobs, jobs without people" scenario described by Seneca College president emeritus Rick Miner. This can be accomplished by a change in focus – recognizing that colleges are equal. complementary partners with universities. Together, they provide post-secondary education that is relevant to all of the province's students. Ontario's post-secondary system has two complementary, interconnected sectors that need to be equally valued if the economy is to prosper.

Changes at individual institutions over the past decade and evolutions in college sectors in many countries attest to this new reality, but the basic structure of the college system established more than 40 years ago in Ontario remains largely untouched, lagging behind advancements around the world. If Ontario is going to reach its target of a 70 per cent post-secondary attainment rate, it must unleash the power of this sector.

Today's colleges are models of teaching excellence, innovation and collaboration. Regulatory, policy and legislative barriers to the advancement of applied education must be removed for colleges to fulfil their full potential in the rapidly changing economy, and for college students to take full advantage of their educational opportunities and credentials.

Equally important is the need for government to require, not request, all post-secondary institutions to forge pathways for students so that they can move seamlessly among institutions in pursuing their educational goals. Only in this way will Ontario maximize the full potential of its post-secondary system, provide all students with the range of opportunities to which they are entitled, and ensure Ontario's economic leadership in the years to come.

This paper outlines a series of transformational changes to position colleges to help achieve the vision articulated by the Ontario government in its 2012 discussion paper, Strengthening Ontario's Centres of Creativity, Innovation and Knowledge – namely, that "Ontario's colleges and universities will drive creativity, innovation, knowledge,

and community engagement through teaching and research. They will put students first by providing the best possible learning experience for all qualified learners in an affordable and financially sustainable way, ensuring highquality, and globally competitive outcomes for students and Ontario's creative economy."

The leaders of Ontario's colleges believe that if these changes are adopted, the province will be better positioned to address the many challenges outlined in the government's position paper, which will ensure that Ontario's students and the economy are well-equipped to take on the world in the challenging environment of the future.

Equal, complementary and interconnected

The students of tomorrow must have access to a robust range of post-secondary options, with greatly expanded access to both theoretical and career-focused learning. Students must be given every opportunity to utilize their talents to their maximum potential, within a learning environment that fits their needs and that is available throughout the year.

Those opportunities must be available within realistic timeframes, and achievable in the most cost-efficient manner possible.

There must be opportunities for all students, and to achieve this it will be essential to break down old prejudices and value every aspect of higher learning.

Ontario's college system will be central to this transformation. The colleges were not originally designed to collaborate with universities, but rather to have a tightly defined and controlled mission in applied or career-focused education. But colleges have evolved as students, businesses and the economy have redefined the value of applied education and the range of credentials required to support economic and commercial innovation.

While there is a great commonality of purpose amongst the 24 colleges, there are many unique characteristics associated with individual colleges or groups of colleges.

La Cité collégiale and Collège Boréal play a key role in providing access to French-language college education to the francophone population and to those who wish to study in French. Northern institutions, with large geographical areas to serve, provide critically important training and educational opportunities for Aboriginal Peoples living in that part of the province. Colleges serving smaller communities have a different orientation to the community than do colleges in large urban centres. GTA colleges operate within a uniquely competitive marketplace characterized by extraordinary diversity.

Colleges serving smaller communities act as comprehensive access-specialized institutions that must maintain a breadth of programming to serve the economic development of the regions, despite a geographically dispersed population. These colleges directly connect graduates to employers, with each college-educated employee elevating the social fabric of his/her small or aboriginal community. Finally, each college has developed unique program specializations and, increasingly, areas of applied research specialization.

Students have responded to the growth and strength of the college system by voting with their feet. Growing numbers of students seek career success by pursuing a combination of both university and college programs. The number of university graduates applying to college has increased more than 40 per cent since 2007. Apprenticeship registrations have doubled in the last decade.

It will be particularly important to embrace the full capacity of all aspects of higher education as the province moves toward more online and technology-enabled learning. Ontario has an opportunity to provide higher education in exciting new ways, which will often be more relevant in today's world.

"While the proportion of university degree holders is similar in both countries (Canada and the U.S.), it is Canada's community college graduates – graduates trained to be job-ready – that give Canada its educational advantage."

> - Larry Smith Essential Economics Corporation

Improving access to higher education

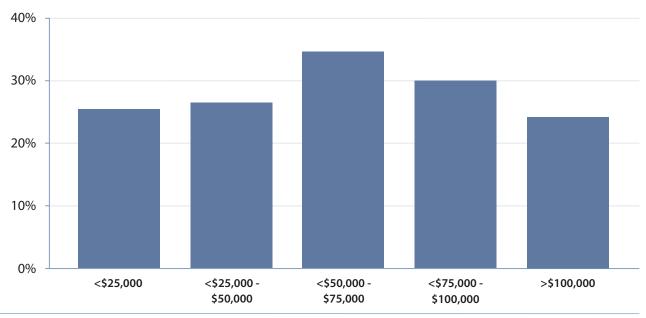
Promoting access to higher education is a priority at the colleges. Access is more than geography, it includes a range of economic, social and cultural factors. In fact, the student population at colleges reflects the diversity of Ontario's population (see chart below), and includes a range of underrepresented groups who otherwise rarely access post-secondary education. Some of the colleges' success can be attributed to specific college programs designed to support access to higher education, including:

- A six-week summer program for at-risk youths in Toronto that provides students with the education and encouragement to pursue full-time college studies in the fall.
- Special services and opportunities for aboriginal students, including an elder-in-residence position, an orientation powwow, and an indigenous graduation ceremony.

- The development at several colleges of "red flag" programs to identify and support struggling students.
- A virtual orientation program at one college that helps students make the transition to college.
- A college partnership with the Centre for Addiction and Mental Health to create Augmented Education, an employment-focused program with modified delivery for students with histories of mental illness and addiction.
- Colleges operating campuses and access points in small, northern, rural and aboriginal communities.

Ontario can be proud of its successes in delivering postsecondary education to students from all backgrounds. But much more must be done if Ontario is to achieve the government's goal of a post-secondary attainment rate of at least 70 per cent of the workforce.

College participation by income



Source: 2012 HEOCO CEA presentation from the 2009 Survey of Labour and Income Dynamics Data

Ontario will need to enrol and educate greater numbers of students who have no family history of post-secondary education. It will need to reach more students who today are challenged to meet their post-secondary needs because of the challenges of geography. It must also deliver higher learning to greater numbers of immigrants. And the province must deliver post-secondary education to more aboriginal students, including young people on reserves who are often reluctant to move to a new community and – when they do – find it challenging to adjust to a very different setting. The gap between French and English programs of study offerings has to be narrowed by increasing the number of French-language post-secondary programs, especially in central-southern Ontario.

Many people in this new pool of students will be students who weren't successful in high school. They don't necessarily have any interest in post-secondary programs offered outside of their home communities. They may need remedial upgrading and can be at the greatest risk of dropping out before completing their studies.

