The Impact of External Quality Assurance Policies and Processes on Curriculum Development in Ontario Postsecondary Education

by

Qin Liu

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The Department of Leadership, Higher and Adult Education
Ontario Institute for Studies in Education
University of Toronto

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Situated in both the global context of quality movement in postsecondary education in the past few decades and the local context of quality assurance for Ontario postsecondary education in 2013-2014, this study aimed to address this research question: How did the external quality assurance policies and processes that emerged from 2000 to 2014 impact curriculum development in Ontario postsecondary education? The purpose was to examine the relationship between two important topics in contemporary postsecondary education—external quality assurance, or EQA, and curriculum development. As the fundamental question for EQA research is whether EQA leads to quality improvement, a deeper question for the study was: Did the accountability schemes in the EQA mechanisms for Ontario postsecondary education lead to quality improvement in terms of curriculum development? If so, how did it happen?

The conceptual framework for the study was informed by four perspectives: external influences on curriculum development; process causality and the realist approach to impact analysis; conceptual models of EQA impact; and the importance of the context and the connectivity between the global and the local. In light of the paradigm of critical realism, the project drew upon case study and policy analysis as its strategies of inquiry.

The study was conducted on two levels. On the macro- or system-level, document analysis and individual interviews informed the intentions and processes of the existing EQA frameworks for Ontario public universities and colleges. On the micro-level, case studies of seven carefully selected outcomes-based education initiatives shed light on the EQA processes and policy
implementation. The analysis focussed on the processes in which the EQA mechanisms had affected curriculum development in Ontario. While conducted in one single province, the study was also concerned with an issue of global concern—the relationship between accountability and improvement in quality assurance for postsecondary education.

The study found that the accountability schemes in EQA mechanisms in Ontario led to some areas of improvement in curriculum development within postsecondary institutions; however, there existed implementation gaps. The analysis revealed a complex reality in the EQA impact processes. The dissertation makes a conceptual, methodological and empirical contribution to EQA studies.
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List of Acronyms

CVS: Credentials Validation Service
DLEs: Degree Level Expectations
EQA: external quality assurance
GUDLEs: Graduate University Degree Level Expectations
INQAAHE: International Network for Quality Assurance Agencies in Higher Education
IQAP: Institutional Quality Assurance Process
MTCU: Minister/Ministry of Training, Colleges and Universities
OBE: outcomes-base education
OCGS: Ontario Council of Graduate Studies
OCQAS: Ontario College Quality Assurance Service
OUCQA: Ontario Universities Council on Quality Assurance
PEQAB: Postsecondary Education Quality Assessment Board
PQAPA: Program Quality Assurance Process Audit
QAF: Quality Assurance Framework
UPRAC: Undergraduate Program Review Audit Committee
UUDLEs: University Undergraduate Degree Level Expectations
Chapter 1. Introduction and Overview

This chapter aims to succinctly sketch out the major components of the study and presents the structure of this dissertation. It starts with introducing the research question, which is followed by the background, the problems, and the research design of the study. The chapter ends with a brief discussion of the significance of the dissertation.

Research Question

As the title of the dissertation suggests, the study intended to address this research question: How did the external quality assurance policies and processes that emerged from 2000 to 2014 impact curriculum development in Ontario postsecondary education? As such, the purpose was to examine the relationship between two important topics in contemporary postsecondary education—external quality assurance and curriculum development—specifically, whether the former impacted the latter and if so, in what ways.

The notion of quality assurance is hereby understood as “the collections of policies, procedures, systems and practices, internal or external to the organization, designed to achieve, maintain and enhance quality and improvement standards” (INQAAHE, n.d.). As such, the concept “quality assurance” consists of both internal and external dimensions and connotes both quality maintenance and quality improvement. In light of that definition, external quality assurance or EQA in this dissertation refers to the external dimension of quality assurance, or a collection of policies, procedures, systems and practices that are external to a postsecondary education institution and designed for quality maintenance and quality improvement.

The notion of curriculum development hereby refers to “a process where the choices of designing a learning experience for students are made and then activated through a series of coordinated activities” (modified from Wiles & Bondi, 1998, p. 2). Curriculum development can take place on both program and course levels (Uys & Gwele, 2005).

The word “impacts” is hereby used as a general term to mean effects and consequences. It does not connote the ultimate aim (Knowlton & Phillip, 2013) or a higher-level strategic goal than project goals (Parsons, Gokey, & Thornton, 2013), which are used in program evaluation literature.

The term “policy” is used in a broad sense. It is not merely an officially accepted government directive but “the resultant of the interplay between the key actors involved on
issues relating to the structure, function and character of higher education systems” (Meek, Leo, Goedegebuure, Kivinen, & Rinne, 1991, p. 455).

The Background

This study was situated in both the global context of quality movement in postsecondary education in the past few decades and the local context of quality assurance for Ontario postsecondary education in 2013-2014.

Quality and quality assurance represent an increasingly important issue in policy discussions on postsecondary education across the world. With the influence of massification and internationalization, a variety of political, economic and socio-cultural factors have given rise to the growing attention to EQA-related issues. Those factors include the changed relationship between the government and postsecondary institutions, reduced funding, increased diversity of students attending postsecondary education, and closer linkage between postsecondary education and economic development (Brennan & Shah, 2000; El-Khawas, 2007; O’Mahony & Garavan, 2012; van Vught & Westerheijden, 1994). An essential issue related to quality assurance is how to reconcile accountability and improvement, the dual purposes of quality assurance (Kis, 2005; Vroeijenstijn, 1995a), or how to turn quality assurance into quality improvement. The examination of how EQA mechanisms have impacted postsecondary education is an endeavour to find out about whether accountability schemes in the EQA mechanisms have been translated into quality improvement in the EQA implementation process, and if so, in what ways it has happened. The global context for quality assurance are discussed in depth in the first section of Chapter 2, which unfolds from four perspectives: the concepts of quality and quality assurance in postsecondary education; quality assurance mechanisms; drivers for quality assurance and related global trends; and issues related to quality assurance.

The frameworks and processes led by the three EQA agencies for Ontario postsecondary education—the Ontario Universities Council on Quality Assurance or OUCQA, the Ontario College Quality Assurance Service or OCQAS, and the Postsecondary Education Quality Assessment Board or PEQAB—shaped the local context for the study. The three EQA frameworks feature different relationships between the government and postsecondary institutions. However, they all strive for achieving continuous quality improvement within postsecondary institutions and adopt the outcomes-based approach to quality assurance. As such, they represent good cases through which to investigate the impact of EQA mechanisms on
postsecondary education and curriculum development in particular. Research on their impacts will shed light on the connections between EQA and curriculum development inside postsecondary institutions as well as the bridging of gaps between accountability and improvement. The second section of Chapter 2 focuses on the local context for the study, that is, the Ontario context of EQA for postsecondary education.

**The Problems**

EQA impact studies essentially address a fundamental question in quality assurance: Does EQA lead to quality improvement? (Newton, 2012). The literature review in Chapter 3 reveals the following problems in EQA impact studies. First of all, with the establishment of an increasing number of EQA bodies and mechanisms across the world, the focus of research has shifted to examining their impact on postsecondary education; however, EQA impact is an area that has been under-researched and under-theorized. EQA impact research has encountered a number of challenges in terms of research design, assessment of impact, and paradigms of inquiry; researchers should try to overcome existing weaknesses in EQA impact studies and explore alternative approaches. In addition, there is more tangible evidence to demonstrate the impacts of EQA mechanisms on organization and management than on teaching and learning. Identified issues include centralization, bureaucratization and managerialism that often accompany organizational changes as a result of EQA impact, negative experiences encountered by faculty members and their less audible voices on EQA-related matters when EQA mechanisms affect postsecondary institutions. Further, long-standing tension exists between the accountability purpose in EQA mechanisms and quality improvement inside postsecondary institutions; various efforts are being made, conceptually and empirically, to reconcile the two aims of quality assurance. Thus, a question for EQA impact studies is how to bridge the gaps between accountability and improvement in a quality assurance process. Finally, with the increasing orientation toward the outcomes-based approach to postsecondary education, can outcomes-based EQA processes be smoothly translated into improvement in outcomes-based curriculum development practice?

The EQA impact study initiated in this dissertation was designed to address the aforementioned problems mainly in the following ways. First, it tried out a realist, process-based approach to examining EQA impact. The approach shifted the focus of impact assessment from measuring the magnitude of the impact to probing into the internal processes. Second, it paid
greater attention to the EQA impact on teaching practice than organizational changes by focusing on curriculum development activities. Although curriculum development is not equivalent to the actual teaching and learning process, the two are intimately associated with each other. Third, the study deliberately attached importance to the voices of educators on the ground by including a number of faculty participants. Only by doing so can the actual picture of EQA impact be possibly known. Fourth, the EQA study was designed to examine the relationship between accountability and improvement, particularly whether the processes required by EQA mechanisms can be translated into internal processes for improvement of curriculum development, and if so, what might be some of the internal mechanisms that could enable such a translation. Last but not the least, the study employed a case study design focusing on outcomes-based education (OBE) initiatives with a view to examining the translation of outcomes-based EQA processes into outcomes-based curriculum development practice. Thus, the research question raised at the beginning of this chapter essentially aimed to address such a question in a broader context: Did the accountability schemes in EQA mechanisms lead to quality improvement? More specifically, did the accountability schemes in the EQA mechanisms for Ontario postsecondary education that emerged from 2000 to 2014 lead to quality improvement in terms of curriculum development? If so, how did it happen?

