In 2013-14, HEQCO will focus on key research and analyses within its legislated mandate to assist:

- **MTCU**, in its efforts to ensure that Ontario’s higher education system delivers a higher quality education to more students in the most effective manner possible.
- **Ontario’s colleges and universities**, as they grapple with increased enrolment, greater international competition, the imperative to contribute to a healthier and more robust Ontario economy and quality of life, all within a very constrained financial reality.
- **Students and the public**, as they seek to make better and more informed choices about accessing and navigating an increasingly complex higher education environment to obtain an affordable and timely education that promotes their personal, learning and professional aspirations.
- **Employers**, who depend on high quality graduates and can offer the postsecondary system insights about the preparedness of graduates for the work force.

HEQCO’s research plan is described within the three mandate areas identified in the Act that established the agency in 2005: accessibility, quality and accountability.

**Accessibility**

Government policies and funding have already enabled impressive gains in enrolment. In fact, over the past decade, postsecondary enrolment in Ontario has grown more than any other province in Canada. However, to achieve the government’s goal of a 70% postsecondary attainment rate, Ontario’s higher education system must be accessible to more than just the traditional 18-24 year old student going directly from high school to college or university. There is a need for the system to be more responsive and accommodating to adult learners and to potential students from groups who are not accessing higher education in appropriate numbers. In addition, the proliferation of technology-assisted learning, especially with the advent of Massively Open Online Courses (MOOCs), may alter the pathways by which students enter and navigate through postsecondary institutions; we understand very little about the ways in which the rapid expansion of online learning will influence traditional patterns of access to postsecondary education.
In 2013-14, HEQCO will publish a series of papers from ongoing research to describe the participation and retention issues for older students and those with disabilities and from other non-traditional pathways, including those pursuing the apprenticeship option.

In 2013-14, in addition to ongoing access and pathways projects, HEQCO will complete or initiate additional research investigating:

1. The pathways being used by adult and lifelong learners ("non-traditional" students) to access postsecondary education and policy changes that may ease their transition into and through Ontario’s postsecondary system.
2. How the increased participation in online learning is influencing access into and through postsecondary education.

**Quality**

The significant recent enrolment increases in Ontario’s postsecondary system challenge the quality of the student experience. Yet, quality is the most critical variable in any higher education system and is the currency by which the worth and the value of a higher education system and its graduates are measured. Our obligation is to graduate students with credentials that are understood, both within Canada and around the world, as reflecting a high quality, high value, progressive and modern education. The majority of HEQCO’s efforts in 2013-14 will continue to examine how we can sustain, if not enhance, the quality of the Ontario student experience even in light of fiscal constraints.

Our quality agenda has three major elements:

- Learning outcomes
- The relationship of postsecondary education to the labour force
- Evaluation of innovations in teaching and learning

**Learning Outcomes:**

In 2012-13, aside from the co-sponsorship of a conference on learning outcomes with the Council of Ontario Universities and Colleges Ontario, and the publication of a monograph from the 2011 *Measuring Learning Outcomes Conference* by HEQCO, we conducted a set of research projects to define and measure learning outcomes including: i) a province-wide “Tuning” project to develop learning outcomes in three sectors (physical sciences, life and health sciences, social sciences), ii) management of Ontario’s participation in the civil engineering AHELO OECD project, and iii) a set of projects with Ontario colleges and universities to assess the feasibility of the Collegiate Learning Assessment (CLA) and the Community College Learning
Assessment (CCLA) to measure critical thinking. The CLA projects will be continuing through 2013-14. The Tuning and AHELO projects will be completed by the end of this planning year (April 2013).

These projects, combined with other learning outcomes research conducted by other groups in other counties, have led us to several fundamental conclusions about learning outcomes that will shape HEQCO’s continuation of learning outcomes research in 2013-14. Specifically:

1. Within Ontario and around the world, groups have become very skilled at writing learning outcomes; the HEQCO-led “Tuning” project has been particularly informative. There seems to be little added value in further projects to write more, or even refine current, descriptions of learning outcomes. Rather, the key impediment is now assessment. Specifically, can we develop methods and tests to provide reliable, valid and meaningful measurements of these desired learning outcomes?

2. There is considerable consensus, no matter how the issue of learning outcomes is approached, on a slate of generic cognitive and learning skills (e.g. problem-solving, critical thinking, oral and written communication, numeracy, adaptability etc.) that we expect students to have upon completion of a postsecondary education.

