



# Measuring Performance in Higher Education

## What Does HEQCO's Research Show?

- Traditional measures of institutional performance have been based on input measures, which say little about how students and institutions are performing.
- Performance measures should be based on outcomes, and linked to government's priorities and goals.
- HEQCO has identified three overarching objectives for an outcomes-based performance-measurement system: educational quality, equity of opportunity and financial sustainability.
- HEQCO has identified seven outcomes-based metrics to measure students' skills, graduate outcomes, economic and social mobility, students' transfer patterns and graduation rates, and the financial sustainability of institutions.





## What is the Problem?

Methods of measuring the performance of postsecondary institutions have traditionally relied on input measures such as enrolment rates. These measures don't reflect government priorities and say little about how students and institutions are performing. What expectations should government have for the province's colleges and universities? And what is the best way to measure and evaluate the performance of the institutions?

## What Does HEQCO's Research Show?

### Identifying Objectives

While accountability is important, the primary goal of performance measurement should be to drive improvement in the system and for the province. The first step in moving toward a system of performance measurement is identifying the objectives the government wants to achieve. HEQCO has identified three overarching objectives for a new performance-measurement system.<sup>1</sup> The primary goals should be to ensure that all students have equitable access to higher education, that institutions provide students with a high-quality education that allows them to succeed in their personal and professional lives, and that institutions operate efficiently and be financially sustainable.

### Constructing Metrics

The metrics selected to measure performance should be closely tied to the government's broad objectives. Many performance regimes rely on input measures, such as enrolment and number of faculty. New measures should focus on impacts such as what students have learned and the economic and social effects of a postsecondary education. They should be measured using the best data available.

**HEQCO has proposed that a performance-assessment regime should include measures of the following elements:**

- **Student Skills** — HEQCO's work on skills assessment found that large-scale assessment of transferable skills such as literacy, numeracy and problem solving using validated tests is feasible. In partnership with 20 Ontario colleges and universities, HEQCO conducted two pilot assessments of Ontario students' numeracy, literacy and critical-thinking skills involving more than 7,500 students. One trial used the Education and Skills Online assessment of adult literacy and numeracy.<sup>2</sup> A second trial used the HEighten Critical Thinking Assessment, an online test developed by Education Testing Services.<sup>3</sup>
- **Graduate Outcomes** — Equally important to understanding what students learn at college and university is how they fare in the job market once they graduate. Ontario tracks employment outcomes of its students through graduate surveys, usually at six months and two years after graduation. Newly available data sets, such as the Education and Labour Market Longitudinal Linkage Platform, link graduates' school records with income tax information. This allows for a more complete and accurate picture of postgraduate income.<sup>4</sup>

- **Economic and Social Mobility** — New tax-linked data sets will also allow researchers to assess the effect of postsecondary credentials on the economic prospects and labour market outcomes of underrepresented students including those from low-income families, Indigenous students, those with disabilities and first-generation students.<sup>5</sup> The data would shed light on whether underrepresented students graduate in similar numbers as other students do and reap the benefits of their postsecondary education.
- **Transfer Patterns and Graduation Rates** — Measuring graduation rates accurately is important to ensure the efficacy and efficiency of the postsecondary sector. Graduation rates are typically calculated by tracking a cohort's progress through a program. The data does not track students who transfer between programs and institutions, or those who stop their studies and then re-enrol. The Ontario Education Number, an individual number assigned to all students in the province, would provide a more accurate picture of students' mobility patterns and their progress through the system, including graduation. It would also provide insight into whether interventions for underrepresented students are working or if they need reform.
- **Financial Sustainability** — HEQCO's previous work on the sustainability of the province's postsecondary institutions found that stagnant rates of domestic enrolment may put pressure on institutions' revenue streams.<sup>6</sup> In an effort to ensure that institutions remain financially stable, HEQCO has called on institutions to rein in expenses, primarily their labour costs.