**Research Design**

The conceptual framework for the study was informed by four perspectives: (1) external influences on curriculum development; (2) process causality and the realist approach to impact analysis; (3) conceptual models of EQA impact; and (4) the importance of the context and the connectivity between the global and the local. In light of the first three perspectives, an analytical framework was developed and is graphically presented in Chapter 4.

Informed by the paradigm of critical realism, the research was a qualitative study mainly drawing upon case study and policy analysis as strategies of inquiry. The study was carried out on two levels: the system-wide policy level and the level of case studies (institutional or local academic unit level). These two areas ran parallel during the data collection process.

On the macro or system level, I interviewed a total of 15 individuals regarding the contexts and the processes where respective quality assurance policies and mechanisms for the university and college sectors were developed and implemented. On the micro-level, I conducted case studies of seven carefully selected outcomes-based education initiatives or OBE initiatives. OBE
initiatives were hereby defined as purposeful actions undertaken by postsecondary providers directed at defining, teaching toward, and assessing learning outcomes in their educational practice (modified from Jones, Voorhees, & Paulson, 2002). OBE initiatives were chosen as the unit of analysis for the case studies as they could maximize understandings of the interactions between EQA and curriculum development practices. The seven OBE initiatives were

1. Technology-supported curriculum mapping process at a university
2. Senate-approved University Learning Outcomes at a university
3. Outcomes-oriented policy and practice at a university arts and social sciences faculty
4. Interdisciplinary science program at a university
5. New program development process at a college
6. Program review process at a college
7. Curriculum mapping process at a college

A total of 64 individuals were interviewed, of whom approximately half were faculty members. Individual interviews and policy documents or institutional documents constituted the major data sources for the study. Data analysis was conducted with the facilitation of the software NVivo 10. Cross-case analysis was also conducted to compare the findings from cases.

The findings from the four university cases and the three college cases are presented respectively in Chapters 6 and 7, and interpretation and discussion of the findings are included in Chapter 8.

Significance of the Study

The dissertation contributes to the existing literature and practice in following ways. First, the study explored an alternative approach to examining the impact of EQA mechanisms on postsecondary education—the realist, process-based approach. The approach helped systematically probe into the internal dynamics within each scenario of EQA impact. Second, through the EQA impact study, the dissertation investigated a core issue of quality assurance—how to translate accountability-oriented EQA processes into improvement-oriented institutional processes within postsecondary institutions. The findings of the study will hopefully shed light on both conceptual understandings and practical strategies for reconciling accountability and improvement. Third, the study will enrich the understandings of the Ontario quality assurance frameworks and their implementation at Ontario postsecondary institutions. As the frameworks are relatively new, the findings will be valuable for a better understanding of the current status
and provide insights on the future development of the frameworks. Fourth, the dissertation will enhance understandings of the learning outcomes approach to postsecondary education. The learning outcomes approach serves as a linkage between quality assurance and curriculum development in this study. Its findings will provide empirical evidence on how the two areas of work could interact well with each other in practice. Finally, although the study was conducted in Ontario, Canada, its implications extend beyond the study itself. The issues that the study attempted to examine and its findings it derived could apply to similar challenges in other parts of the world. Based on the discussion of the findings, Chapter 9 concludes the dissertation by discussing the implications of these contributions of the study.
Chapter 2. The Contexts

In this chapter, I will review literature to provide the global and local contexts of the study. The review is important to understanding quality assurance-related issues in a broader context than Ontario as well as to interpreting the findings to be reported in Chapters 6 and 7.

The Global Context of Quality Assurance

This section provides a review of the literature in four areas that are important to understanding the global context of quality assurance: (1) the concepts of quality and quality assurance in postsecondary education; (2) quality assurance mechanisms; (3) drivers for quality assurance and related global trends; and (4) issues related to quality assurance. The purpose is to develop general understandings of quality and quality assurance related trends and issues that are applicable to situations across national boundaries.

The concepts of quality and quality assurance in postsecondary education.

The concept of “quality” is not new; it has always been part of the academic tradition of postsecondary education (Vroeijenstijn, 1995a). Quality in postsecondary education is a multi-dimensional concept. The widely cited definition is the one advanced by Harvey and Green (1993): quality as exceptional, quality as perfection, quality as fitness for purpose, quality as value for money, and quality as transformation. When further exploring these five dimensions, some scholars find that fitness for purpose and transformation are most appropriate for postsecondary education (Lomas, 2002). An earlier definition of quality was proposed by Astin (1980), who conceived of quality as mystical, reputational, resources, outcomes and value-added; the latter four are concrete and measurable. It is acknowledged that quality in postsecondary education should embrace all its functions and activities, including teaching, research and services (van Ginkel & Rodrigues Dias, 2007) and “relates to the contextual settings of an educational model, to institutional mission and objectives, as well as to the specific standards within a given system, institution, programme, or discipline” (Vlasceanu, Grunerg, & Parlea, 2007, p. 70). The multiple dimensions of quality are linked to how postsecondary education is perceived, from which various models of measuring quality are derived, including the “production model” (revealing a direct relationship between inputs and outputs), the “value-added model” (measuring the gain by students before and after they attend postsecondary education), and the “total quality experience approach” (examining the entire learning experience of students during their enrolment) (Tam, 2001).
Related to the multi-dimensional nature of the definition of quality in postsecondary education are the differing perceptions of the notion of “quality” by different stakeholders. As Elassy’s (2015) review suggests, academics often perceive quality involved in quality assurance mechanisms as ritualism, tokenism, and impression management; however, students tend to perceive quality as associated with teaching, learning and lecturers’ performance. Skolnik (2011) viewed the different opinions among stakeholders as to what constitutes quality in postsecondary education as reflecting the political nature of quality assurance. Skolnik also observed that academics tended to define quality in terms of resources, such as student-faculty ratio, laboratory space and library holdings, whereas there was growing interest of the public and the government in the learning outcomes view of quality compared with resources or process-oriented views of quality.

While quality in postsecondary education represents an idea or an aim and demands evidence for it (Bogue & Sanders, 1992), quality assurance is viewed as a process (Altbach, Reisberg, & Rumbley, 2010). Literature shows multiple definitions of quality assurance in postsecondary education, with each emphasizing different aspects of quality assurance. For Vroeijenstijn (1995a), quality assurance refers to “systematic, structured and continuous attention to quality in terms of quality maintenance and improvement” (p. xviii), which stresses the deliberation in a quality assurance process. Similarly, for Woodhouse (1999), quality assurance means “the policies, attitudes, actions and procedures necessary to ensure that quality is being maintained and enhanced” (p. 30). For Harvey (2011), quality assurance is “a process of establishing stakeholder confidence that provision (input, process and outcomes) fulfils expectations or measures up to threshold minimum requirements” (p. 14), which seems to attach greater importance to the accountability aspect than improvement. The definition of quality assurance advanced by the International Network for Quality Assurance Agencies in Higher Education (INQAAHE) is “the collections of policies, procedures, systems and practices, internal or external to the organization, designed to achieve, maintain and enhance quality and improvement standards” (INQAAHE, n.d.), which encompasses both the internal and external aspects of quality assurance as well as quality maintenance and improvement. The dissertation has adopted the INQAAHE definition of quality assurance.

In practice, a variety of terminologies, activities and procedures are encompassed under the umbrella term “quality assurance,” including quality assessment, quality monitoring, quality
auditing, and quality management. In European publications, the term “quality assessment” appeared in literature in the 1990s (e.g., Vroeijenstijn, 1995a; Westerheijden, Brennan, & Maassen, 1994) whereas the term “quality assurance” tends to be used more often recently (e.g., Eggins, 2014). Four purposes or rationales for quality assurance are identified in literature (Harvey and Newton, 2004; Harvey 2006a): accountability, control, compliance, and improvement.

Often, when the term “quality assurance” is used, it often refers specifically to external quality assurance—“government policies that call on institutions of higher education to submit to some form of external scrutiny in order to provide public assurances that they offer worthwhile services to society” (El-Khawas, 2007, p. 24). In actuality, quality assurance activities can be internal and external to postsecondary education institutions. When the activities are initiated outside the institutions, they are referred to as “external quality assurance” or EQA. It can be assumed that all postsecondary education institutions have a set of mechanisms for internal quality assurance in order for the organizations to be effective. The external and internal aspects of quality assurance are what van Vught and Westerheijden (1994) called “intrinsic and extrinsic qualities” of postsecondary education. EQA is not intrinsic to postsecondary education institutions but has been triggered in the context of the expansion of postsecondary education systems, tighter public funding for postsecondary education, and closer associations of postsecondary education with economic development (van Vught & Westerheijden, 1994). It is believed that internal and external procedures need to be in a symbiotic relationship that is mediated by the institutional quality culture (Harvey, 2007).

**Quality assurance mechanisms.**

A variety of approaches can be used to demonstrate the evidence for quality in postsecondary education, including accreditation, rankings, licensure, academic program reviews and outcomes assessment (Bogue & Sanders, 1992). However, not all of these are formal quality assurance mechanisms.

