

Quality Assurance in Higher Education:
A Review of the Literature

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Introduction

Over the past two decades, quality assurance processes in higher education have become increasingly common in Europe, the United Kingdom and Australia, and are steadily gaining in importance in Canada and the United States. A number of factors have contributed to this development: government and industry have advocated that a well-educated workforce is essential to increased productivity and to maintaining a competitive edge in the global knowledge economy, resulting in an increase in public funding for higher education and a drive to make postsecondary education more accessible, particularly for under-represented populations. This, in turn, has brought about calls for greater accountability on the part of educational providers and the measuring of outputs through quality assurance processes (Australian Universities Quality Agency, 2009; Harvey, 1998 & 2005; Harvey & Knight, 1996; Koslowski, 2006; Quality Assurance Task Force, 2010; Woodhouse, 1999). In Ontario, external audit and appraisal of graduate programs has been in place since 1968; for undergraduate programs, it has existed since 1996. 2010 marked the establishment of the Ontario Universities Council on Quality Assurance (the Quality Council) and a new quality assurance protocol, the *Quality Assurance Framework*. The Quality Council is responsible for assuring (a) the quality of all programs leading to degrees and graduate diplomas granted by Ontario's publicly assisted universities, and (b) the integrity of university quality assurance processes. Through these practices, the Quality Council seeks to assist with the improvement and enhancement of university programs.

The Quality Council has the following mandate:

- to guide Ontario's publicly assisted universities in the ongoing quality assurance of their academic programs;
- to review and approve proposals for new graduate and undergraduate programs;
- to ensure through regular audits that Ontario's publicly assisted universities comply with quality assurance guidelines, policies and regulations for graduate and undergraduate programs;
- to communicate final decisions to the Ministry of Training, Colleges and Universities;

- to review and revise, from time to time for future application, the Council of Ontario University's quality assurance protocols in light of its own experiences and developments in the field of quality assurance;
- to liaise with other quality assurance agencies, both provincially and elsewhere; and
- to undergo regular independent review and audit at intervals of no longer than eight years. (Quality Assurance Task Force, 2010, p. 35)

With the implementation of the *Quality Assurance Framework*, publicly assisted universities in Ontario have placed themselves in the mainstream of quality assurance. The following literature review provides an overview of some of the main themes related to quality assurance in higher education in order to provide background information and context for the *Framework*. First, we will examine the debate surrounding the meaning and measures of quality in higher education. Next, we will discuss the dual purpose of quality assurance—to ensure accountability and promote enhancement—and the processes of accreditation, assessment and audit of quality assurance by which it is achieved. Finally, we will review common approaches to quality assurance in higher education and examine the main features of outcome-based education.

Defining “Quality”

One of the overarching themes in the higher education literature on quality assurance is how to define and measure “quality”. Harvey and Knight (1996) identify the following meanings attributed to quality:

- quality as *exceptional*, i.e., exceptionally high standards of academic achievement;
- quality as *perfection* (or consistency), which focuses on processes and their specifications and is related to zero defects and quality culture;
- quality as *fitness for purpose*, which judges the quality of a product or service in terms of the extent to which its stated purpose—defined either as meeting customer specifications or conformity with the institutional mission—is met;
- quality as *value for money*, which assesses quality in terms of return on investment or expenditure and is related to accountability; and
- quality as *transformation*, which defines quality as a process of qualitative change with emphasis on adding value to students and empowering them.

Quality as transformation is further described as “critical transformation” and as a “meta-quality concept”:

The transformative notion of quality presupposes a fundamental purpose of higher education. It assumes that higher education must concern itself with transforming the life experiences of students, by enhancing or empowering them. The transformative conception is, in effect, a meta-quality concept. Other concepts, such as perfection, high standards, fitness for purpose and value for

money, are *possible* operationalizations of the transformative process rather than ends in themselves. (Harvey & Knight, 1996, pp. 15-16)

Bogue (1998) highlights the following three “perspectives” on quality common to institutions of higher education:

- *limited supply*, often used in institutional rankings such as Macleans;
- *quality within mission*, defined as “fitness for purpose”; and
- *value-added*, or *quality in results*, defined by Astin (1985, cited in Bogue, 1998, p. 9) as the impact “on the student’s knowledge and personal development and on the faculty member’s scholarly and pedagogical ability and productivity”.