Colleges have a long history of attracting such students and helping them succeed. However, it is a costly proposition as there are typically special service delivery needs for these students. A cost-benefit analysis done by Deloitte for Ontario's colleges has found the cost to colleges of providing services to students at risk of dropping out far exceeds the funding colleges receive for such services.

The report says colleges spend about \$107 million to provide additional services to at-risk students, resources that must come from student tuition and general operating grants. Furthermore, if the province proceeds with its plan to increase post-secondary spaces by 60,000, Deloitte estimates an additional \$20 million in annual cost to colleges.

Ontario can transform higher education to better support more students. For example, technology-enabled learning overcomes the need to physically access a learning site at a specific time and place. It also provides one important means of support to increase access and success for learners with learning disabilities, and for students with language and cultural barriers. The use of technology will

enable colleges to reach the potential student population across the whole province.

More can also be done to support students with mental health challenges. In May 2012, colleges, universities and student groups hosted the Focus on Mental Health conference in Toronto. The conference identified a number of steps that can be taken to help more students succeed, including a recommendation to develop an online repository of best practices at institutions that will serve as a resource for colleges and universities and publicize concrete actions to create healthier campuses.

RECOMMENDATIONS

The Ontario government must continue to make improvements in the participation and success rates of students from underrepresented groups and underserved communities and regions in post-secondary education a high priority, and improve the funding allocated to colleges to provide the necessary supports to these students.

In some communities, specialization could negatively impact access, as college students often will not travel for higher education. Colleges managing the challenges of geography and small populations need to be enabled to offer the range of programs required to meet the needs of these students.

Expanding options for students

Today's students are changing the education experience – they are moving among programs, institutions, and career choices in unprecedented numbers. Yet the silos in the system are impeding their way, making the journey longer and more expensive than it needs to be. The pathways to allow them to make these changes without losing time or credit for their work must be clear. New options are required to ensure students get full access to the education that best suits their strengths and goals. Right now, students for whom an applied education is the right approach often cannot complete their education journey in an applied environment because colleges are restricted in what they can offer these students.

Ontario must create a more comprehensive, interconnected post-secondary system, and this process must start with ensuring that whatever options students choose, their credits will be recognized at every stage of their education journey.

Because colleges were originally imagined 45 years ago as only being providers of terminal credentials, there are gaps in the college system's ability to serve the needs of today's students. Students want to go further in their education in an applied environment and hope to tailor their education to their own needs.

1. Closing Ontario's credentials gap

a. Introducing three-year degrees at colleges

Students whose ambitions are driving them to high levels of applied education should have the option to continue their education at colleges that can provide a broader range of offerings. To support this choice, colleges in Ontario should be authorized to provide three-year degrees that are relevant to their students and their communities.

A three-year degree option would provide students and graduates with the ability to better tailor their education to meet their career ambitions. In some cases, the option of a three-year degree could also improve the educational opportunities for students who were streamed away from a degree pathway in high school, but who find that their ambitions and abilities best suit a degree program.

As well, as greater numbers of professions require the nomenclature of a degree for entry to practice, three-year degrees at colleges provide an opportunity to meet shifting entry-to-practice requirements.

Others who would benefit include workers returning to post-secondary education to gain a credential needed to advance in their careers, and students who may want to move from a diploma to the degree stream – a broader range of degree options should be available to them at their local college if that is the place they will flourish.

In many countries, a substantial portion of students in undergraduate programs are enrolled in colleges that are similar to Ontario's colleges.

In Germany, the fachhochschulen – the college system equivalent – accounts for about one-third of undergraduate enrolment. In Ireland, the figure is nearly 40 per cent in the institutes of technology. The Netherlands equivalent, the hogescholen, accounts for more than 60 per cent of undergraduate enrolment. Colleges in Ireland deliver undergraduate and graduate-level education up to and including PhDs with an applied focus.

The idea of three-year college degrees isn't new. In fact, in 1972, the Commission on Post-secondary Education in Ontario recommended that colleges that wish to award bachelor's degrees to students who complete three-year programs should be permitted to do so.

Three-year degrees offered by colleges will, in many cases, be built from the foundations of current three-year diplomas that offer advanced, sophisticated applied education and currently meet the same learning outcomes as three-year degrees offered at Ontario universities. These programs will be excellent additions to the family of Ontario post-secondary degree credentials that offer clear pathways to students.

Ontario appears to be the only jurisdiction in North America in which a three-year program is a "diploma" program, rather than a "degree" program. With the exception of Asia, three-year diploma programs are extremely rare internationally.

In other parts of Canada and in other countries, the term "degree" is the credential descriptor used to recognize the learning outcomes achieved by these students. To ensure that its students are globally competitive, Ontario must ensure their credentials speak to this reality.

There are excellent reasons to look at evolving the academic credentials established nearly a half-century ago, particularly when those credentials mirror the learning outcomes of degree programs.

Reviewing the nomenclature for the three-year programs will also make colleges and post-secondary education in Ontario more attractive to international students. The current "advanced diploma" credential is not well understood internationally. Furthermore, parents of domestic students may be more inclined to support the ambitions of students wanting to take an applied path if the credential at the end of that path (when the learning outcomes of the diploma and degree are a good match) is a degree. Despite their primary objective of a good job for their children, many parents continue to push their children towards a university education even though college training often will frequently open many more career doors.

According to the qualifications framework in place in Ontario, the knowledge and skills standards for three-year diplomas and three-year baccalaureate degrees at the universities are virtually the same. Requiring colleges to award a diploma to graduates of three-year programs that meet degree standards does those students a disservice by not adequately reflecting their learning achievements.

Consider the language in the Ministry of Training, Colleges and Universities' descriptions for credentials in the Ontario Qualifications Framework, such as these statements under the heading of "Overall Program Design and Outcome Emphasis":

Advanced Diploma

Programs provide the knowledge, skills and attitudes to enable graduates to work within a broad range of technical and/or management functions in a broad range of occupational areas. Graduates understand both the required conceptual frameworks as well as applications related to the specific occupational area.

Baccalaureate Degree

Programs provide some broad knowledge and conceptual sophistication, including specialized knowledge in at least one discipline or field.

The description of the advanced diploma contains a reference to some of the specific contexts in which graduates might apply their knowledge and skills, and it also refers to attitudes. Otherwise, it is difficult to find a significant difference between the two credentials.

Providing students with proper recognition for completing three-year programs will help encourage greater numbers of students to pursue career-focused higher education. In fact, in a recent survey of college students, 89 per cent of the more than 3,800 who responded said a three-year college program would be more attractive to them if it were a degree program, rather than a diploma program.

b. Four-year honours degrees

Ontario colleges have been offering high-quality, four-year baccalaureate degrees for more than a decade. While the Ontario Qualifications Framework confirms that a single standard of quality is in place, colleges are prohibited by the Post-secondary Education Quality Assessment Board (PEQAB) from using the term "honours" for their four-year degrees.

PEOAB's rationale is that these degrees are practiceoriented and that the term honours should be reserved for university research-oriented degrees. This restriction is in place in spite of the fact that no distinction is made in any of the PEQAB degree standards between practice-oriented and research-oriented degrees.