Major forms of quality assurance include accreditation, assessment, and auditing (Harvey, 2008; Kis, 2005). A traditional quality assurance mechanism is accreditation. Accreditation is defined as “the process by which a (non)governmental or private body evaluates the quality of a higher education institution as a whole or of a specific educational programme in order to formally recognize it as having met certain pre-determined minimal criteria or standards”
Accreditation, as a quality assurance mechanism, may be institutional or specialized. *Institutional accreditation* refers to “the accreditation of an entire institution, including all its programs, sites, and methods of delivery, without any implication to the quality of the study programs of the institutions” and *specialized accreditation* focuses on specific standards for the curriculum and course content of individual units or programs and is conducted by specialized or discipline-based accrediting bodies (ibid., p. 26). In the United States, accreditation of both programs and institutions is the main quality assurance mechanism (Eaton, 2004). The U.S. accreditation framework is drawn upon to establish accreditation systems by other countries too (e.g., by Chile, see Espinoza & González, 2013).

Rather than targeting at postsecondary institutions and the programs they offer, quality audits focus on those processes implemented by postsecondary institutions to assure the existence of quality (Dill, 2000); therefore, they are usually carried out at the institutional level. Quality auditing is considered to be a promising mechanism to achieve the goal of quality enhancement (Filippakou & Tapper, 2008). Some observe that accreditation has limited impact on quality due to its focus on a binary decision (accredited and unaccredited) whereas audit evaluates the institutional quality assurance procedures, thus representing a process-oriented approach and providing a basis for continuous improvement (Harvey, 2007).

Accreditation and audits typically involve external quality assurance agencies. In Europe, almost all countries have an agency coordinating quality assurance. Some are established by the national government (e.g., Denmark); and others are autonomous agencies created by postsecondary institutions themselves, often at the requirement of the government (e.g., Belgium and France) (Kis, 2005). In the United States, accrediting organizations are independent of state governments but are recognized by the federal government and sustain a partnership relationship in which the federal government relies on the accrediting bodies for judgments about the quality of institutions and programs to grant funding (Eaton, 2004). Thus, the government plays an indispensable role in relating itself to EQA processes even though the role varies from country to country.

Quality assurance mechanisms can be at the national level, the regional level, the institutional level, the program level, and the course level. Szanto (2010) illustrated the levels of quality assurance by proposing four tiers of a quality assurance pyramid from the perspective of the entire quality of a postsecondary education system. The first level is the internal self-
assessment at postsecondary institutions; the second level is external reviews conducted by quality assurance agencies at the institutional and program levels; the third level involves “recognition bodies” who recognize quality assurance agencies for their professionalism, resources, independence and self-enhancement mechanisms; and the fourth level is represented by international networks of quality assurance who scrutinize agency reviewers to see whether reviews are conducted in an appropriate manner and in adherence to international standards.

Internationally, different quality assurance models have emerged in different types of postsecondary education systems in the world. Van Vught and Westerheijden (1994) described two fundamental models of quality assurance that dated back to medieval times: “the French model of vesting control in an external authority,” and the “English model of a self-regulating community of fellows” (p.355). Harvey (1998) observed several EQA models: the “Continental model of centralized-autonomy” found mostly in Western Europe including Italy, France, and Austria; the “British model” of autonomous institutions found throughout much of the Commonwealth; the “market systems” seen in the United States and the Philippines; the “semi-market systems” found in Taiwan and Brazil; and the centralized system seen in China.

It should be noted that while the purposes of quality assurance mechanisms, regardless of accreditation or auditing, vary considerably, their processes can be quite similar. As van Vught and Westerheijden’s (1994) general model of quality assessment suggests, though there are considerable variations in the quality assurance systems of different countries, some common components include the independent meta-level role of managing agents (i.e., a coordinating agency), self-evaluation, peer review and site visits, the degree of confidentiality of reporting, and the relationship between quality review outcomes and funding. The general model can be used to provide a starting point from which to map deviations among EQA mechanisms in different countries; Billing’s (2004) study was such an example. Further, despite the similarity within the processes under various quality assurance mechanisms, who administers the process can make a significant difference (Weinrib & Jones, 2014).

**Drivers for quality assurance and related global trends.**

Quality assurance began to be a prominent topic of policy discussions in postsecondary education in the late 1980s and 1990s (El-Khawas, 2007), and remains to be “a rapidly growing concern” in the postsecondary education around the world (Altbach, Reisberg, & Rumbley, 2010, p. 53). There is an international trend toward the emergence of national quality assurance
mechanisms and the expanding use of these mechanisms to regulate universities (El-Khawas, DePietro-Jurand, & Holm-Nielsen, 1998; Weinrib & Jones, 2014).

Factors that lent prominence to quality assurance issues include expansion and diversification of postsecondary education, internationalization, cuts in public funding, privatization of higher education, new approaches to public administration, and international competition (Brennan & Shah, 2000a; El-Khawas, et al., 1998; El-Khawas, 2007). According to Brookes and Becket’s (2007) review, a variety of political, economic, and socio-cultural forces have given rise to strengthened quality assurance and management in postsecondary education. O’Mahony and Garavan’s (2012) case study at an Irish institution also illustrated those factors based on the situation in Ireland.

Under the influence of globalization and regionalization, international agreements, such as the North American Free Trade Agreement (NAFTA), the UNESCO/OECD Guidelines for Quality Provision in Cross-Border Higher Education (UNESCO, 2005), and those of the University Mobility in Asia and the Pacific (UMAP) organization, specifically address accreditation, recognition, and the need for improvements in student mobility, thus creating pressures for establishing quality-assurance procedures for some countries, such as Canada (CICIC, n.d.). As another example, the Bologna Process has become a catalyst for creating formal quality assurance authorities in many European countries.

In the last few decades, the relationship between the government and postsecondary institutions has also shifted. As observed from an international study on the quality assurance mechanisms in 14 European countries (Brennan & Shah, 2000a), there is a trend of deregulation in terms of the ways in which the government steers postsecondary education; that is, the governments of many countries tend to exercise less direct control and support greater autonomy and self-regulation in postsecondary institutions. To that purpose, the emergence of EQA agencies and the entailed establishment of quality assurance systems has become a key factor in the changing national context of postsecondary education.

Global trends in quality assurance include a growing shift from control and accountability purposes to the purposes of improvement and enhancement, from building a system to fostering quality culture, and from an emphasis on inputs to a focus on outputs and student outcomes (Harvey, 2008). Another trend is that quality assurance is becoming increasingly transnational. Under the global network INQAAHE, as of 2015, 17 regional quality assurance networks
operate across the world, including the European Association for Quality Assurance, the Asia-Pacific Quality Network, and the Quality Assurance Network for African Higher Education. Meanwhile, U.S. accreditors have been reviewing and accrediting colleges and universities in other countries. The transnational trend reflects an emerging demand for international standards for quality assurance (Ewell, 2010).

**Issues related to quality assurance.**

The notion of quality in postsecondary education is a “contested idea” (Filippakou & Tapper, 2008; Tam, 2001), and is often associated with the dual purposes of quality assurance—accountability and improvement (Kis, 2005; Vroeijenstijn, 1995a). The growing focus of attention on quality assurance in the past couple of decades was driven by the accountability purposes (Vroeijenstijn, 1995a). The relationship between quality and accountability is well put by Clark, Moran, Skolnik and Trick (2009): the terms of quality and accountability are two distinct but related spheres of practice: accountability is broader and could be viewed as including quality, although historically the discourse and practices associated with quality developed earlier than those that are associated with accountability (p. 113). This seems to suggest that quality issues are intrinsically a matter of improvement within postsecondary institutions and that the association between quality and the accountability purpose is a recent development in the past few decades. An indicator of the conflict between accountability and improvement is the existence of a clear tension between quality assurance as a bureaucratic and administrative task and the improvement of the quality of academic endeavours, as Harvey and Williams (2010) concluded from their review of literature over a period of 15 years.

Perhaps due to the increasing awareness of the gap between accountability and improvement, the discourse of quality assurance is recently shifting from an emphasis on accountability to a focus on improvement. As Elassy (2015) observes, in the early 1990s when EQA first emerged in many countries, the purposes seemed tilted toward accountability whereas in recent years there has been a greater emphasis on quality enhancement than quality assurance. The quality movement in postsecondary education appears to be on a continuum from quality assurance to quality enhancement, as shown in Figure 1. How to translate a quality assurance process into quality enhancement or reconcile between the two purposes of accountability and improvement has been a challenging question for stakeholders in postsecondary education (Filippakou & Tapper, 2008; Vroeijenstijn, 1995a).
Related to that, challenges exist in how to effectively implement quality assurance mechanisms. One cause for the difficulty is the divergence of interests and concepts of quality between diverse stakeholders, often on a divide between accountability and improvement (Vroeijenstijn, 1995a). Another barrier is the “implementation gap” where the difference exists between planned outcomes and the actual outcomes of quality assurance policies and processes due to the relative autonomy of the frontline workers at the point of implementation (Newton, 2000). Although external quality assurance is of great importance for the development of an internal quality culture in postsecondary education (Danø & Stensaker, 2007), the challenge lies in how to build a quality culture that could facilitate the process of quality assurance and enhancement. A key to the whole integrated approach of quality culture is to ensure that the internal processes that are “under local control and with delegated responsibility and accountability” are “fully integrated with external processes into an infrastructure” (Harvey, 2008, p. 29).