3. Learning outcomes, even generic learning and cognitive skills, are best measured as part of the normal and on-going evaluations of students as they proceed through their course of study. There are some significant impediments if measurement of these learning skills is pursued as an “add-on”.

Given these conclusions, the 2013-14 HEQCO work on learning outcomes will focus on the development and implementation of methods and instruments to measure general cognitive learning skills. A key strategy will be to recruit a consortium of colleges and universities to work collaboratively to explore promising avenues. Institutions successful in their application to join this consortium will have made several tangible commitments to the measurement of learning outcomes in their institutions and to the dissemination of their findings beyond the consortium.

The relationship of postsecondary education to the labour force:

One of the primary reasons governments support colleges and universities is because of the centrality of higher education to a robust and vibrant, knowledge-based economy. Similarly, students say that their primary reason for seeking a postsecondary education is the desire to obtain the credential necessary to get a good job. Understanding the linkage between higher education and labour market outcomes is a major area of focus for governments and students, and that is why it represents a major theme in our research. In 2012-13 we will have published
a series of reports on the relationship between postsecondary education and the workforce, including papers on labour market outcomes of graduating students, the 2012 Campus Recruitment and Benchmark Report from the Canadian Association of Career Educators and Employers (supported by our Opportunities to Innovate Fund), and hosted an international conference: Learning to Earning: Higher Education and the Changing Job Market. The results of these projects have led us to identify the following as important areas to pursue further in 2013-14:

1. Employer survey: There is consensus that postsecondary education should educate students with the skill sets appropriate and needed in the 21st century workforce. But what are these skill sets are and, more significantly, are employers satisfied with the skill sets of recent postsecondary graduates? If not, what are the gaps? These issues were highlighted as one of the significant data gaps in our recent analysis of the productivity of the Ontario postsecondary system. We, and others, have conducted some limited employer surveys. However, it is time to initiate a far more comprehensive and meaningful employer survey and we will be initiating several projects to achieve this goal. Aside from the work within Ontario itself, there is considerable interest in these issues across Canada so we are working with the federal government to extend these analyses to the national level.

2. The private sector and industry also invest considerably in the education and training of their employees. In fact, the higher education programs of some companies (e.g., General Electric) are of a high profile and well regarded. We intend to research the scope, role and motivation behind industry’s activities in the higher education and training of their employees. Are these programs intended to provide additional value to the education students are acknowledged to have received in their postsecondary studies? Or, are they designed to fill in the gaps of an education employers believe students should have obtained, but did not, as part of their postsecondary programs? Finally, it is private sector and venture capital firms that are supporting the proliferation of on-line ventures and offerings, especially the most massive ones. We will conduct research to identify the motivation behind these private sector decisions, how they might affect the nature of post-secondary education and the potential for a greater representation of these activities and firms in Ontario (where they appear to be almost absent).

3. We will continue and expand a significant set of projects currently underway that investigate experiential and work-integrated learning opportunities, as well as career training and portfolios, being introduced by colleges and universities designed to better prepare students and graduates for the workforce.
Evaluation of innovations in teaching and learning

In 2012-13, HEQCO has nearly 50 research projects underway with Ontario colleges and universities to evaluate specific teaching innovations or experiments in large classes or using technology. The HEQCO Research Consultation Group has been very useful to improve the quality of these research projects. The first reports are already being published, and many of these projects continue in 2013-14. In addition to a series of symposia in March 2013, we intend to publish several thematic papers summarizing the broader findings of these projects as well as @Issue papers on work-integrated learning and teaching and learning.

**Accountability**

All governments are holding their public postsecondary systems to greater account, reflecting the greater scrutiny governments are under regarding how they spend the public purse. The best accountability regimes that governments introduce promote and guide the system towards public goals, are aligned with purposeful government policy and are respectful of traditions of institutional autonomy and governance.

Ontario has been hit hard by the recession and faces several years of considerable financial restraint in the public sector. The challenge for the province, and one that it shares with many other jurisdictions around the world, is how to provide a high quality education to more students with fewer dollars. This challenge shapes HEQCO’s future research in the general areas of accountability. It has also led the government to ask for even more assistance from HEQCO to advise on and inform possible new government initiatives and policies. This has led to a significant number of HEQCO projects that continue and expand in 2012-14. These include work on:

- Graduate studies
- Productivity
- Indicators
- Cost and quality implications of higher education trends
- Strategic Mandate Agreements

**Graduate studies**

Both provincial (especially Ontario) and federal governments have invested heavily in the expansion of the number of students pursuing graduate (master’s and PhD) degrees. We have already published several reports detailing the impact of these investments in Ontario. We will
continue this series in 2013-14 and also complete a Canada-wide analysis of the impact and outcomes of these investments.