The restriction against the use of "honours" creates an artificial distinction between college and university degrees and therefore should be lifted.

A number of institutions in Canada and worldwide are extending colleges' mandates further to meet labour demand. To increase graduate education capacity and leverage the strength of centres of sophisticated technological innovation, British Columbia recently expanded the mandate of the British Columbia Institute of Technology (BCIT) to deliver master's degrees. In Ireland, the government responded to a need for efficient higher learning pathways and more advanced graduates by approving the institutes of technology to offer graduate-level degrees. Germany and the Netherlands made similar changes to their institutes of technology to respond to technological advances and the need for highly qualified professionals in many industry sectors. This is an evolution that colleges could envision in Ontario in the future.

The introduction of new college pathways, supported by a rigorous review process, that includes a range of three-year degrees and four-year honours degrees opens opportunities for improved system collaboration.

c. The need to address nursing for the future

One specific area needing reform is nursing. Colleges already offer high-quality baccalaureate degree programs in nursing in collaboration with universities that meet national standards for nursing education.

While many colleges have excellent partnerships with universities and are committed to those partnerships on a long-term basis, some colleges are ready to deliver a standalone nursing degree. In fact, in some of the collaborative programs between colleges and universities, colleges provide 90 per cent or more of the actual instruction.

Permitting stand-alone nursing degree opportunities at colleges will help ensure Ontario has the workforce it needs to support the province's health-care system, support pathways from RNA to RN, and improve access to nursing for first-generation students for whom college is more often than not the post-secondary option of choice.

Not every college will want to deliver a stand-alone nursing degree – in fact, many colleges plan to continue their strong partnerships with universities. However, for those that cannot find a willing partner, or that have struggled to create a successful partnership and have the necessary infrastructure and qualified faculty to deliver this degree on their own, this option should be available.

RECOMMENDATIONS

Ontario's colleges are proposing that government authorize colleges to award three-year degrees in areas of study in demand by students, industry, communities and the economy.

The province must end the restriction that prevents colleges from using the word "honours" to describe fouryear college degree programs to allow for appropriate recognition of the level of attainment in these programs. This change must go hand in hand with the ability to award three-year degrees, to help create seamless pathways for students and recognize the actual level of their achievement.

Colleges will work with the government and system experts to develop an action plan to ensure an appropriate and thoughtful review process takes place to drive this transformation.

Regulatory changes should be made to allow new entrants to the nursing profession to hold a Bachelor of Science in Nursing degree granted by either a college or a university. This would give future students the option to pursue a nursing degree at a university or college, or through a collaborative college-university program.

2. Improving the assessment process for college degree programs

A college system with a greater range of options and stronger nomenclature will advance the needs and interests of students. To do this in an efficient, effective way, these changes must also be accompanied by improvements to the provincial assessment process for degrees.

Currently, the four-year degree programs offered at Ontario colleges must be approved by PEQAB. Despite its broad name, this government agency focuses primarily on college degree assessments, but bases these assessments on a university degree model.

Because PEQAB standards are based upon a university degree model, they lack sufficient flexibility to address many aspects of college education. For example, college education utilizes an outcomes-based approach that focuses on end-point knowledge, skills and abilities rather than relying excessively on input measures.

By contrast, the university sector controls its own degree assessment process through the Ontario Universities Council on Quality Assurance.

If Ontario is going to value applied education equally, and ensure that the fundamental strengths of the applied education approach are embedded in college degrees, the processes that establish access to college credentials for students should respect and support this approach. One place to start is by establishing a college-based system for new degree approvals that mirrors the process in the university sector. It is important to recognize that the college system in Ontario is a mature system with experience and success in developing and delivering degree programs and should now move away from the approval process required for undergraduate degrees when they were newly introduced.

Fortunately, there is already a world-renowned, innovative model of quality assurance in the college system that can be adapted to achieve this important goal. The province should engage the Ontario College Quality Assurance Service (OCQAS) to develop a new model for college undergraduate degree approvals and to make recommendations to the minister about these approvals.

OCQAS currently oversees two important functions – the credential validation service (CVS), which determines that programs have been validly classified as advanced diploma programs; and the program quality assurance process audit (PQAPA), which validates the internal quality assurance procedures used by colleges in assessing programs.

The PQAPA in the college sector is similar to the process used in the university sector by the Ontario Universities Council on Quality Assurance. Since 2006, the PQAPA has completed quality academic audits at all 24 colleges.

The Ontario College Quality Assurance Service is an established leader in quality assurance. It is one of eight agencies worldwide - and just two in North America that has been recognized by the International Network of Quality Assurance Agencies in Higher Education as meeting its Guidelines of Good Practice for stand-alone quality assurance agencies.

Since OCQAS already validates three-year college programs, it should be authorized to oversee the review process for three-year college degrees. This responsibility would involve both developing quality standards for the three-year degrees, and subsequently assessing individual applications from colleges. This would represent a fundamentally important component of the recognition of the college system as forming a separate but equal part of Ontario's post-secondary system.

OCQAS would take the lead, in consultation with system experts, to develop quality standards for three-year, practice-oriented college baccalaureate degrees, and for all other new degree assessment approvals in the college system.

Additionally, given the college system's maturity in establishing and delivering four-year degrees, the approval process for four-year college degrees must be transferred from PEQAB to OCQAS.

Establishing a single, sector-based agency through OCQAS to oversee degree assessments and approvals in colleges would improve efficiency in evaluating and approving high-quality, practice-oriented post-secondary credentials, allowing colleges to react more quickly to changing market demands for new programs.

Given the extensive experience of OCQAS, the government can be confident OCQAS could make the necessary changes to successfully handle the new responsibility.

RECOMMENDATIONS

OCQAS be authorized to design and recommend, in consultation with system experts, a model for a high-quality, college-based system of degree approvals.

OCQAS, in consultation with system experts, should develop the quality standards for three-year baccalaureate programs at colleges.

3. College-university 2+2 and other pathway partnerships

Many colleges have developed effective partnerships with universities in selected program areas through a variety of partnership models, including transfer programs, also known as 2+2 programs.

In this type of program, students study for two years at a college, then transfer to a university to complete their studies. Students usually enter a 2+2 program with the intent of earning a university degree – they have guaranteed admission into the participating university, provided they maintain a predetermined grade point average.

The 2+2 programs offer students the benefit of gaining access to university while completing the first two years of their post-secondary program in an environment with smaller class sizes, interactive learning, a high level of faculty-student interaction, and lower tuition fees.

To meet the government's goal of improving access to higher education, institutions will need to attract more students from a wide variety of backgrounds. Some of

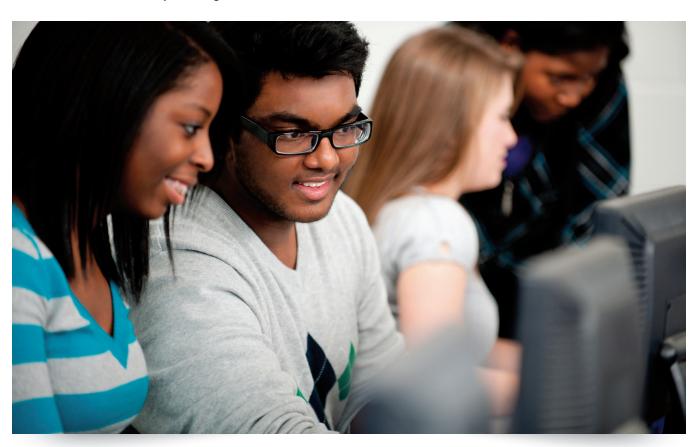
those students would be more likely to enrol and persist if given the option to start their post-secondary education in the supportive environment of a college.