Quality improvement can be process-based (Thune, 1996) or measured by student learning gains. If improved student learning is the ultimate goal of quality improvement, there is lack of evidence to demonstrate how much the efforts in quality enhancement have been translated into improvement of student learning. As Banta (2010) and Ewell (2010) both observed, the evidence for improved student learning as a result of quality assurance (or outcomes assessment in the context of the United States) remains elusive although quality assurance has provided guidance for improving pedagogy, curricula and student support programs since the 1970s. In the same vein, Houston (2010) considered it a sharp contrast to see significant expansion and harmonization of quality assurance mechanisms in postsecondary education on one hand and limited evidence of positive effects on the quality of teaching and learning. O’Mahony and

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**Figure 1.** The continuum of quality assurance and quality enhancement
(Source: Elassy, 2015, p. 256)

<table>
<thead>
<tr>
<th>QA</th>
<th>QE</th>
</tr>
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<tbody>
<tr>
<td>Assessment</td>
<td>Improvement</td>
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<tr>
<td>Diagnosis</td>
<td>Treatment</td>
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Garavan (2012) also identified the conflict between quality for accountability and quality of learning as an issue. One explanation for this gap could be that there is little communication between the separate offices responsible for quality assurance and for curriculum development and student learning support (Harvey, 1998). Other explanations attribute the paradox to the inadequacy in quality assurance processes, which pay little attention to educational processes, educational theory or student learning (Harvey, 2002), and the gap between quality assurance practices and quality improvement practices (Houston, 2010). Still others criticize quality assurance mechanisms for placing emphasis on quality for accountability purposes while ignoring the actual quality of learning (O’Mahony & Garavan, 2012).

**The Local Context of Quality Assurance in Ontario**

The quality assurance for Ontario postsecondary education is intimately intertwined with the roles and functions of the three quality assurance agencies that operate in Ontario: the Ontario Universities Council on Quality Assurance, the Ontario College Quality Assurance Service, and the Postsecondary Education Quality Assessment Board. Their frameworks and related processes involve various approaches to quality assurance, including credential validation, quality assessment and auditing.

**The Quality Assurance Framework for the university sector.**

The Ontario Universities Council on Quality Assurance (OUCQA), also known as the Quality Council, is what Baker and Miosi (2010) called “university consortium agency.” The history of the predecessors of the Quality Council can be traced back to 1966, when the Council of Ontario Universities established the Ontario Council of Graduate Studies (OCGS), thus beginning the external appraisal of new graduate programs in Ontario. In 1982, the OCGS also started to undertake direct quality assessment of exiting graduate programs on a seven-year cycle. The year of 1996 witnessed the start of the external auditing of the Undergraduate Program Review Audit Committee (UPRAC) for undergraduate programs. Unlike the OCGS processes, the UPRAC was concerned whether the university’s program review policy complied with the standards and procedures enunciated by the external body and whether the reviews were actually implemented fully in strict accordance with the university policy; in other words, it was not a direct assessment of academic quality (Baker & Miosi, 2010). However, neither the OCGS nor the UPRAC process was mandated by the government although government funding was conditional upon the OCGS approval of a new graduate program. Drawing upon those prior
practices, the Quality Council was established in 2010 and a new framework was created to merge the two previously separate processes for undergraduate and graduate programs.

It is important to note that the Quality Council is not a government-appointed, independent agency that oversees the quality assurance processes in public universities (Clark, Trick, & van Loon, 2011); rather, it was created and is governed as part of the Council of Ontario Universities. The 2010 Quality Assurance Framework (QAF) was prepared by the Quality Assurance Transition/Implementation Task Force, the members of which were exclusively from Ontario universities and the Ontario Council of Academic Vice-Presidents’ Executive Committee (OUCQA, 2014). The framework was approved by the Ontario Council of Academic Vice-presidents after a two-year consultation process. Therefore, the QAF is owned by Ontario universities themselves and the Quality Council serves the interests of Ontario universities and adheres to “respecting the autonomy and diversity of the individual institutions,” as the Quality Assurance Framework and Guide (OUCQA, 2014, p. 35) states, although it is also accountable to the government. The framework represents a set of self-regulatory quality assurance processes for Ontario universities.

With the 2010 framework, the institutional and program assessment of quality is coordinated under a quality assurance audit process. The audit tests whether the institution’s practice conforms to its own Institutional Quality Assurance Process, or IQAP, by looking at the institution’s records of sampled new programs and cyclical program reviews, together with associated documents (OUCQA, 2014). It is designed “to determine whether or not the institution, since the last review, has acted in compliance with the provisions of its IQAP for Cyclical Program Reviews as ratified by the Quality Council” (ibid., p. 25). In other words, the audit assumes the existence of an internal quality assurance process and evaluates whether the institution actually implements the stated process, rather than directly checks the quality of academic programs. Ontario universities themselves are expected to undertake the actual quality assessment of academic programs through the institution’s own cyclical review process before the audit. Hence, it appears that the mechanism under the framework intentionally combines internal and external quality assurance by design.

The QAF holds all Ontario public universities accountable to a set of Degree Level Expectations or DLEs, which are degree profiles for graduates from Ontario universities. The DLEs are represented by a matrix that describes six categories of broadly defined learning
outcomes for graduates of bachelor’s degrees, master’s degrees, and doctoral degrees (OUCQA, 2014). There are two separate sets: the University Undergraduate Degree Level Expectations (UUDLEs) for undergraduate programs and the Graduate University Degree Level Expectations (GUDLEs) for graduate programs.

There exist a few recent pieces of scholarly work that focus on analyzing and evaluating the QAF or the DLEs used in the framework. Goff (2013) analyzed the need for quality assurance in Ontario universities in terms of political, media, international, technological and social influences. Frake-Mistak (2013) traced UUDLEs from their conception as a policy to their implementation within a faculty of education of one Ontario university. Heap (2013) argued that the QAF fails to meet all criteria for a strong quality assurance system focused on student learning. Lang (2015) discussed how the QAF addressed some common issues in assuring quality, including scope of jurisdiction, role of governors, benchmarking and isomorphism.

**The OCQAS framework for the college sector.**

Quality assurance for Ontario colleges is an expectation embedded within the legislation that governs those colleges. The *Ontario Colleges of Applied Arts and Technology Act, 2002* stipulates that the Minister of Training, Colleges and Universities (MTCU), or the Minister of the government responsible for postsecondary education in Ontario, may intervene into the affairs of a college if the college is not providing quality education and training services to students.

The quality assurance framework under the Ontario College Quality Assurance Service (OCQAS) found its seeds in the Minister’s 2003 Binding Policy Directive—*Framework for Programs of Instruction*, of which the legal authority is enshrined in the 2002 Act. The policy directive mandated two things regarding quality assurance to the Ontario college sector: on the system level, “to establish a system-wide credentials validation service that will provide reasonable assurance” for the types of credentials under the Credentials Framework; and on the other hand, on the institutional level, “to establish mechanisms for the review of their programs of instruction to ensure ongoing quality, relevancy, and currency” (OMTCU, 2003, pp. 4-5).

Both of the expectations in the policy directive were fulfilled within the next few years after its release. The program-level quality assurance mechanism, the Credentials Validation Service (CVS), was established in 2003. The institutional-level mechanism, the Program Quality Assurance Process Audit (PQAPA), was developed through a joint government-college sector working group between 2003 and 2005, and approved by the Committee of Presidents for full
implementation in January 2007 (OCQAS, 2014). Thus, it was the government’s mandate that created CVS but the PQAPA was created by the colleges themselves. The CVS and the PQAPA processes constituted the two components of the OCQAS framework. As Klassen (2012, p. 3) emphasized, the service at the OCQAS is “funded by, and responsible to, the 24 member colleges, and not to the government”; and the OCQAS is “owned and operated by the colleges” and is not a government agency.

Like the QAF for the university sector, the framework under the OCQAS is also a self-regulatory mechanism. Establishing a self-regulating process at the system level was one of the expectations from the government when the process was first developed (OCQAS, 2014). After having audited the pilot PQAPA project in 2006, William Massy, the external consultant for the pilot project, commented that he had no evidence that OCQAS’s ownership by the college system had inhibited the fulfillment of its functions in any way (Massy, 2006). Klassen (2012) also affirmatively stated that the PQAPA fulfilled the self-regulatory function of the OCQAS by following an academic audit process, which assumed the existence of quality and quality assurance systems in Ontario colleges and hence intended to find the evidence to verify this assumption.

The OCQAS framework requires all college programs to conform to both the Credentials Framework and the Program Standards. The Credentials Framework represents the minimum provincial standards for an array of college credentials ranging from certificates to graduate certificates (OMTCU, 2003). The Program Standards for a particular program consist of vocational learning outcomes, a generic skills standard known as essential employability skills, and general education requirements, constituting a provincial-level benchmark for all similar programs offered by different Ontario colleges since the 1990s, when the government began to produce those standards for college programs.

In fall 2015, a new institutional accreditation system began its operation at the OCQAS, thus turning a new page and adding additional meaning to the OCQAS framework.

Research focusing on the OCQAS framework appears to exist only in two theses. In Saari’s (2009) master’s thesis, positive changes that had occurred to different types of Ontario colleges were found as the impact of the PQAPA audits between 2005 and 2008. Arvast’s (2008) doctoral thesis utilized a critical theory perspective to examine the program reviews under the
OCQAS framework and disclosed discourses of positivism and neo-liberalism that existed in the PQAPA documents and reviews.

The PEQAB framework.