The definitions put forth by Harvey and Knight (1996) and Bogue (1998) can be aligned as presented in Table 1. *Definitions of Quality Compared.*

Table 1. <i>Definitions of Quality Compared</i>	
Harvey and Knight (1996)	Bogue (1998)
Quality as exceptional	Quality as limited supply
Quality as perfection or consistency	
Quality as fitness for purpose (mission)	Quality within mission
Quality as value for money	
Quality as transformation	Quality as value-added

According to Koslowski (2006), in the 1980’s and 1990’s, quality was defined as *excellence* or *limited supply* and assessed according to the internal resources of an institution, such as the number of faculty with terminal degrees, the number of volumes in the library, reputation, endowment, etc. Emphasis was placed on high quality inputs and producing “excellent” outcomes. Total Quality Management and Continuous Quality Improvement, approaches borrowed from corporate management paradigms, followed in the late 1990’s. These were replaced in turn by performance-oriented, outcomes-based approaches to quality that stress identifying and measuring competencies students should gain through a university education. Since then, the most widely accepted definition of quality is *fitness for purpose* (Harvey, 1998;

Woodhouse, 1999). One can surmise that its appeal stems from its inherent flexibility, which allows institutions to measure quality in terms of their ability to meet their respective missions and objectives.

For many scholars, the lack of agreement surrounding the meaning of quality in higher education suggests that the concept—borrowed from business and industry—is ill suited to the educational context. While customer-based definitions of quality have gained pre-eminence in business, in higher education, they are viewed as problematic for a number of reasons. First, a singular view of quality is not representative of the varied—and sometimes conflicting—views of stakeholder groups: “The key issue is the ability of the quality concept to facilitate the perspective of a range of stakeholders who have different conceptions of higher education” (Cullen, Joyce, Hassall & Broadbent, 2003, p. 6). For example, in determining whether or not their educational experience has met their expectations, students are most likely to judge quality as *fitness for purpose*, while faculty members are apt to measure quality in terms of inputs and outputs, such as research dollars and productivity, number of publications, number of courses taught, etc., or outcomes such as improved student learning. In contrast, external stakeholders such as government and the public would almost certainly agree that quality equals value for money and doing more with less. Moreover, because the two university mainstays of research and teaching differ in terms of purpose, process and outcomes, they *require* different approaches to quality assurance (Marshall, 1998). In light of this, it is not surprising that Harvey and Green (1993) suggest that the only practical solution to this “complex philosophical question” is to recognize and validate all of these diverse perspectives and reject the possibility of accepting a singular definition of quality.

Building on work by Koslowksi (2006), Table 2. *Definitions of Quality in Business and Higher Education* brings together the definitions of quality identified above and aligns them with the stakeholder group most likely to support each.

Table 2. <i>Definitions of Quality in Business and Higher Education</i>				
BUSINESS		EDUCATION		
Definition		Definition		Stakeholders
<i>Transcendent</i>	Quality results from producer's expertise	<i>Exceptional</i>	Quality results from expertise of professoriate	Faculty
<i>Manufacturing-based</i>	Product conforms to specifications;	<i>Fitness for purpose (mission)</i>	Institution is capable of	External stakeholders,

Table 2.

Definitions of Quality in Business and Higher Education

BUSINESS		EDUCATION		
Definition		Definition		Stakeholders
	fitness for purpose		meeting educational aims and objectives	accreditation agencies
<i>Product-based</i>	Quality is determined by the presence or absence of an ingredient	<i>Transformative Value-added</i>	Linked to assessment; evidence of quality is increased student learning	Accreditation agencies, employers
<i>Value-based</i>	Acceptable performance at an acceptable price	<i>Value for money Limited supply</i>	External rankings, such as Macleans Resource orientation	Administrators, parents, students
<i>User-based</i>	Quality defined by consumers' needs and preferences	<i>Fitness for purpose (customer specification)</i>	Outcomes meet specified requirements	Students, government (depending on who is identified as the "customer")