Groups that have been historically underrepresented in universities, including students from low-income families, those who are the first in their families to pursue higher education, students with disabilities, and Aboriginal Peoples, would be better served by a 2+2 model and other pathway partnerships that allow these students to begin their post-secondary education at college.

Colleges will continue to develop 2+2 partnership models. However, the Ontario government must take action to make these programs a more integral part of Ontario's post-secondary system.

RECOMMENDATION

The government should develop a policy framework to support the expansion of collaborative 2+2 and other pathway partnerships between colleges and universities.



"Every state in the U.S. as well as B.C. and Alberta make it easily possible for undergraduates to take the first two years in a college and then complete their degree at a university.

"This is not a change that can be imposed overnight since colleges and universities were originally set up with different mandates. But other systems have successfully bridged the gap and, with sufficient encouragement from government, Ontario could, too."

> Richard Van Loon Past-president of Carleton University Ottawa Citizen, July 7, 2012

Improving the recognition and transferability of completed post-secondary credits

As the Ontario government's discussion paper notes, "Ontario's credit transfer system continues to lag behind comparable jurisdictions' systems, and student mobility remains a challenge for the province. For students, their parents, employers and the general public, it is difficult to understand why students have to repeat the same courses when they transfer from one institution to another."

Students shouldn't have to repeat courses they have already successfully completed.

As Ontario moves to create a robust post-secondary system that helps more students pursue both theoretical and career-specific learning, it will be essential to put clear measures in place to address the credit-transfer issue. Greater numbers of students must have access to both university and college education, and they must have the opportunity to complete their education as quickly as possible.

Education leaders in Ontario have discussed this challenge for years. In 1999, representatives of Ontario's colleges and universities signed the Ontario College-University Degree Completion Accord, also known as the Port Hope Accord. That accord set out a series of principles for developing degree-completion agreements between colleges and universities.

Unfortunately, progress on the credit-transfer issue has been slow. For students seeking to transfer from one institution to another without an established pathway already negotiated, the process to get recognition for already-completed credits is often arbitrary and unclear. Institutions in Ontario often require students to repeat courses they have previously completed, which often drives students outside of Ontario.

Clearly, students recognize the importance of a transparent and meaningful system for the recognition and transfer of completed credits.

In a 2011 survey of college applicants administered by Academica Group Inc., almost 25 per cent of college applicants and registrants who responded said preparing for university was a major reason they were applying to college. In some colleges, the number of students who are planning to continue their education after graduation from their current program is as high as 50 per cent. Meanwhile, the number of university graduates applying to college has increased more than 40 per cent since 2007.

Yet Ontario remains far behind other jurisdictions that do a better job of incorporating career-focused education into higher learning.

In most parts of the United States, credit transfer has already been integrated into the design of the state-level post-secondary systems. The provinces of British Columbia and Alberta are also well ahead of Ontario. For example, the British Columbia Council on Admissions and Transfer ensures the system is transparent and robust, and that information on transferable credits is updated regularly.

In Ontario, however, the successes have been at the institutional level, rather than system-wide.

Colleges and universities are entering agreements to help students get a combination of college and university education. In Barrie, for example, Georgian College has announced a new partnership with Lakehead University in Thunder Bay that includes credit-transfer agreements and the joint delivery of programs that allow students to obtain both a Georgian diploma and a Lakehead degree.

The University of Guelph-Humber in Toronto provides students with an opportunity to simultaneously earn a four-year university degree and a college diploma in business, early childhood education, kinesiology, media studies, justice studies, psychology, and family and community social services. Seneca's Liberal Arts Transfer program is providing its students the opportunity to transfer to the University of Toronto or York University after two years to complete a diploma and an honours degree in four years.

Many more such partnerships exist but almost all are institution specific.

The Ontario government's steps to improve the credittransfer system at the provincewide level are having an impact.

In 2011, the government announced it was investing \$73.7 million over five years to support the development of a new credit-transfer system, including a Credit Transfer Innovation Fund. The province also announced the creation of the Ontario Council on Articulation and Transfer (ONCAT), the successor to the College-University Consortium Council.

These were important first steps and helped move Ontario closer to establishing a meaningful provincewide system for facilitating the transfer of completed post-secondary credits. The priority now is for the Ontario government to set clear targets for recognizing credentials and transferring completed credits.

The province should recognize that this transformation could produce significant costs savings. For example, a report by the Centre for Spatial Economics estimated a typical Ontario college student who transfers to a university could save as much as \$26,000 through an improved credit-transfer system. The report also found the government could save more than \$60 million each year once an improved system is fully implemented.

RECOMMENDATIONS

The government should adopt the following recommendations from the joint submission from the College Student Alliance, the Ontario Undergraduate Student Alliance, and Colleges Ontario:

Recognize the provincial credentials framework.

In order to build trust and transparency, the credit-transfer system must be based upon a common understanding of the province's credentials framework for certificates, diploma and degrees.

Establish greater system-wide consistency.

There must be greater consistency across institutions in recognizing students' previously earned credits. A predictable approach across all institutions will lead to a more positive transfer experience for all students. Furthermore, institutions should ensure that all documents (e.g., course descriptions and outlines) used to assess transferability are available electronically.

Recognize previously earned credits.

Establishing an agreement among institutions to assign maximum credits will help students to successfully navigate through post-secondary education (PSE) in a timelier and cost-efficient manner, and allow students to estimate to a greater extent the time it will take to reach their PSE goals. The determination of the credits to be granted should be based upon the learning outcomes for the program and type of credential.

This would include establishing a provincial repository of courses accepted by colleges and universities as meeting certificate, diploma and undergraduate degree breadth requirements.

Encourage the expansion of provincial and multi-lateral articulation agreements, including those for 2+2 programs, as one of many means of increasing student pathways.

Review institutional policies to remove barriers.

Investigate and propose changes to government and institutional policies that create credit recognition and transfer barriers, such as program residency requirement policies. While policies can vary between institutions, students are generally required to earn a minimum per cent of their credits at the institution conferring the diploma or degree in order to graduate, thereby limiting the amount of recognition given for credits that would reduce the time to completion.

Improve institutional transparency.

Institutions should make their credit-transfer policies publicly available and easily accessible and make each incoming student aware of them. These policies should utilize a common vocabulary and format to allow students to effectively make comparisons.

Students seeking to transfer should be able to obtain information about the credits for which they are eligible when they are offered admission to an institution. Furthermore, the province should ensure that students have easy access to searchable credit recognition databases to allow potential transfer students to assess the compatibility of their credit courses with those of the receiving institution.