The Postsecondary Education Quality Assessment Board (PEQAB) was mandated by the Post-secondary Education Choice and Excellence Act, 2000, and created by the Ontario government to administer quality assurance for degree-granting programs offered by the Ontario public college sector (known as the Colleges of Applied Arts and Technology or CAATs), private institutions within Ontario, and out-of-province educational providers. The PEQAB makes recommendations to the MTCU, who decides whether to grant ministerial consent to degree-granting applicants. The PEQAB assesses both the acceptability of the degree proposal itself and the organizational capacity to manage programming at a given degree level. The assessment of an organization only occurs when an application comes from a private institution.

The PEQAB is readily recognizable as an agency for postsecondary quality assessment when it deals with new programs (van Loon, 2007). It does not have any legislated responsibility for monitoring the implementation of approved programs once they have received ministerial consent (Baker & Miosi, 2010). As it is more concerned with initial program quality and institutional capacity than ongoing quality assurance, it does not fulfill all the requirements of quality assurance (van Loon, 2007). With a rising demand for postsecondary degrees, the PEQAB plays an increasingly important role in quality assessment of degree-granting programs offered outside public universities of Ontario. No published studies seems to be available on the work of the PEQAB.

The PEQAB follows a set of 13 criteria and related benchmarks in its quality assessment. The key component is the degree level standard, which consists of degree standards for graduates of bachelor’s, master’s, and doctoral programs in Ontario (PEQAB, 2014). These standards are also part of the outcomes-based Ontario Qualifications Framework and consistent with the DLEs used by the QAF for the university sector.

Roles of the government.

The government responsible for Ontario postsecondary education, known as the Ministry of Training, Colleges and Universities (MTCU), plays varying roles in quality assurance issues for Ontario colleges and universities.
The government has mandated a few quality assurance mechanisms for the college sector. As mentioned earlier, the CVS component under the OCQAS framework was mandated by the government through a policy directive; and the PEQAB is a government agency although maintaining an arms-length relationship with the MTCU. In addition, the MTCU also gets involved in creating and updating provincial Program Standards, which are used by Ontario colleges which offer academic programs in the same field. The idea of the Program Standards was recommended in the *Vision 2000* report (Ontario Council of Regents for Colleges of Applied Arts and Technology, 1990), which reviewed the mandate of Ontario colleges. In 1993, following its recommendations, the Ontario government established the College Standards and Accreditation Council (CSAC), which was to establish learning outcome standards for college programs and assess them against those standards. In 1996, the CSAC was shut down as a government austerity measure and the government took over the task of developing the program standards (Clark, Moan, Skolnik, & Trick, 2009). As of the end of 2015, new or updated standards of approximately 130 programs were published on the MTCU website (http://www.tcu.gov.on.ca/pepg/audiences/colleges/progstan/)

It is important to note that while the hands of the Ontario government reached out to those quality assurance schemes, the government also tended to relax its hands and encourage greater autonomy among colleges in academic matters. The move towards designing outcomes-based standards was out of the consideration that the focus of program reviews would be on learning outcomes, rather than the specific content and delivery methods of the programs (Clark et al., 2009). Also, part of the intent of the 2003 policy directive was to grant colleges’ boards of governors the authority to approve academic programs. As Charles (2011) observed in her dissertation, Ontario colleges gained responsibility and flexibility, and the relationship between the colleges and the government shifted “from a command and control model, to an accountable for results model” (p. 278).

Like Canadian universities in other provinces, Ontario universities historically have a high level of institutional autonomy and the government has limited capacity for quality assurance matters in universities. Although university autonomy was challenged from time to time by some government initiatives (Shanahan, Jones, Fisher, & Rubenson, 2014), maintaining high autonomy at universities is always an important consideration and direct control of the university sector has never been an option or preference for the government (Jones, 1997; Royce, 1998).
Given this governance tradition, establishment of a self-regulatory quality assurance mechanism through an intermediary body—first the OCGS and then the OUCQA under the Council of Ontario Universities, appears to be an optimal solution for the complex relationship between Ontario universities and the government.

**Key features of the system.**

Three quality assurance agencies are in operation and oversee different quality assurance mechanisms for Ontario publicly assisted universities and colleges. Their frameworks and processes have significantly shaped the quality assurance policies and activities at both the system and institutional levels. A summary table is shown below (Table 1) to compare the processes overseen by the three quality assurance agencies.

A critical distinction between the three agencies lies in the authority for quality assurance: the PEQAB is a government-established agency whereas the OUCQA and the OCGAS execute a set of self-regulatory quality assurance processes for Ontario universities and colleges respectively. Both the QAF and PQAPA processes are pre-emptive efforts made by postsecondary institutions to deter the intervention from the government into quality issues within postsecondary institutions. This pre-emptive way of thinking could be traced to the 1960s and 1970s, when the university community started to initiate the discourse on quality and control the quality agenda (Clark et al., 2009).

This distinction is critical to understanding the matter of control and the power relationships between the government and postsecondary institutions in Ontario. As Thune (1996) revealed in his study in the Danish settings, there is a fundamental and understandable perception among universities that government initiatives for quality assurance are owned by the government, are fundamentally external and bureaucratic in perspective and procedures, and have a focus on accountability; in contrast, a university initiative is owned by the institution, with procedures that are internal, non-bureaucratic and acceptable to universities, aiming for fostering improvement. This distinction might also be true in the Ontario context, for both universities and colleges. The nature of self-regulation in the QAF for the university sector and the OCQAS framework for the college sector and their ownership to the postsecondary communities might, to a large extent, pre-determine that the long-standing divide between the interests of the government and postsecondary institutions, and between accountability and improvement could be possibly resolved. With this speculation in mind, this dissertation initiated
the EQA impact study and will interpret the findings in the local quality assurance context of Ontario.

Further, all the processes guided by the three frameworks have adopted the outcomes-based approach to quality assurance. That is, learning outcomes based standards, as specified in Table 1, are an integral part of all these quality assurance processes and enforced by the work of the related agencies. As learning outcomes are an important part of the curriculum, they could represent a key to linking EQA to curriculum development.

In a nutshell, the EQA policies and processes under the oversight of three quality assurance agencies were developed in the past fifteen years. It can be argued that the QAF and the OCQAS frameworks constitute the pillars of the quality assurance system for Ontario public universities and colleges while the system is also buttressed by the PEQAB framework that provides another layer of assurance for degree-granting programs outside the scope of public universities. The intricate relationships of the OUCQA and the OCQAS with the government and the self-regulatory approach they have employed as well as the outcomes-based standards embedded in all three frameworks and their strives for balancing accountability and improvement all make the Ontario quality assurance system an optimal choice for examining the EQA impacts on curriculum development. It can be anticipated that the EQA policies and processes for Ontario postsecondary education are likely to exert palpable, positive impacts on quality improvement in the area of curriculum development.

**Summary**

In this chapter on the contexts of the study, I have first outlined four quality assurance related areas in the global context and then discussed the Ontario context of quality assurance for postsecondary education.

In the global context, both quality and quality assurance are concepts of multiple dimensions; different types of EQA mechanisms can affect postsecondary education in varying ways. While a variety of factors have given rise to an increasing number of EQA mechanisms across the world, there is also a growing shift from the purpose of accountability to the purpose of improvement. Despite the shift, tension and gaps still exist between accountability and improvement, and challenges are present in implementing EQA mechanisms. This seems to represent an essential issue in quality assurance worldwide.
Table 1. *Comparison among the three quality assurance agencies in Ontario*

<table>
<thead>
<tr>
<th></th>
<th><strong>OUCQA</strong></th>
<th><strong>OCQAS</strong></th>
<th><strong>PEQAB</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional Stakeholders</strong></td>
<td>Ontario public universities</td>
<td>Ontario public colleges</td>
<td>Ontario public and private colleges; Organizations (private or public) from outside Ontario</td>
</tr>
<tr>
<td><strong>Major EQA Activities</strong></td>
<td>New program appraisal (program-level); Institutional quality assurance process audit (institutional-level)</td>
<td>Credentials validation (program-level); Program quality assurance audit (institutional-level)</td>
<td>Degree program quality assessment (program level)</td>
</tr>
<tr>
<td><strong>Approaches to EQA</strong></td>
<td>Outcomes-based; Self-regulation through auditing;</td>
<td>Outcomes-based; Self-regulation through auditing;</td>
<td>Outcomes-based; Direct assessment</td>
</tr>
<tr>
<td><strong>Components in EQA</strong></td>
<td>Self-study; Peer review, with site visit; Reporting for improvement</td>
<td>Self-study; Peer review, with site visit; Reporting for improvement</td>
<td>Self-study; Peer review, with site visit; Reporting for improvement</td>
</tr>
<tr>
<td><strong>Learning Outcomes Standards</strong></td>
<td>Degree Level Expectations for undergraduate and graduate programs</td>
<td>Credentials Framework; Program Standards</td>
<td>Four degree standards, as part of the Ontario Qualifications Framework</td>
</tr>
</tbody>
</table>

The discussions of the context of quality assurance for Ontario postsecondary education suggest that the existing features of the three EQA frameworks appear to make Ontario an excellent case for studying the EQA impacts on postsecondary education, particularly in the area of curriculum development, and for examining how accountability and improvement could be bridged.
In the next chapter, I will review areas of literature that are relevant to the key notions of this study—EQA impacts on postsecondary education, curriculum development and the interconnections between EQA and curriculum development.
Chapter 3. Literature Review

The research question suggests that this study was situated in three bodies of literature: (1) the impacts of EQA on postsecondary education; (2) curriculum development; and (3) the interconnections between EQA and curriculum development. The purpose of this review is two-fold: to present what has been known about these topics on one hand; and to identify issues in EQA impact studies in postsecondary education settings on the other.