Within Ontario's *Quality Assurance Framework* (Quality Assurance Task Force, 2010), quality is operationalized in several ways including: (a) fitness for purpose (mission), (b) exceptional, and (c) value-added. For example, the criteria for the evaluation of new undergraduate and graduate programs, which include "consistency of the program with the institution's mission and academic plans" and "clarity and appropriateness of the program's requirements and associated learning outcomes in addressing the institution's own undergraduate and graduate Degree Level Expectations" (p. 8), assess *fitness for purpose*. The view of quality as *exceptional* is evident in the measures described in section 2.1.10, "Quality and other indicators". These measures, intended to "provide evidence of quality of the faculty" and "evidence of a program structure and faculty research that will ensure the intellectual quality of the student experience", include

qualifications, research, innovation and scholarly record, and “appropriateness of collective faculty expertise to contribute substantively to the proposed program” (p. 11). Finally, the Degree Level Expectations included in the *Framework*, which represent the threshold level skills and knowledge Ontario students must demonstrate in order to successfully complete their programs, measure *fitness for purpose* at the program level: “The Degree Level Expectations, combined with the expert judgment of external disciplinary scholars, provide the benchmarks for assessing a program’s standards and quality” (Quality Assurance Task Force, 2010, p. 18). Since they “serve as Ontario universities’ academic standards and identify the knowledge and skill outcome competencies that reflect progressive levels of intellectual and creative development” (Quality Assurance Task Force, 2010, p. 4), one could argue that they could also be used to measure the *value-added* dimension of quality, or the impact of the student’s educational experience on his/her knowledge and personal development.

Quality Assurance: Accountability and/or Enhancement

If quality in higher education is most often defined today as “fitness for purpose”, as we have seen above, *quality assurance* “refers to the policies, attitudes, actions and procedures necessary to ensure that quality is being maintained and enhanced” (Woodhouse, 1999, p. 30). Quality assurance is intended to ensure accountability and/or to bring about improvement (Canadian Council on Learning, 2009; Harvey, 1998). Accountability is most often associated with external stakeholders, such as state and regional accrediting bodies, governmental agencies and the public, while improvement—or enhancement—focuses on internal processes: “Quality occupies the middle ground between the external and the internal; a philosophy or system that focuses and guides the interaction between the external calls for increased accountability and the internal efforts of an organization that is addressing it” (Koslowki, 2006, p. 280).

Although they are not synonymous, the terms “quality”, “accountability” and “assessment” are often used interchangeably (Koslowski, 2006). Drawing primarily on work by Woodhouse (1999), the following section provides an overview of quality assurance processes and attempts to clarify the meaning of these terms.

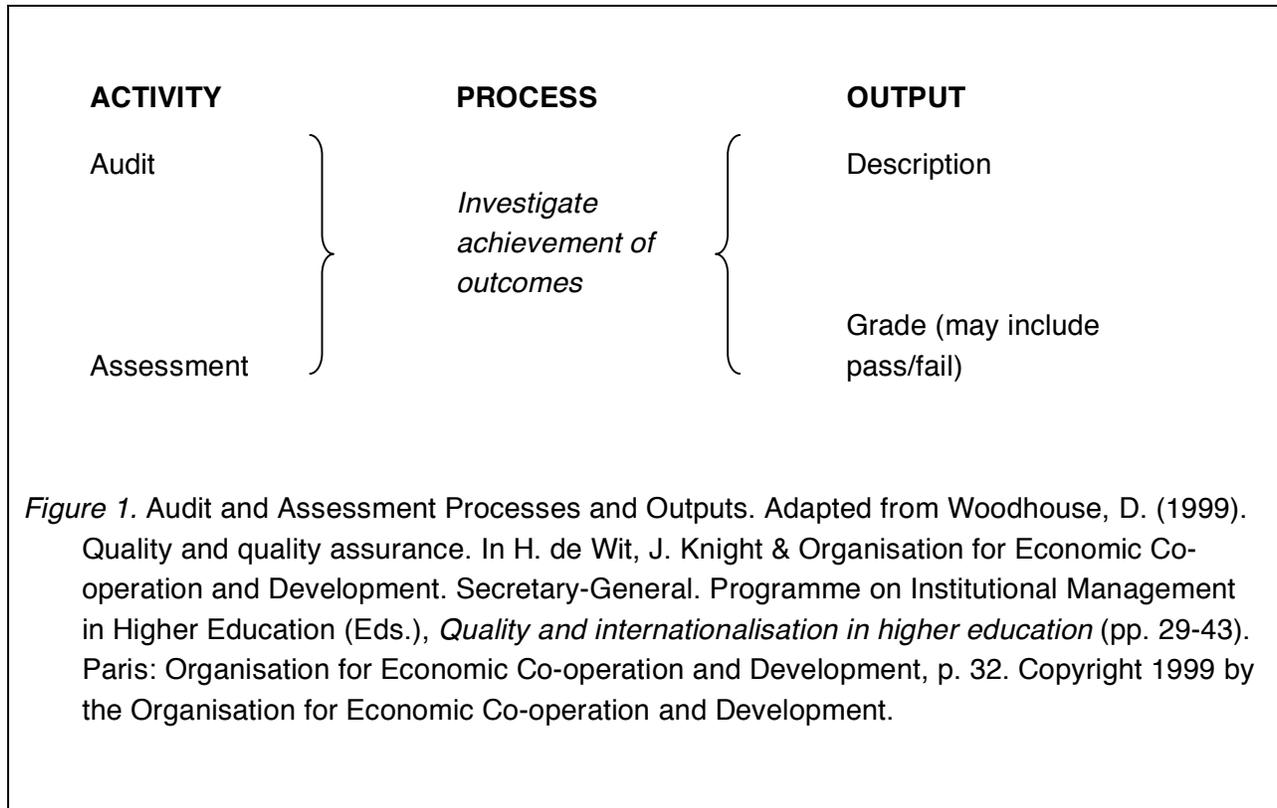
Accountability requires quality measures, metrics or performance indicators, typically defined as inputs, outputs or outcomes. The processes of *accreditation*, *audit* and *assessment* are used to gather data in order to provide evidence of accountability by answering the following questions:

- Are the institution’s objectives appropriate?
- Are its plans suitable for these objectives?
- Do its actions conform to its plans?
- Are its actions effective in achieving its objectives?
- What is the measure of the objectives? (Woodhouse, 1999, p. 33)

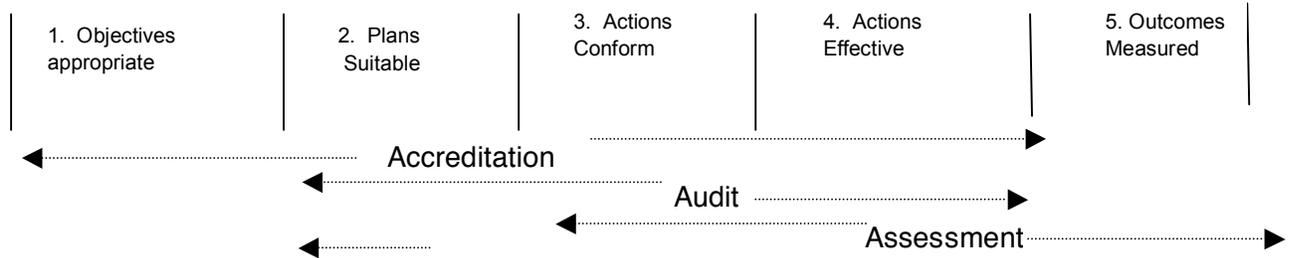
Accreditation determines whether an institution or program meets threshold quality criteria by examining the mission, resources and relevant processes of the institution or program. *Assessment*, often called “evaluation”, measures the quality of outputs. *Audit*, sometimes referred to as a “review”, verifies:

- the suitability of the planned quality procedures in relation to the stated objectives;
- the conformity of the planned quality procedures in relation to the stated objectives; and
- the effectiveness of the activities in achieving the stated objectives. (Woodhouse, 1999, pp. 30-31)

Both audit and assessment focus on outcomes but they produce different results, as illustrated in Figure 1. *Audit and Assessment Processes and Outputs.*



Although audit, assessment and accreditation represent three distinct concepts and processes, they may coincide, merge or mingle, and “any attempt to make a precise definition is further confused by the fact that most of these terms are also used generically to refer to any review or evaluation process” (Woodhouse, 1999, pp. 33-34). Figure 2. *Accreditation, Assessment, Audit. Five Point Checking Sequence* clarifies the relationship between these three concepts.