Establish practices to ensure consistent treatment of all students.

Establish an appeal mechanism.

In the case that a student is not awarded a credit, the student should have recourse to an appeal process to a higher authority within an institution.

Improve the functionality of ONCAT.

Incorporate additional features into the ONCAT portal. For example, the ability to save searches for use at a later time and an automated degree completion audit function. A degree-audit function would allow users to enter their PSE credits and obtain information on the types and levels of course credits they would need to complete their credential.

Additionally, the search functionality for university-touniversity and college-to-college transfer outside of specific articulation agreements needs to be expanded.

Incorporate an evidence-based approach to building Ontario's provincial transfer system.

Establish a credit-transfer research program to develop indicators and mine provincial data to identify trends, barriers and areas for improvement. This would include tracking and reporting on successful and unsuccessful transfers, and strategies for improvement. Furthermore, ONCAT should continue to fund research projects on all aspects of student mobility.

Increase funding to incent institutions to improve the student transfer experience.

Transferring students need access to information and supports to make their transfer experiences successful. Increased dedicated funding should be made available to institutions to provide student transfer supports. Student transfer supports should include a "one-window" office in each institution with responsibility for simplifying and expediting credit transfers.

In addition to the recommendations above, the province must strengthen the accountability measures for credit transfers. Institutions should be required to publicly report on transfer activities and strategies to improve the transfer process.

The government should also seek greater transparency and accountability in admissions for university graduate and professional programs. Admissions decisions should be based on evidence about applicants' likely success in their intended program of study. Students deserve to be assured of fair treatment in graduate admissions, regardless of which university or college they attended as undergraduates.

Embracing world-class, technology-enabled flexible learning

The proliferation of information technology has the potential to radically transform the content and delivery of post-secondary education worldwide. The opportunities for students to complete their education fully or partially online are increasing daily – whether it is through traditional post-secondary institutions, or through new ventures such as EDx, the Khan Academy, Coursera and Udacity.

The key advantage of online learning is that it can be accessed by learners anytime and anywhere. Such flexibility is particularly appealing to learners who work and need to upgrade their skills and qualifications, displaced workers seeking retraining; learners seeking skills training not available in their communities; and working parents. However, since a pure online experience is not suitable for all learners, hybrid or blended models are invaluable. Technology-enabled learning can also assist in reducing the costs and improving the effectiveness of the school-college-work initiatives.

Ontario's colleges are committed to creating the best technology-enabled, flexible-learning environment in the world that opens up opportunities for all students, including non-traditional learners, secondary school students – such as those in dual credits – and employees needing upgrading. Colleges are committed to establishing the best environment possible for all learners to tailor their learning needs.

Features of a world-class online institute would include:

- Every course offered online being accessible through multiple technologies, providing students with the most appropriate learning option for them, and increasing their ability to start and stop their learning as needed.
- Developing learning units to serve as the building blocks of courses and therefore all credentials.
- Expanded ability for college students to take courses through more than one college - creating students of the college system.

- Enhanced availability of bridging programs, so that students can complete the program they need easily and on their own schedule.
- Expanded capacity to "import" professors/instructors from other institutions to support courses.
- Online college degree programs (this would require a change in the current rules).
- The ability to use Prior Learning Assessment and Recognition (PLAR) to ensure that the work experience and previous credentials of learners are valued to the fullest extent possible.
- Expanded access to online resources for apprenticeships.
- The means to support workers and employers needing specific training, including for newly emerging workplace competencies.
- Student access to 24-hour support, including technopedagogical tools, e-tutoring and e-mentoring.
- The use of digital and other information communication technologies, including simulated learning, to enhance student learning experiences.
- The use of real-time analytics to support student learning by identifying where students are struggling and finding ways to support their success.
- A strong quality assurance framework consistent across all post-secondary activity – full and part time, online, hybrid or in-class - to ensure uniform high quality.
- Further support for educators to ensure they are properly prepared to offer the best possible technology-enabled learning experiences for students.
- The engagement of the private sector and other key providers such as Contact North and ORION.
- The ability to develop system-wide courseware, similar to the recent development of the dental hygiene courses.

How can Ontario get there? The colleges are already leaders in online education, so Ontario doesn't need to reinvent the wheel.

The Ontario network provider, Contact North, has 26 years of experience, 112 online learning centres, 18,000 online college and university courses, 1,000 online university programs and multiple university and college partners now serving all of the province.

The Ontario colleges' collaborative approach to online education through OntarioLearn (a consortium of Ontario's colleges) has been very successful. OntarioLearn ranks as one of the largest providers of online course development and delivery in North America.

Under the OntarioLearn structure, partner colleges select courses from the OntarioLearn inventory that complement their existing distance education courses. This allows colleges to rationalize resources, avoid duplication and increase the availability of online learning opportunities for their students.

The OntarioLearn website effectively acts as a portal enabling students to search online courses and programs by college. Support for faculty and students is provided 24/7 across all the learning management systems used by the colleges.

OntarioLearn course registrations have increased to 66,000 in 2011-12 from 500 in 1995-96, making it almost twice the size of the Western Governors University online learning initiative in the U.S. in terms of total annual registrations. OntarioLearn's success rate (the percentage of students with a final grade of 50 per cent or higher) is close to 75 per cent.

A key achievement of the OntarioLearn consortium is that colleges have collaborated and cooperated to implement online learning with no additional funding from the government.

OntarioLearn can evolve to become a change agent in Ontario for technology-enabled, flexible learning. To ensure this happens quickly, an upfront provincial investment will be required.

A more robust OntarioLearn would take a lead role in driving innovation in online learning by promoting new ideas and facilitating the adoption of new technologies. It would support the expansion of online programs and courses and ensure that high-quality standards are met. It would also support credit transfer and credential recognition.

It would build on and strengthen its current structure. It would provide one-window access to all online college courses.

Students would also have access to bridging courses and to fuller diploma programs online, as well as to degree programs. OntarioLearn would identify existing gaps in online courses and programs and fund colleges to develop new offerings to fill those gaps. To maximize efficiency in the development and delivery of online education, all new courses and programs would be made available to all colleges.

Because of the breadth of program choices that would be available to students online, OntarioLearn would go beyond Western Governors University. One signature feature is that it would be a facilitator of robust credit transfer, informed by ONCAT.

This proposed model would facilitate students being able to obtain credentials but it would not have the power to grant credentials. The credentials would continue to be granted by individual institutions.

Although this proposal is focused on college programs, university participation would be welcome. OntarioLearn would work towards establishing a collaborative and cooperative relationship with any parallel organization that might be established by the universities, or would welcome interested universities into the OntarioLearn partnership model.

While the French-speaking colleges have recently joined the OntarioLearn consortium, services to French-speaking students will have to be defined. The gap between French online training and English online training will also have to be addressed.