The Impacts of External Quality Assurance on Postsecondary Education

Studies on impact of quality assurance policies are identified as one of the three general themes that dominate the evolving area of inquiry into accountability and quality assurance, along with analyses of the influence of policies on the long-term relationship between higher education and government, and policy analysis, looking to policy development and design issues (El-Khawas, 2007). The attention in quality assurance research has evolved from the emergence, design and implementation of quality systems to the usefulness of activities taking place within those systems, and from the system’s level to the program level, and to the individual level (Westerheijden, Hulpiau, & Waeytens, 2007). This shift of focus suggests that the impact of EQA has increasingly become centre stage in studies of quality assurance policies and mechanisms. However, research on EQA impact is an area that has been under-researched and under-theorized (Newton, 2012).

In the following sections, I will first review the methodological challenges involved in EQA impact studies, and then present the findings and arguments in two major areas in which quality assurance mechanisms are found to exert considerable effects on postsecondary education: organization and management; and teaching and learning (Harvey, 2006). That will be followed by a review of literature addressing a fundamental question for EQA research: Does EQA lead to improvement?

Methodological challenges.

Like impact studies in other areas of research (Pascarella & Terenzini, 1991, 2005), impact studies on quality assurance are faced with considerable methodological challenges. Those challenges can be part of the reason for the limited empirical evidence regarding the effects of EQA mechanisms on postsecondary education, particularly on teaching and learning (Houston, 2010; Leiber, 2014). Literature suggests the following three areas of difficulty in identifying EQA impact.
First, as “quality” is a multi-dimensional notion (Harvey & Green, 1993), it is challenging to reflect those dimensions in an impact study (Stensaker, 2007). Further, it is easier to identify organizational change, such as changes to structures, responsibilities, policies and procedures, which are often more visible than the impact in other areas (Barrow, 1999), and to examine the impact as perceived by stakeholders; it poses more challenge to measure changes in quality per se, particularly in terms of student transformation. This explains why most of EQA impact studies focus on organizational change and the perceived impact, rather than the actual impact.

Second, given that multiple aspects of organizational change usually take place within a postsecondary institution at the same period of time, it is difficult to isolate the impact of EQA from other forces that may have affected the institution; therefore, the impact of quality assurance mechanisms is hard to establish (Askling, 1997; Brennan, 1997; Harvey, 2006; Shah, 1997).

Third, the findings of impact studies tend to be overly optimistic as stakeholders are interested to create a successful image of quality management (Stensaker, 2003, 2007). Thus, the quality assessment may be biased by the tendency for “impression management” (Newton, 2000). As Harvey (2006) found, the perceptions among quality assurance agencies about the main impacts of their work are generally positive, although anecdotal. The perceived impacts, such as changes evident from one review to the next; improvements in performance indicators; adoption of formal internal quality processes by institutions; student feedback indicating positive changes and employer perceptions about the improvement in graduate abilities; and adjusted curricula as a result of a review, are possible in reality but would carry more creditability if they come from stakeholders within postsecondary institutions.

Due to those challenges, methodological approaches for determining the effectiveness of EQA are found underdeveloped (Lillis, 2012). To overcome the existing weaknesses in research methodology in EQA impact studies, Leiber (2014) recommended a longitudinal before-after comparison design, which still falls under the positivist paradigm. As an alternative to positivist approaches, a phenomenological or dialectical approach was suggested and believed to bear more fruit (Harvey, 2008). An illustrating example can be found in Newton’s (2000) close-up case study at a single site.

Given those challenges, researchers of EQA impact need to find ways to overcome the identified weaknesses or explore other alternatives to examining EQA impact.
**EQA impacts on postsecondary education.**

What is the existing evidence for EQA impacts on postsecondary education? Table 2 presents a review summary of 20 carefully selected empirical studies that were published from 1995 to 2015 on the impact of EQA mechanisms on different stakeholders of postsecondary education in different countries. Some of those EQA mechanisms under investigation were better established than others.

As shown in the table, those EQA impact studies were situated in 13 countries, most of which are in Europe. Samples for the studies included students, academics, academic administrators, quality assurance administrators, and institutions. In terms of research design, surveys, interviews and case studies were employed in many of the studies. Most of the studies examined EQA impacts as perceived by stakeholders; a couple of the studies involved analysis of curriculum documents (Vilgats & Heidmets, 2011) or quality evaluation documents (Gerbic & Kranenburg, 2003; Suchanek et al., 2012). In one study (Csizmadia et al., 2008), a questionnaire for institutions was used for data collection.

Those studies, along with other conceptual work, point to two major areas in which EQA mechanisms have impacted postsecondary education: organization and management; and teaching and learning.

**EQA impacts on organization and management.**

Quality assurance mechanisms often bring about organizational change. External quality assessment can strengthen authority at the institutional level by placing emphasis on the exercise of responsibility at that level, scrutinising internal mechanisms of accountability, and requiring institution-wide policies and effective strategies for the implementation of strengthened internal mechanisms (Brennan & Shah, 2000). Thus, EQA affects organizational process and the distribution of power within a postsecondary institution. On the institutional level, a main consequence can be that organisational decision-making become more centralised in the wake of external evaluations while bureaucratisation might be the undesired side-effect of this development (Stensaker, 2004). The trend toward greater centralization and bureaucratization is observed in a number of studies (Askling, 1997; Kogan, Bauer, Bleilie, & Henkel, 2000; Stensaker, 1999, 2003).
Table 2. Summary of the selected empirical studies on EQA impact

<table>
<thead>
<tr>
<th>Authors</th>
<th>Jurisdictions</th>
<th>EQA mechanisms</th>
<th>Key findings about the impact (including samples)</th>
<th>Impact Indicator*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartwright (2007)</td>
<td>UK</td>
<td>quality assurance agenda set by the Quality Assurance Agency</td>
<td>There is a considerable mismatch between the rhetoric of the official paragons of quality represented by the Quality Assurance Agency and the experience of quality by academic staff embroiled in the quality systems developed as a consequence of the requirements of the government agency. [sample: academics]</td>
<td>-</td>
</tr>
<tr>
<td>Cheng (2010)</td>
<td>UK</td>
<td>institutional audit conducted by the Quality Assurance Agency</td>
<td>Nearly two-thirds of those interviewed considered audit and quality assurance mechanisms as a bureaucratic practice that had little impact on their work. [sample: academics]</td>
<td>-</td>
</tr>
<tr>
<td>Elassy (2015)</td>
<td>Egypt</td>
<td>a QA system since 2002 (comprising an internal QA system operated by individual institutions and an independent external QA system based on peer review)</td>
<td>students were not efficiently involved in the QAF [samples: students]</td>
<td>-</td>
</tr>
<tr>
<td>Gerbic &amp; Kranenburg (2003)</td>
<td>New Zealand</td>
<td>External program approval processes administered by the New Zealand Qualifications</td>
<td>An external process does improve the quality of a new program proposal when the developers seek to meet the requirements and</td>
<td>+</td>
</tr>
<tr>
<td>Author</td>
<td>Country</td>
<td>Methodology</td>
<td>Summary</td>
<td>Sample</td>
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<tr>
<td>Authority and the Committee on University Academic Programs</td>
<td>-</td>
<td>practical enactment of the approval process. [sample: program developers and reviewers]</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Horsburgh (1999)</td>
<td>New Zealand</td>
<td>Quality monitoring</td>
<td>Quality monitoring had quite a narrow impact on improvement of student learning and were not concerned with the complexity of a whole teaching program. [sample: students]</td>
<td>-</td>
</tr>
<tr>
<td>Hou, Morse, Ince, Chen, Chiang &amp; Chan (2015)</td>
<td>Taiwan</td>
<td>three program accreditations (HEEACT, AACSB International, IEET)</td>
<td>The three accreditation systems did have a great impact on learning outcomes-based teaching, self-enhancement mechanisms and internationalization in Taiwan’s higher education institutions. Yet the increased time and efforts by staff and faculty has inevitably resulted in resistance to all three program accreditations. [sample: administrators and academic staff]</td>
<td>+/-</td>
</tr>
<tr>
<td>Langfeldt, Stensaker, Harvey, Huisman, &amp; Westerheijden, (2010).</td>
<td>Norway</td>
<td>NOKUT's practices</td>
<td>What is presented as judgments based on peer expertise turns out to be a rather technical process in which predefined rigid criteria and standards are imperative. The whole peer review process is under pressure by the emergence of the European standards and guidelines for quality assurance. [sample: QA agency staff; students and staff within institutions]</td>
<td>-</td>
</tr>
<tr>
<td>Liu &amp; Yu (2014)</td>
<td>China</td>
<td>a quality assessment policy (Quality Assessment of Undergraduate Education)</td>
<td>Quality assessment in China has facilitated the improvement of teaching infrastructure and led to the intensification of school discipline in evaluated higher education institutions significantly. Its impacts on teaching/learning are not noticeable. [sample: students]</td>
<td>+/-</td>
</tr>
<tr>
<td>Liu (2013)</td>
<td>China</td>
<td>government-designed Quality Assessment of Undergraduate Education (QAUE) scheme</td>
<td>The impact of QAUE was the result of an interaction between the external quality assessment scheme and the evaluated universities [sample: university leaders, faculty leaders and professors]</td>
<td>N</td>
</tr>
<tr>
<td>Newton (1999)</td>
<td>UK</td>
<td>(1) quality assessment by the funding councils; (2)</td>
<td>Front-line academic and academic support staff view the system as more &quot;accountability-led&quot; than &quot;improvement-led&quot;</td>
<td>- -</td>
</tr>
</tbody>
</table>
institutional quality audits by HEQC

Newton (2000) UK quality monitoring "Quality policy" becomes changed in the implementation process. A number of dimensions of the "implementation gap" are identified.