*Figure 2. Accreditation, assessment, audit. Five point checking sequence. Adapted from Woodhouse, D. (1999). Quality and quality assurance. In H. de Wit, J. Knight & Organisation for Economic Co-operation and Development. Secretary-General. Programme on Institutional Management in Higher Education (Eds.), *Quality and internationalisation in higher education* (pp. 29-43). Paris: Organisation for Economic Co-operation and Development, p. 33. Copyright 1999 by the Organisation for Economic Co-operation and Development.*

Accountability versus Enhancement

A common criticism of quality assurance is that it pays little attention to educational processes, educational theory and/or student learning and as a result, improvement or enhancement is only incidental (Bogue, 1998; Canadian Council on Learning, 2009; Harvey, 1998, 2005; Harvey & Knight, 1996; Houston, 2008; Law, 2010; Woodhouse, 1999). “Many people claim [accountability and improvement] are incompatible, as the openness essential for improvement will be absent if accountability is the aim. Others claim that they are inseparable, as accountability can always be re-phrased to focus on improvement” (Woodhouse, 1999, p. 37). The exploration of this tension, a central theme in the literature, is briefly discussed below.

Quality assurance and enhancement are based in quality paradigms that are philosophically opposed. Since accountability is the main driving force behind quality assurance in higher education, the primary goals of quality assurance processes are to monitor and maintain quality. As a result, quality assurance processes tend to inhibit innovation in teaching and learning rather than advance it.

This emphasis on accountability is the primary reason why there has been very little linkage between quality policy and the encouragement of innovative approaches to teaching and learning. Accountability focuses attention on quality as value for money, although this may be mediated by other notions of quality. What this accountability orientation overlooks is the transformative process. If quality is viewed as a process in which key stakeholders are participants, rather than as a product made available to customers or clients, then it is necessary to explore the nature, development and evolving outcomes of that transformative

process. ...A transformative notion of quality requires a focus on *change*. (Harvey & Knight, 1996, p. 68)

Despite these criticisms, Harvey (1998) singles out the Ontario Council of Graduate Studies (OCGS) implementation of the External Quality Monitoring approach as a positive example of quality assurance that results in quality enhancement:

The limited research evidence suggests that EQM has provided an initial impetus to change, but that it offers little by way on continuing momentum. ...[However] research suggests that there is sufficient evidence to show that the process, overseen by the Ontario Council on Graduate Studies (OCGS), has been effective in maintaining and improving the quality of graduate programs. Improvement can be seen in terms of quantitative, summative indicators such as completion rates and times to completion, and in terms of improvements in peer evaluations over a seven-year cycle. Whether this has resulted in an institutional culture of continuous improvement is less clear. (Harvey, 1998, p. 9)

While Bogue (1998) suggests that “it would perhaps be both arrogant and unwise to suggest that ‘good practice’ in quality assurance could be conveniently summarized in a small number of bulleted ideas or principles” (p. 15), he does offer the following “governing ideals and design principles” as a means to ensure quality assurance processes address the demands of accountability and enhancement:

- Can the program or institution offer rich evidence or multiple indicators of both performance and improvement, activity and achievements?
- Are these indicators of performance being used to make increasingly informed decisions on policy, program, and personnel?
- Is the distinctive mission of the program, institution, or both affirmed and advanced by the indicators of quality and performance selected?
- Are quality assurance systems designed to minimize the duplication of effort and to maximize usefulness for decisions? Is there an awareness of and allegiance to the overall approach by faculty and staff?
- Is each quality assurance instrument clearly linked to teaching and learning and its impact realized?
- Is the campus making use of external standards and judgments that go beyond the confines of its own experience and faculty? (Bogue, 1998, pp. 15-16)

Ontario’s *Quality Assurance Framework* (Quality Assurance Task Force, 2010) seeks to build on “well-tested [quality assurance] processes” in order to “balance the need for accountability with the need to encourage normal curricular evolution”.