To drive innovation, Ontario's colleges have initiated – or would pilot – a series of initiatives (assuming seed funding is available). Many of the pilot projects would be open to any college interested in participating. These projects would include:

- The development of a gaming prototype as an education tool.
- The development of learning outcome units or modules as alternative to traditional courses.
- The use of gaming technology to support literacy and numeracy acquisition.
- The development of portfolios for students, working with Desire2Learn, that start in the secondary school system.
- The development of a blended e-trades model where apprentices participate online for the theoretical part of their education.
- A partnership between two colleges to deliver the Industrial Mechanic Millwright apprenticeship program to northern and remote communities using a hybrid model.
- The creation of a "knowledge garden," a digital space that facilitates collaborative content creation, content curation and collaborative engagement by students.

The colleges are committed to dramatically expanding the availability of online courses through OntarioLearn.

Colleges will increase the availability of online courses by 50 per cent. While new provincial funds are needed to accelerate the expansion of online programs and courses, the collaborative development model will result in savings for the taxpayer.

The province could find resources to support this transformation by revisiting its existing plans. The province should revisit its plan to create three new post-secondary campuses in Ontario. Savings achieved by revisiting that proposal could support the transformation of higher education.

In the long term, the reforms envisioned in this paper will drive productivity improvements in the colleges through this increasingly collaborative model. This model will also produce savings for students and result in a more effective use of public resources.

RECOMMENDATIONS

The Ontario government should work with Colleges Ontario and the college system to realize a vision of a world-class, technology-enabled flexible learning environment, with the characteristics identified in this document.

The province should allocate \$10 million over three years to develop a world-class, technology-enabled learning model at Ontario's colleges and to provide seed funding to colleges to establish a series of innovative pilot projects to expand the reach and effectiveness of this environment by transforming the delivery of programs.

The province must work with colleges to define and ensure access to French-language online training and services.

All colleges and universities should be provided with access to the K to 12 educational resources bank, to help with activities such as entry-level teaching or academic upgrading, and access to the online Grade 11 and Grade 12 courses available through e-Learning Ontario.

The government should support the use of digital technologies, open educational resources, and mobile learning programs towards the development of solutions that can be rolled out provincewide. This would provide the college system with the greatest opportunity for productivity gains as defined in the discussion document.

The province must ensure the strengthening of the credit-transfer system in Ontario includes digitally based learning, by requiring any online entity to be informed by and supportive of ONCAT's mandate.

The province should ensure the process used for approving degree programs allows colleges to develop and deliver fully online degrees.

Expanding apprenticeship opportunities for students

Ontario's vision for higher education in the 21st century must promote and value all access points to post-secondary learning. It must provide greater mobility for students to move among institutions and it must recognize that skills training is an essential component of higher learning. This is particularly true in the new economy, when innovations are revolutionizing all sectors of the economy, including the skilled trades.

Ontario has fallen behind in apprenticeship training. Ontario produces fewer certified trades persons on a per capita basis than does the rest of Canada. In addition, only about one-quarter of Ontario apprentices complete their programs.

To further complicate matters, many employers have been reluctant to take on apprentices during the economic downturn. Apprentices are always the last to be hired and the first to be let go when a business is struggling.

Perhaps most concerning for the future, few parents, students or guidance counsellors see apprenticeship as a true part of the post-secondary continuum, and are reluctant to choose or recommend it as a career path. This must change, as apprenticeship remains a vital component in the province's high-value economy. Much of the anticipated shortage of skilled employees in the years ahead will be in the skilled trades.

Ontario must set clear targets to increase the number of apprentices in core trades and to improve the completion rate for students in apprenticeship programs. As well, the province must do better at removing barriers to students seeking to become apprentices and must find ways to inform the public that apprenticeship is a key element of the post-secondary system. To do so, apprenticeship must look more like post-secondary education than it does today.

The new College of Trades has a role to play in this transformation. However, the province could take a number of steps to achieve these goals in partnership with colleges, and should not wait to do so. Working with colleges on these objectives would not undermine the role or mandate of the College of Trades or the important role of unions and employers in apprenticeship.

RECOMMENDATIONS

Ontario's colleges must be responsible for administering the in-school part of apprenticeship training, beginning with opening up the Ontario College Application Service (OCAS) to include apprenticeship students.

Colleges should take a lead role in matching employers to potential apprentices – this is not a role that government needs to perform.

The province should expand the availability of preapprenticeship programs and college co-op programs, to better prepare students for apprenticeship training.

Ontario should expand the in-school portion of apprenticeship training to include "equivalent-to-work" experiences. This could be achieved through hands-on shop and simulation experience and in-college placements.

Maintaining the focus on learning outcomes

Ontario's colleges are ready to discuss increasing the importance of learning outcomes in post-secondary education. Colleges have a well-established history of focusing on learning outcomes. Faculty members are hired based on both their expertise in a program subject area and on actual workplace experience. College programs are developed in consultation with program advisory committees made up of industry and business leaders, to ensure the programs offered to students have real-world relevance.

As the government considers learning outcomes for higher education, it must ensure the outcomes set for colleges are aligned with the career-focused goals of college education. Three issues need to be addressed: measuring learning outcomes, setting performance goals, and linking performance to funding.

Colleges currently have a set of learning outcomes for each program that is designed using program advisory committees that provide business and industry expertise. Learning assessment is based on the professional judgment of college faculty, within the framework of the colleges' academic quality assurance processes. In a few programs, learning is also assessed by entry-to-practice exams mandated by regulatory bodies, such as the Canadian Registered Nurse Examination.

The government's discussion paper suggests the model for measuring learning outcomes in Ontario would be based upon three international projects: The OECD's Assessment of Higher Education Learning Outcomes (AHELO), the U.S.-based Collegiate Learning Assessment (CLA), and the E.U.-based Tuning Project.

It must be remembered that all of those projects are primarily focused on learning outcomes for universities, not colleges.

The range of academic disciplines the Tuning Project and AHELO intend to cover includes those typically taught at universities. The hundreds of programs taught at Ontario colleges are excluded or are only partly included.

The CLA is focused on generic skills such as written communication and problem-solving. While these are important elements of Ontario college programs, they represent only a small fraction of the learning outcomes that colleges teach.

The CLA is also problematic because it is a complex, essay-based test that may have limited validity for traditionally underrepresented students and those from diverse cultural backgrounds. In addition, CLA testing uses a very small sample size that would limit crossinstitution comparisons and would not allow evaluations on a program-to-program basis. To scale it up to a size appropriate for such comparisons would be extremely costly and so would require significant new resources.

Ontario is a long way from having nationally or internationally recognized processes for measuring learning outcomes that would be relevant to the large majority of learning that takes place at colleges. Colleges are open to improving how student learning is assessed, but there is no standard test on the horizon that will replace the assessments currently made by college faculty within the framework of the colleges' academic quality assurance processes.

Any learning outcome measures developed for Ontario's colleges must include valid assessments of occupationally based programs.

The issue is complex and the province needs to approach it in collaboration with college experts. Learning outcomes should be assessed using a multi-pronged approach that measures the added value of programs and includes metrics related to program quality and accessibility.

At the present time, Ontario's colleges do not believe any tools exist that meet the aforementioned criteria but colleges are willing to work in partnership to develop them.