Rosa, Tavares, & Amaral (2006). the Portuguese quality assessment system, with an additional “academic accreditation” in 2003 Rectors and coordinators had perhaps an over-optimistic view of the positive impact of quality assessment. Rectors had a more positive attitude than did the academics about the capacity of the institutions to implement the recommendations of external review teams. Institutional leadership paid more attention to internal procedures and services than to actual improvements in student learning experience.

Saarinen (1995) Finland Pilot institutional and field study evaluations initiated by the Ministry of Education There was a gap in expectations of the impact and their realisations. The most important impact of assessment might be that assessments provide a legitimate way to openly discuss possible solutions to present complicated problems. [sample: department chairs and faculty members]

Stensaker (1999) Sweden external quality audits (since 1995) overseen by the Swedish National Agency for Higher Education There is stronger centralisation and formalisation of quality improvement work at the institutions. The "improvement" dimension in the present auditing processes is far stronger than the "accountability" dimension, and the auditing processes have resulted in real effects, also at the departmental level. [sample: department heads]

Stensaker, Langfeldt, Harvey, Huisman, & Norway An external quality assurance system administered by NOKUT, including quality auditing, institutional The impacts of different forms of evaluation are more similar than expected. The institutional leadership and the administration are the groups identifying most positive effects of the schemes; students are the group that is least informed and is less convinced
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Country</th>
<th>Methodology</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Westerheijden (2011)</td>
<td></td>
<td>accreditations, new program accreditations, and national evaluations.</td>
<td>about the positive effects of various evaluations. [sample: administrators, academic staff and students]</td>
</tr>
<tr>
<td>Suchanek, Pietzonka, Künzel, &amp; Futterer (2012)</td>
<td>Germany</td>
<td>program accreditation</td>
<td>Program accreditation does not support the continuous improvement of quality in teaching and learning; HEIs only gain marginally from the control-oriented approach of programme accreditation. [sample: Vice-Presidents of HEIs, Bologna commissioners, quality managers, deans of study and program managers, student representatives]</td>
</tr>
<tr>
<td>Veiga, Rosa, Dias, &amp; Amaral (2013)</td>
<td>Portugal</td>
<td>The former Portuguese quality assessment system</td>
<td>There is low impact of the institutional context on academic cultures. Quality assurance processes did not generate great interest. [sample: academic staff]</td>
</tr>
<tr>
<td>Vilgats &amp; Heidmets (2011)</td>
<td>Estonia</td>
<td>curriculum accreditation (consisting of self-analysis and experts' visit) (1997-2009)</td>
<td>The general impact was evaluated as comparatively low. It was stronger in relation to the curriculum, study process and academic reputation of a teaching unit, but in several other significant aspects, such as university management, quality assurance and funding, there was little influence reported. [sample: program managers and university leaders]</td>
</tr>
</tbody>
</table>

*Indicating the nature of EQA impact:

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"- -": very negative; ".-": generally negative; "+/-": partly positive and partly negative; "+": generally positive
N.: neutral on EQA impact
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Other studies suggest that quality management is often enhanced as a result of the implementation of EQA. Liu and Yu (2014) found that quality assessment had a strong impact on the improvement of teaching infrastructure and teaching management – changes occurring at the institutional or meso-level, but not much on teaching methods. The Langfeldt et al. (2010) study shows that 20% and 41% of the survey respondents thought that the effects on the governance structures of the institution and the effects on new routines and procedures were “clearly positive” whereas 37% indicated the effects on the quality assurance of the education/teaching were “clearly positive.” Stensaker (1999) found that in reference to the nine objectives the auditing processes aimed to achieve, the greatest effects were in the areas of “management and organization of quality assurance work” as exhibited in stronger centralization and formalization of quality improvement work, and “development of academic staff.”

It is also observed that EQA gives rise to institutional transparency and managerialism. With the growth of information involved in the process of meeting the quality assurance requirements, activities at the department level are also more prone to interference from the institution and the government (Stensaker, 2003). The transparency may also be qualified by the possibility that the institution has learned to “play the game” and try to keep an appearance that is in compliance with the quality assurance system (Dill, 2000). In the meantime, quality assurance mechanisms become a catalyst for putting administrative norms in place (Barrow, 1999), thus giving rise to managerialism at the institutional level. Departmental approaches to quality assurance are frequently being standardised by institution-wide policies and procedures for quality assurance; academic administrators have taken a more autonomous role for more complex and strategic tasks, including taking greater responsibility for internal reviews and follow-up actions after external evaluations (Brennan & Shah, 2000a).

Variation can be seen in the perceived impact of EQA mechanisms among different stakeholders. Some studies (Rosa, Tavares, & Amaral, 2006; Stensaker et al., 2011) found that university leaders and the administration tended to perceive the impact as more positive than academic staff. Stensaker et al (2011) related the higher level of impact perceived by academic administrators to the fact that it is the institutional leadership and the administration that are formally responsible for setting up the quality assurance processes within their institutions. Lack of awareness of quality management processes among academic staff may be another reason for their less positive perceptions on the EQA impact. As revealed in the Veiga et al. (2013) study,
51% of the surveyed academic staff at two schools of a Portuguese institution did not know whether there was an institutional structure to support quality programs.

**EQA impacts on teaching and learning.**

The impacts of EQA on teaching and learning mainly lie in the increased attention drawn toward the quality of teaching and learning, which is echoed in a number of studies (Dill, 2000; Brennan, Frederiks & Shah, 1997; Hou et al., 2015; Jordell, Karlsen, & Stensaker, 1994; Saarinen, 1995). Outstanding improvements have occurred in the teaching environment (Silva, Reich, & Gallegos, 1997). Existence of external quality arrangements provides, at best, a legitimation for internally-driven innovation (Harvey and Newton, 2004).

Studies have shown that academic staff’s perceptions of the EQA impact on teaching and learning are mixed. Researchers have noted less positive experiences and comments in multiple areas. A wide gap was identified between the rhetoric of quality assurance policies and the experiences of academic staff (Cartwright, 2007; Newton, 2000). It is also found that most academics considered quality assurance mechanisms as a bureaucratic practice and brought little benefit to their educational practice (Cheng, 2010); the expertise of academics was subjected to rigid criteria and standards in the quality assurance requirements (Langfeldt et al., 2010); EQA requirements damaged the morale among academic staff (Brennan, Frederiks & Shah, 1997); and the quality assurance system became more accountability-led than improvement-led (Newton, 1999). In contrast, a couple of studies reported generally positive impacts on teaching-related matters. The Hou et al. (2015) study shows that the three accreditation systems under investigation did bring positive changes to teaching-related practices, such as curriculum reform and greater attention given to teaching quality and learning outcomes, while noting some resistance against increased workload incurred by the accreditation processes. Saarinen (1995) reported that when asked “how significant changes have been made with reference to assessment,” 45% of the surveyed academic staff indicated that “quality of teaching” was “important” or “very important” and 47% gave positive responses to “curriculum contents” and “organization of teaching.”

Different quality assurance mechanisms are found to exert different effects on teaching and learning. The Stensaker et al. (2011) study found that the effects on the quality assurance of teaching were felt to come more from auditing of the internal quality assurance system and program accreditation than from institutional accreditation. Vilgats and Heidmets (2011) found
that the perceived impact of curriculum accreditation was stronger in teaching-related practices but weaker in quality management related issues. This finding perhaps is related to the fact that the quality assurance mechanism under their study had a focus on the curriculum.

Stensaker’s (1999) study has provided insights on some internal and external factors that can affect the perceived impact on individual faculty members. The internal factors are related to individual faculty members’ attitudes toward quality assurance in general, such as the extent to which they accept the assessment instruments, the extent to which they recognize evaluation results, the extent to which they can make prima facie interpretation of the data, and their perceptions of the existence of a discrepancy between how they think they taught and how they were evaluated by students. The external factors point to elements in the general organizational climate in which education and evaluations take place. They are also related to how faculty members are stimulated to work on the quality of education (Westerheijden, Hulpiau, & Waetens, 2007).

The EQA impact on students seems to be consistently less tangible than the impact on other types of stakeholders. Students were generally not involved in the quality assessment process and were the least informed about the process (Elassy, 2015; Stensaker et al., 2011); therefore, their perceptions about the impact was limited, ambiguous and idealized (Cardoso et al., 2012; Horsburgh, 1999). Langfeld et al (2010) found from the perspectives of a group of surveyed leaders, staff and students that 24% of the respondents thought the evaluation / accreditation had “clearly positive” effects on student involvement in learning and teaching questions. Liu and Yu’s (2014) study found from students’ perspectives that the quality assessment process helped enhance students’ discipline and commitment to their studies but the improvement regressed after the assessment process was finished.