Productivity

As part of its initiation of a province-wide consultation on postsecondary education, the Ontario government asked HEQCO to conduct a productivity analysis of the Ontario system. It is a request and analysis that we welcomed. In December 2012, with the guidance of an Advisory Panel, we published a preliminary analysis of the productivity of the Ontario system. This analysis led to the identification of some significant data gaps that needed to be filled to provide a better and more useful and meaningful assessment, particularly the identification of the most promising areas for productivity improvement. We are committed to continuing this analysis and to initiate projects to fill those data gaps. We have received considerable support and assistance from Colleges Ontario, the Council of Ontario Universities and MTCU on this project, which also encourage the continuation of these analyses.

Indicators

Consistent with HEQCO’s legislated mandate and a specific request from government, we have been preparing a set of indicators to assess the state of postsecondary education in Ontario and how it compares to other relevant jurisdictions. The first report will be issued in early 2013, but we expect to publish this report annually. There is considerable ongoing work to refine the indicators and to find better ways of measuring some of the critical variables that are important in any such evaluation but for which we do not currently have adequate measurement procedures.

Cost and quality implications of higher education trends

There are several dominant trends in the evolution of public higher education systems, but we understand little about the quality and cost implications of these developments. We have initiated several projects (RFPs released in 2012 but work to be done in 2013-14) to examine the cost and quality implications of two such trends: i) the shift to competency-based credentialing and ii) the more extensive use of on-line learning. We also expect to initiate several other projects consistent with this theme, including an appraisal of the effectiveness and cost implications of incentives institutions and governments have used to accelerate time-to-completion.
**Strategic Mandate Agreements**

As part of its efforts to promote a more differentiated Ontario postsecondary system and to introduce some institutional funding tied to the achievement of specific objectives and mandates, MTCU initiated a process in the summer of 2012 asking each Ontario postsecondary institution to submit a Strategic Mandate submission articulating its distinctive mandate and to identify its top three priorities consistent with this mandate. HEQCO was asked to provide a critical appraisal of these submissions and to fashion some recommendations to MTCU based on the input received. We assembled an Expert Panel to assist with this task. Although the report to government is scheduled for February, there is likely to be an ongoing advisory and informational role for HEQCO after this date as the government explores policies and actions resulting from these, and the other, consultations they have conducted.

**Other HEQCO activities for 2013-14**

We identify two other sets of activities in 2013-14 that represent the evolution of HEQCO’s roles and activities and underlie its emerging work.

**Greater involvement in data collection**

As a result of HEQCO’s Indicators and Productivity projects, we have been increasingly involved in discussions and activities with groups which assemble large data bases of higher education data. The distancing of Statistics Canada from some large higher education data bases it used to collect, and the growing recognition of the need to obtain more pointed and useful data across Canada to inform higher education decisions, has led to our deeper engagement with data collection agencies and groups at all levels and to an increasing role for us to promote and participate in collection of large relevant data sets. It was this increasing involvement that led to our recent hiring of Martin Hicks as Executive Director, Data and Statistics – a hiring that has proven to be very helpful. We will be hosting a national workshop on higher education data collection in 2013-14 and, in general, we anticipate a greater involvement of HEQCO in the development, sponsorship and implementation of data collection exercises relevant to our research projects.

**HEQCO’s increasing national and international profile**

Aside from the generally positive reaction to our work, the involvement of HEQCO in several highly visible and prominent activities – especially AHELO and the Indicators and Productivity projects – has increased our international and national profile. We are now regularly approached for advice and engagements from other provinces and countries. In some cases, these interactions have the potential to result in contracts with governments, institutions or groups outside of Ontario that are consistent with our mandate and, in fact, increase our capacity to do additional work for the province at no additional cost to Ontario. HEQCO will work closely with MTCU to seek legislative authority to engage in
revenue-generating activities consistent with HEQCO’s mandate. The HEQCO Board has approved a set of principles to guide any such revenue-generating opportunities that would, if authority is obtained, permit us to conduct more higher education research at no additional cost to the Ontario public purse.