RECOMMENDATION

The province must establish a stakeholder task force to explore ways to ensure learning outcomes and teaching excellence are at the forefront of post-secondary education.

Strengthening experiential and applied learning

Experiential learning is central to the mission, focus and reality of Ontario's colleges. Currently, experiential learning takes place in many forms throughout the college sector.

1. Work placements

Colleges have found that the most current, objective and relevant concrete experience can be provided in the workplace. Students report that work placements enrich learning, focus career interests, moderate expectations and often provide a bridge into employment.

For employers, student placement programs contribute to employee recruitment and succession planning. While cooperative programs are offered by many colleges, shorter-term work placements are common. This important element of applied study is, however, becoming increasingly difficult to deliver. In many sectors, the employers' commitment to cooperative placements has softened during recessional periods and rebounded more slowly during the recovery.

In health-related disciplines, clinical placements are required. However, these placements are also becoming more and more difficult to find as more students enter the health-care field at the same time that hospitals and other health-care agencies are increasingly reluctant to provide placement opportunities, or in some cases the agencies require significant fees.

2. Experiential learning as part of the program of study

It is quite common for college programs to require graduating-year students to participate in comprehensive, real-life projects, performances and/or professional competitions.

For example, with the guidance of a faculty mentor, students in Fanshawe's Kinlin School of Business provide consulting services to local business. Durham College and The University of Ontario Institute of Technology's student association operate an Internet-based visual radio station

that develops hosting and journalism skills while informing students of news and events. The students in many hospitality and culinary programs at colleges plan, staff and manage food service and even hotel operations. Theatre and music programs at colleges (e.g., at George Brown, Humber and Sheridan colleges) offer a rich series of public performances. Journalism schools publish weekly college newspapers and broadcasting programs run campus radio stations.

3. Applied research

The colleges' growing role in applied research projects with industry is providing students with valuable opportunities for experiential leaning. Participation in applied research enriches students' experiential learning and supports commercialization work at small and emerging businesses across Ontario. As government works to support a growing entrepreneurial culture in the province, it is critical that the value of students' engagement in applied research, and the interaction with local entrepreneurs that this facilitates, be valued and supported.

The province must also address questions about proper credential recognition for programs that include experiential learning. For example, it is reported that some Ontario university graduate programs continue to reject applications from otherwise qualified graduates of college degree programs because of those programs' applied and experiential nature.

RECOMMENDATIONS

The government needs to encourage regulatory bodies to accept 25 per cent of clinical-placement hours being replaced by simulation, in order to address the critical shortage of clinical placements in Ontario.

The government must increase its support for applied research in the college system, and recognize the value of this agenda in economic development, commercialization and helping to develop the next generation of entrepreneurs. The experiential learning component of applied research in the college system must be specifically supported by government policies and funding.

The productivity challenge: Rethinking the roles of institutions within Ontario's post-secondary system

Colleges have been achieving strong outcomes for students while improving productivity for many years. The proposals in this paper will do even more – by rethinking the roles of institutions within Ontario's post-secondary system, giving a larger role to institutions that are focused on teaching and market-driven innovation, and creating a more integrated post-secondary sector.

Ontario's colleges have shown themselves to be among the most productive in North America:

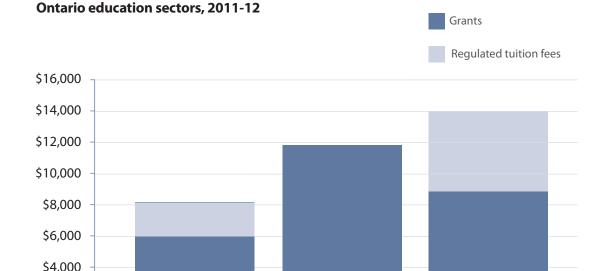
• Ontario colleges educate students at a cost to the government that ranks second-lowest per full-time equivalent (FTE) among the provinces; only Prince Edward Island is lower.

Operating funding and regulated tuition fees per student

- The total cost per FTE, taking into account both government grants and tuition, is the lowest of the 10 provinces.
- If Ontario's college costs per FTE were compared to the 50 U.S. states, taking into account both government grants and tuition, Ontario would rank among the 10 lowest. Only a handful of states emulate Ontario's low-grant, low-fee approach to funding.

On a per-student basis, colleges are highly productive relative to school boards and universities. From a government perspective, colleges are the least expensive of the three major sets of educational institutions. They also operate at a lower direct cost to the student than do universities.

Colleges have worked individually and collaboratively to achieve this high level of productivity, which is then redirected to students' education and training.



Note: Figures for colleges exclude the tuition set-aside and collaborative and second-entry nursing and clinical education funding for collaborative nursing. Sources: Ministry of Training, Colleges and Universities and Ontario Public School Boards Association

Secondary

schools

\$2,000

0%

Colleges

Universities

Colleges have found productivity improvements from within their own operations that have been redirected to meet students' needs.

- Despite funding restraints, colleges have made it a priority to offer a teaching environment that gives students personal attention. Ninety-six per cent of college classes are taught in sections of 60 or fewer students.
- Colleges are meeting the increasing cost of support services for students with higher needs. An independent analysis by Deloitte shows that colleges spend \$107million annually from their general revenues to serve higher-need students. That's in addition to the targeted grants from government specifically geared toward higher-need students.
- Colleges have found ways to operate with about half as much space per student as universities. In 2008-09, the average college had 7.3 gross square metres of space per FTE student in all types of programs. Universities report that in 2007, they had 15.4 gross square metres of space per FTE student. Even if the space that is laboratory space for faculty and graduate students is omitted, the university figure is 13.2 gross square metres per FTE student.

Colleges also have an extensive record of improving productivity through collaboration. Colleges share in:

- Provincewide collective bargaining, including a new collective agreement with faculty that recognizes the government's fiscal environment by providing no acrossthe-board salary increases for the next two years.
- A single pension plan that serves faculty, support and administrative staff at all 24 colleges.
- A centralized applications service for students.
- Shared support services for library and resource centres.

- A shared network to market colleges' training services to employers.
- An applied research network that supports collaboration and reduces duplication.

Colleges' collaboration goes well beyond sharing administrative costs; sharing academic services has also become part of the colleges' approach to better productivity.

- Colleges have developed OntarioLearn, a shared platform to offer online programs and courses to students across the province.
- Colleges have adopted a new policy for the sharing of curriculum that allows colleges to enter agreements to share curriculum for common programs, while maintaining opportunities for each college to develop its areas of specialization.
- Colleges are developing new measures to ensure college students can transfer between programs with appropriate credit.
- Colleges are working to implement better pathways between apprenticeship and diploma programs, amongst similar diploma programs, and between diploma and degree programs.

Colleges are prepared to do more to improve the productivity of their own operations. Over the coming year, colleges will undertake a comprehensive review of potential new areas for shared services. They are also developing common standards to improve space planning and utilization of the physical plant.

Colleges are committed to continue to explore new areas for collaboration in order to bend the cost curve and improve services.