## What Can Be Done?

HEQCO has argued that the principal goal of performance measurement should be to drive improvement, rather than act as an accountability tool. Assessment should be tied to government policy and objectives, focused on outcomes and based on the best available data. HEQCO has identified three broad policy objectives that could form the basis of a new performance-measurement plan and seven key "Metrics for the 21st Century" to measure progress toward meeting these objectives.<sup>7</sup>

## What More Would We Like to Know?

Based on HEQCO's research, the province has indicated that colleges and universities will be required to begin measuring skills and competencies in postsecondary students. Elements of institutional and system performance other than those identified in HEQCO's research are also important but more difficult to measure, such as research, innovation and community engagement. Initial metrics are welcome, but more research might be useful in determining the best ways to measure these elements from an outcomes-based perspective, and how these and other measures can help drive improvement.



## Metrics for the 21st Century

Ontario objectives	Outcomes we need to know	How we will measure these
<b>QUALITY:</b> Students graduate with the skills they need and are successful in the job market.	Are students able to construct efficient pathways to graduation?	Replace the current cohort-based graduation rate with OEN-driven data and begin tracking student mobility between institutions and programs. Use the data to improve retention, credit transfer and program-level graduation outcomes.
	Are students acquiring the transferable skills they need to succeed in tomorrow's job market?	Implement province-wide, program-level, online testing of incoming and graduating students using Education and Skills Online and the HEIghten Critical Thinking Assessment. Use the data to drive improvement at the program level.
	Are graduates realizing long-term labour market returns for their investment in public higher education?	Replace the current short-term graduate employment survey with income tax data linked to administrative records. Use the data to drive improvement at the program level.
<b>OPPORTUNITY:</b> All Ontarians have an equitable opportunity to access and reap the benefits of public higher education.	Does higher education deliver for Ontarians from low-income or marginalized circumstances?	Use tax data linked to student-record data to measure the participation gap and labour market outcomes for low-income and first-generation Ontarians. Use the data to tailor strategies that close the gap.
<b>SUSTAINABILITY:</b> The system operates efficiently and sustainably in order to meet its quality and opportunity objectives with available resources.	Are institutional expenditures, which are primarily a function of labour costs, managed at a sustainable rate of increase?	Require institutions to measure and publish the real increase in employee remuneration. Use the data to inform sustainable compensation strategies.
	Are faculty deployed efficiently?	Require institutions to measure and publish faculty-workload data, including teaching loads, research outputs and salary levels. Use the data to deploy faculty effectively and to drive differentiation at both the faculty and institutional levels.
	Are institutions financially sound?	Update and share key financial ratios promptly. Use the data to identify, investigate and remediate emerging weaknesses.



## Endnotes

1. Weingarten, H.P., Hicks, M., Kaufman, A., Chatoor, K., MacKay, E. & Pichette, J. (2019). *Postsecondary Education Metrics for the 21st Century*. Toronto: Higher Education Quality Council of Ontario.
2. Weingarten, H.P., Brumwell, S., Chatoor, K. & Hudak, L. (2018). *Measuring Essential Skills of Postsecondary Students: Final Report of the Essential Adult Skills Initiative*. Toronto: Higher Education Quality Council of Ontario.
3. Finnie, R., Dubois, M., Pavlic, D. & Suleymanoglu (Bozkurt), E. (2018). *Measuring Critical-thinking Skills of Postsecondary Students*. Toronto: Higher Education Quality Council of Ontario.
4. Frenette, M. (2019). *Do Youth from Lower- and Higher-income Families Benefit Equally from Postsecondary Education?* Ottawa: Statistics Canada.
5. Frenette, M. (2019). *Do Youth from Lower- and Higher-income Families Benefit Equally from Postsecondary Education?* Ottawa: Statistics Canada; See also Chatoor, K., MacKay, E. & Hudak, L. (2019). *Parental Education and Postsecondary Attainment: Does the Apple Fall Far from the Tree?* Toronto: Higher Education Quality Council of Ontario.
6. Weingarten, H.P., Kaufman, A., Jonker, L. & Hicks, M. (2018). *The Sustainability of the Ontario Public Postsecondary System: Putting Together the Pieces of the Puzzle*. Toronto: Higher Education Quality Council of Ontario.
7. Weingarten, H.P., Hicks, M., Kaufman, A., Chatoor, K., MacKay, E. & Pichette, J. (2019). *Postsecondary Education Metrics for the 21st Century*. Toronto: Higher Education Quality Council of Ontario.