In particular, if quality assurance measures become too onerous or restrictive, they can become impediments rather than facilitators of continuous program improvements. Ontario universities have kept this in mind in order to produce a Quality Assurance Framework that supports innovation and improvement while cultivating a culture of transparency and accountability—*i.e.* quality *assurance* that produces quality *enhancement*. (Quality Assurance Task Force, 2010, p. 1)

Provisions for fostering innovation and encouraging enhancement form part of the requirements for the *Institutional Quality Assurance Process* (IQAP), designed and implemented by each institution in accordance with its own institutional mission statement, and which forms the core of the *Framework*. These include “evidence of any significant innovation or creativity in the content and/or delivery of the program relative to other programs” and “initiatives taken to enhance the quality of the program and the associated teaching and learning environment” (Quality Assurance Task Force, 2010, pp. 23-24).

Approaches to Quality Assurance

We have seen that quality assurance in higher education seeks primarily to maintain quality through a combination of accreditation, assessment, and audit. There are a number of approaches to quality assurance, each of which incorporates various combinations of (self-) assessment, audit or peer review, and performance indicators. The most widely used approaches to quality assurance in higher education are:

- External Quality Monitoring (EQM), also referred to as External Quality Review (EQR);
- Assessment-and-Outcomes Movement, which calls for the development of performance evidence and attention to value-added questions;
- Total Quality Management (TQM), which focuses on continuous improvement and customer satisfaction; and
- accountability and performance indicator reports, which focus on inputs and outputs, such as enrollment trends, student performance on admissions examinations, retention and graduation rates, pass rates on licensure and other professional examinations, job placement rates, and student and alumni satisfaction. (Canadian Council on Learning, 2009; Bogue, 1998; Harvey & Knight, 1996; Houston, 2008; Koslowski, 2006; Law, 2010)

External Quality Monitoring (EQM), or “delegated accountability”, in combination with assessment-and-outcomes measurement, is found in higher education systems in Europe, Asia, the United States and Canada (Bogue, 1998; Harvey, 1998; Harvey & Knight, 1996). EQM covers a variety of quality-related evaluations undertaken by individuals or agencies external to higher education institutions, including accreditation at the institutional and program levels, assessment of teaching and research quality, audit or review of institutional procedures and the monitoring of standards.

In Ontario's *Quality Assurance Framework* (Quality Assurance Task Force, 2010), the *Protocol for Cyclical Program Reviews* includes five principal components:

1. self-study
2. external evaluation (peer review) with report and recommendations on program quality improvement;
3. institutional evaluation of the self-study and the external assessment report resulting in recommendations for program quality improvement;
4. preparation and adoption of plans to implement the recommendations and to monitor their implementation; and
5. follow-up reporting on the principal findings of the review and the implementation of the recommendations.

The Degree Level Expectations, combined with the expert judgment of external disciplinary scholars, provide the benchmarks for assessing a program's standards and quality. (Quality Assurance Task Force, 2010, p. 18)

Outcome-Based Education

Calls for greater accountability and output measures have also led to an increased focus on outcome-based education, "...an approach to education in which decisions about the curriculum are driven by the outcomes students should display at the end of the course" (Harden, 1999, p. 8). As Barrie (2006) states, "One obvious way in which universities have sought to articulate their role and purpose is through a description of the qualities of their graduates" (p. 215).

There are three components that comprise an outcome-based approach to learning:

- (a) an explicit statement of learning intent expressed as outcomes which reflect educational aims, purposes and values;
 - (b) the process or strategy to enable the intended learning to be achieved and demonstrated (curriculum, teaching, learning, assessment and support and guidance methods); and
 - (c) criteria for assessing learning which are aligned to the intended outcome.
- (Jackson, 2002, p. 142)

Outcome-based education presents the following advantages for administrators, instructors, educational developers and students:

- it provides a mechanism for ensuring accountability and quality assurance;
- it helps to ensure the approval and accreditation of new and existing programs;
- it provides a strategic way to enhance the quality of teaching and learning;
- it empowers students to take responsibility for their own learning;
- it provides a means for students to articulate the knowledge, skills and experience acquired during their program;

- it encourages continuity between undergraduate, postgraduate and continuing education. (Harden, 1999)

Tagg (2010) believes that the assessment of student learning outcomes is the key to effectuating a change from an accountability-driven model of quality assurance to one that focuses primarily on enhancing student learning.

Many institutions have expressed the intention, in vision or mission statements or strategic plans, to change the governing values that guide their decision-making, to become more learner-centered or learning-centered. They face a daunting challenge, however, if they have no direct data on what and how students are learning. ...Thus, assessment of student learning is the lever that, with the fulcrum of student learning outcomes, can move institutions to transformative rather than cosmetic change.