Much of the potential for real productivity improvement lies in rethinking the roles of institutions within Ontario's post-secondary system. Among jurisdictions of comparable size, Ontario is unique in believing that every university

should be a research university, almost all full-time university faculty should be active researchers, and almost all baccalaureate students should be educated at universities. Reform to the design of Ontario's post-secondary sector is a fundamental requirement to achieve a more cost-effective system.

The proposals in this paper will increase productivity by making better use of colleges to meet Ontario's need for advanced student learning that is oriented to workforce needs. When fully implemented, these proposals have the potential to save significant resources for government and students and use public resources more effectively.

Table: Summary of proposed productivity savings

PROPOSAL	PLANNING TARGET	PRODUCTIVITY SAVING
Share course development in online learning.	 To increase the availability of online courses through OntarioLearn by 50 per cent. 	 Cost avoidance: \$5 million to \$10 million annually.
Provide greater credit recognition when students transfer from college to university.	 Recognize 65 per cent of college credits for transfer (up from 35 per cent to 45 per cent today). 	 Government savings: \$36 million to \$61 million annually in reduced costs and additional tax revenues at current enrolment levels (\$2,700 to \$4,100 per transfer student in reduced operating grants and lower OSAP costs). Student benefit: \$26,000 to \$51,000 per student in lower costs and additional earnings (up to \$410 million annually at current enrolment levels).
• Implement three-year degrees at colleges.	• Enrolment of 10,000 students annually who would otherwise take four-year degree programs.	 Government savings: \$45 million annually in operating grants. Reduced OSAP demand. Student benefit: Approximately \$40 million annually in savings for all students on tuition fees.
• Expand the 2+2 model, based on current partnerships in Ontario and programs offered in B.C. and elsewhere.	• Enrolment of 5,000 students annually in college portion of the 2 +2 model.	 Government savings: Reduced OSAP demand. Student benefit: Approximately \$15 million annually in savings for all students on tuition fees. In addition, students who remain in their home community for the first two years of the degree program would have significantly lower living costs.

Ensuring long-term fiscal sustainability

A new vision to transform higher education must be supported by policy measures and resources that effectively drive change and produce the desired results. This is particularly important as the province strives to ensure students from all socioeconomic groups get access to higher learning.

Improvements to the post-secondary system cannot serve solely the needs of the top academic achievers. While it is important to ensure such students get the best education possible, the student body of the 21st century is far more diverse.

Ontario's colleges provide quality post-secondary education to a diverse range of students in a manner that is efficient by national standards. Ontario is ranked second-lowest among the provinces when it comes to the cost to government per full-time-equivalent (FTE) student; only Prince Edward Island is ranked lower.

At the same time, colleges deliver quality post-secondary programs. Graduation rates improved markedly in the middle of the last decade and remain high, ranging from 63 per cent to 65 per cent each year.

Even in this difficult economy, 83 per cent of graduates find work within six months of graduation, and the provincial Key Performance Indicators confirm that 93 per cent of employers are satisfied with the quality of the graduates they hired.

Furthermore, the average weekly wage for someone with a college diploma or an education in the skilled trades has increased at a quicker pace than the weekly wage of someone with a bachelor's degree from university.

More students enter college each year than university, with college students coming equally from all family income levels.

In the years ahead, Ontario will face additional cost pressures as the province strives to improve its post-secondary attainment rate.

Literacy and numeracy skills often need improvement, particularly in a world where innovations are transforming all sectors of the workplace. As well, aboriginal students who have never lived off their reserve often need support to transition to a new community.

The need for new equipment and capital improvements at colleges also cannot be ignored. In his 2010 report, the auditor general in Ontario said the deferred maintenance backlog at colleges was in the range of \$568 million to \$745 million. He said more than \$70 million in capital repairs are in the critical category.

In 2009, the Courtyard Group's report to the Ministry of Training, Colleges and Universities recommended that the higher education sector's spending on deferred maintenance should equal 2.5 per cent of the Current Replacement Value (based on optimal industry standards), of which the government should provide 1.5 per cent. The Courtyard Group also recommended the government take a broader view of facilities renewal to recognize re-purposing of space for new forms of instruction.

As the government develops its vision for higher education, it must ensure its funding allocations, funding formula/ policies and tuition policies support the vision's objectives. The new vision for higher education in Ontario should include the following commitments to long-term fiscal sustainability:

A multi-year plan for revenue per student, from operating grants and tuition

Any fiscal framework for colleges must provide adequate and predictable revenue to meet the public's expectations of the college system. The framework should recognize there are important differences among the colleges, particularly with respect to enrolment growth and declines, and also with respect to the costs of serving small, northern, rural and French-language populations. The framework should also recognize the additional costs of improving success rates among students with higher needs.

"Delay at this point could cost us an important strategic and comparative advantage, if others understand and act on the implication of the emerging knowledge economy and demographic shifts before we do"

> - Rick Miner People Without Jobs, Jobs Without People: Ontario's Labour Market Future

A multi-year college tuition framework

The consultation process will not be complete until it includes a college sector tuition framework that provides adequate revenues for colleges while maintaining accessibility for students. This framework should recognize that colleges are different from universities. College tuition is significantly lower than university tuition, programs are often shorter, and fewer students need to leave home to attend college than to attend university.

A plan for maintaining and improving buildings and equipment

Colleges urge the government to adopt the auditor general's recommendations with respect to funding and maintaining their physical plants. The government's discussion paper mentions options for using buildings in summer and providing learning electronically. Colleges look forward to discussing what can be done, and what colleges have done, in both of those areas. Neither of them can be a substitute for addressing the longstanding shortfall in facilities funding that has created a deferred maintenance backlog of more than \$500 million.

RECOMMENDATIONS

The province's education funding framework should be reviewed to support equity and flexibility for all students, and funding allocations and policies must align with the government's principles for the future.

A multi-year college tuition framework must be developed that recognizes the distinct nature of tuition fee policy in the college sector. Development of a new fee framework must include a review of ministry fee policy regarding fouryear college degree programs and the establishment of a fee policy for three-year degrees at colleges.

Conclusion

The knowledge economy requires a robust vision for post-secondary education that embraces the diverse nature of the student population and the dynamic range of opportunities available to educate students in the most effective ways possible.

The province can be proud of its post-secondary system. Much has been done over the years to provide students with the education they need to achieve success, including the creation of the college system, which has been the most important factor in Ontario's post-secondary attainment rate leading the OECD. French colleges have provided the additional benefit of emphasizing the government's will to contribute a strong bilingual workforce to the job market.

But Ontario cannot rest on its laurels. The new world of innovation and creativity demands more from the province's employees, placing greater demands than ever on graduates who enter the knowledge economy.

These students must have more options and flexibility in choosing their post-secondary paths, must have previously earned credits and experience recognized to the fullest extent possible when they move to a different path, and must have the opportunity to take advantage of all of the technological and teaching innovations open to them in a global environment.

The students of today are more technologically savvy and innovative than any other generation in history. Government and education leaders must embrace that spirit of innovation and deliver higher learning that truly helps students to fulfil their potential. Ontario must be courageous, confident and activist in setting and implementing its vision for the future.

The time for meaningful transformation is now.