External demands for accountability and internal pressures for reform often emerge as responses to the same evidence. ...But just as extrinsic rewards and punishments tend to depress intrinsic motivation in students, the prospect of external accountability has often displaced, rather than reinforced, institutional improvement as a purpose for learning assessment. ...That accountability has become, for some at least, the enemy of improvement is dramatic testimony to the perverse workings of the law of unintended circumstances... But it remains true that the process of assessment for improvement can, if properly structured, satisfy the call for accountability. (Tagg, 2010, pp. 57-58)

Program-level learning outcomes such as Ontario's Degree Level Expectations can be used in externally focused processes, such as accreditation and audit, and internally focused ones, such as program review, curriculum design and review, and student assessment (Jackson, 2002; Tagg, 2010). They provide a mechanism for demonstrating student achievement, calculating student workload and transfer credits, gaining admission to graduate programs, accreditation, and promoting mobility, as demonstrated by initiatives undertaken by the Organisation for Economic Co-operation and Development, the European Higher Education Area and the Australian Universities Quality Agency. The Organisation for Economic Co-operation and Development (OECD) is developing a feasibility study for the assessment of higher education learning outcomes in order to facilitate the comparison of higher education across countries. Fifteen countries, including Australia, the United States (CT, MA, MO, PA) and Sweden will participate in the *Assessing Higher Education Learning Outcomes* (AHELO) study. The AHELO is a tool for quality assurance and accountability, designed to assist:

- universities in assessing and improving their teaching;
- students in making better choices when selecting institutions;
- policy-makers in ensuring that funds provided to higher education are well spent;

- employers in identifying whether or not the skills of graduates match their needs. (OECD, 2010)

In attempting to ascertain what each university brings to the learning process, or the “value-added measurement”, the AHELO test will examine generic skills, such as critical thinking, analytical reasoning, problem solving, written communication, as well as discipline-specific skills in economics and engineering. Countries can opt to participate in either the generic skills or disciplinary skills components, or both.

Second, as part of the Bologna Process, a series of educational reforms intended to harmonize postgraduate degree cycles and credits, increase access to higher education, and improve the mobility of students and staff within the European Higher Education Area (EHEA), all programs and significant constituent elements of programs of EHEA member institutions had to be described in terms of learning outcomes by 2010.

Finally, the Australian Universities Quality Agency (AUQA) has identified developing national statements of academic achievement thresholds as key steps to creating an effective national structure for measuring, monitoring and reporting on the standards of academic achievement. This approach is said to be advantageous to a variety of stakeholders, including students, employers and faculty:

Students will have a better idea in advance how their work will be measured and reported, and a clearer picture of what their final reported achievement signifies. Employers will have greater confidence in the meaning of the results that graduates present to them, regardless of the institution from which they come. Academics themselves will be able to face with greater confidence – and, one hopes, rebut – the frequent accusations of falling standards and ‘dumbing down’. The counter-arguments will be clearly based on strong and explicit evidence. (AUQA, 2009, p. 3)

Conclusion

In this literature review, we have provided an overview of some of the main themes related to quality assurance in higher education: the debate surrounding the meaning and measures of quality in higher education, the purpose and processes of quality assurance, and common features of quality assurance in higher education and outcome-based education.

Ontario’s new *Quality Assurance Framework* (Quality Assurance Task Force, 2010) seeks to build on “well-tested [quality assurance] processes” in order to balance needs for accountability and normal curricular evolution. It is hoped that the program-level learning outcomes identified in the Degree Level Expectations will provide a mechanism for bringing together accountability, enhancing curriculum, and measuring the value-added impact of a university education on student learning and development. The *Quality Assurance Framework* is described as “more

streamlined, more effective, more transparent, and more publicly accountable” than existing quality assurance processes (Quality Assurance Task Force, 2010, p. 1). While the merits of this claim are difficult to judge at this early stage of implementation, it is clear that the creation of the Quality Council and the *Quality Assurance Framework* continues the tradition of quality assurance in higher education in Ontario’s publicly assisted universities and is in keeping with current quality assurance standards and processes in higher education internationally.

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