It is important to note that the institutional context seems to play an important role in affecting the extent to which EQA mechanisms penetrate into local academic units. For example, in Veiga et al’s (2013) study, quality management processes within the institution were not sufficiently visible to academics, resulting in lack of awareness of, and involvement with, quality management issues among academics. Csizmadia, et al. (2008) provided a theory-based proposition for the relationship between the institutional context and the EQA impact; that is, institutional characteristics, such as the dependence of the postsecondary institution on the government, decision-making process within the institution, the complexity within its
governance, its reputation, commitment of institutional leaders, and involvement of external consultancy, are related to the protocol, pace, scope and adequacy of quality management implementation. In other words, the impact of EQA mechanisms seems to be mediated by internal quality management processes, which are determined by certain institutional characteristics. The empirical evidence in Liu’s (2013) study supports the conclusion that the disequilibrium between the operational and normative modes caused by institutions’ interactions with the EQA policy plays a significant role in how the impact of the policy is perceived.

The review of existing literature on EQA impacts on postsecondary education draws my attention to a few things. First, while there is tangible evidence to demonstrate the impacts of EQA mechanisms on organization and management, centralization, bureaucratization and managerialism are also observed to go in parallel with organizational changes. The impact on faculty members is often found less palpable than on administrators within postsecondary institutions. Second, the EQA impact on teaching and learning is less obvious than the impact on organization and management issues. Faculty members’ perceptions as to how EQA-related activities impact their educational practice are mixed and they often encounter less positive experiences. Third, students’ voices regarding EQA impacts are least audible among all stakeholders within postsecondary institutions. Therefore, greater attention should be given to the voices of frontline educators and students when examining EQA impacts. Fourth, as both different types of EQA mechanisms and institutional contexts play a role in how EQA mechanisms affect postsecondary institutions, a research design should take these factors into account.

**Does EQA lead to improvement?**

Does EQA lead to quality improvement? This is an essential question in relation to the EQA impact (Newton, 2012). Based on the key findings of the 20 empirical studies, an “impact indicator” was generated. Table 2 shows that of the 20 studies, only two (Gerbic & Kranenburg, 2003; Stensaker, 1999) reported generally positive results, six studies found mixed results, and the rest presented generally negative findings.

The moderate EQA impact may be conceptually ascribed to the gap between accountability and improvement—the dual purpose of quality assurance (Kis, 2005; Vroeijenstijn, 1995a). On the conceptual level, the relationship between the two notions are often seen mutually exclusive (Thune, 1996; Vroeijenstijn, 1995a) or independent of each other (Middlehurst & Woodhouse,
Thune (1996) defined the criteria for *accountability* as procedures that involve “criteria set down by external authorities and institutions and with the goal of strengthening external insight and even control, opening the door for eventual external corrective action” and the criteria for *improvement* as those “procedures that engage the [higher education] institutions in terms of a self-learning process” and those procedures “should aim at promoting future performance (formative evaluation) rather than judgments on past performance (summative evaluation)” (p. 22); as such, they are quite distinct from each other. The tension between accountability and improvement can be seen as two equally unworkable polar scenarios: in one scenario, accountability is dominant and improvement is ineffectual, and in the other, improvement is dominant and accountability is suppressed; a trade-off between accountability and improvement is required (Massy, 1997). The arguments for incompatibility between the two purposes are made on the basis of the perception that internal processes are related to improvement whereas external processes are associated with accountability (Stensaker, 2003). Therefore, it is difficult for one EQA agency to simultaneously serve two masters: the postsecondary institutions and the stakeholders that are external to them (Vroeijenstijn, 1995b). In addition, accountability may divert academic staff’s attention away from the improvement of learning when they try to comply with the bureaucratic imperative for enhancing cost efficiency, thus damaging the potential for quality improvement (Harvey, 1997, cited in Kis, 2005).

Empirical studies on EQA impact reported mixed results regarding how accountability and improvement are balanced. In the context of the United Kingdom, Newton’s (2000) ethnographic study of a higher education institution found that situational factors relating to organizational context, work environment, and stakeholders’ subjectivities had prevented accountability and improvement from being reconciled. It raised concerns about the “implementation gap” between the intentions of quality assurance policies and the actual outcomes. Newton argued for taking full account of the expectations and values of academic staff in the policy implementation process because sustained quality improvement in teaching and learning is premised upon the energies and initiatives of the academic staff at the ground level. On the other hand, Stensaker’s (1999) study investigating the external quality auditing processes in Sweden found that the improvement dimension was far stronger than the accountability dimension at the departmental level. In Genis’ (2002) case study on technikons in South Africa, tensions were identified between the approach of the external accreditation body and institutional quality assurance.
approaches. However, Genis argued that although the point of departure of EQA is accountability, follow-up and follow-through of improvement recommendations may have enhanced the use of an improvement approach, thus tilting the quality assurance process toward the improvement end of the accountability-improvement continuum.

Scholars also argue for compatibility between accountability and improvement through reasoning and suggest approaches to bridging the gaps. Harvey (1997, cited in Kis, 2005) contends that accountability can lead to improvement in teaching and learning. Woodhouse (1999) believes that accountability can always be rephrased into the perspective of quality improvement. Stensaker (2003) argues that accountability can be dealt with internally when it is seen as being directed at students, disciplines and professions, and quality improvement can have its external origin when the self-evaluation process initiated by external parties turn out to be useful for postsecondary institutions. Self-evaluation is believed to be important to a quality improvement process as the most beneficial part of quality assessment is found in the preparation of the self-evaluation (Brennan, Frederiks, & Shah, 1997) and the long-term objective of a self-evaluation process is to encourage continued internal quality development of the program (Thune, 1996). It is argued that a sound self-evaluation that is conducted under full faculty responsibility offers the best guarantee for quality improvement (Weusthof, 1995). Leeuw (2002) argued for the importance of reciprocity between evaluators and evaluated institutions. Jeliazkova (2002) developed a four-level scheme to classify recommendations from reviewers to facilitate discussions about quality improvement.

Literature further shows that the notion of “quality enhancement” has often been in quality assurance-related discussions in the United Kingdom. When its EQA body, the Quality Assurance Agency for Higher Education (QAA), introduced institutional auditing to the postsecondary education community in 2005, the QAA also accepted and advocated the inevitability of building the notion of “quality enhancement” into the audit process (Filippakou & Tapper, 2008). While there were those who believed that “quality enhancement” was quite a different territory than “quality assurance,” there also existed the supposition that “quality enhancement can only blossom in the context of a flexible, negotiated evaluative model” (Filippakou & Tapper, 2008, p. 92) and the acknowledgement that how to institutionalize quality enhancement would be the greatest challenge. As Filippakou and Tapper (2008) observed, in contrast to quality assurance that means making judgements against defined criteria, the quality
enhancement agenda is less bounded and potentially provides greater space and freedom to academics, thus opening up more possibilities in the understanding of the experiences of postsecondary education. Filippakou and Tapper also contended that quality assurance and quality enhancement could be in “a positive symbiotic relationship” and are “in effect interactive processes in the improvement of an institution’s teaching and learning mission” (p. 93).

At a recent European Quality Assurance Forum, Newton, an emeritus professor from a U.K. university, provided insights on the relationship between quality assurance, quality enhancement and quality improvement. Newton (2012) views “quality enhancement” as “a deliberate process of change that leads to improvement,” including both strategic initiatives and the small steps to make things better; improvement “is the outcome of enhancement” and “arises from enhancement activities” (p. 9). Newton does not see it helpful to represent quality assurance practice only in terms of accountability as quality assurance can provide a context for quality enhancement and thus becomes an important driver for it. He also acknowledges that there are no simple solutions to the transition from quality assurance to enhancement and then to improvement.

However, in other jurisdictions, the concepts of “quality enhancement” and “quality improvement” do not seem to carry distinct connotations. In a longitudinal case study of a teacher education college in Israel (Ezer & Horin, 2013), it is found that during the first three years of implementing a quality assurance program, leading faculty members’ perceptions changed from a view of the process as a target to be achieved (a view of quality assurance) to a view of the process as expressed in synergy between the institution and individuals for improvement (a view of quality enhancement). In this context, quality enhancement was understood as a process directed at cultivating an internal culture of quality and anchored in the institution’s organizational learning routines (Ezer & Horin, 2013). In Smith and MacGregor’s (2009) study, learning community programs committed to quality improvement at several U.S. institutions were examined and factors that made difference in stimulating their quest for quality were identified, including learner-centred leadership and organizational structures to support those programs. In both cases, organizational learning appears important to their quality enhancement or improvement endeavours.

EQA impact studies fundamentally aim to address an essential question in quality assurance issues, that is, the relationship between accountability and improvement. Conceptual
reasoning and empirical evidence reviewed above suggest that on one hand tension exists between the two; and on the other hand, efforts are being made to reconcile the two and make them compatible. It can also be argued that only when ways are found to reconcile accountability and improvement in the process of implementing an EQA mechanism can the mechanism produce genuinely positive impact on postsecondary education. This became a question for me when I approached this dissertation.

Curriculum Development

As Null (2011) succinctly notes, “curriculum is the heart of education” (p. 1). The definition of a curriculum has multiple orientation or perspectives. It has evolved from narrow definitions focusing on subject-matter mastery to broad ones encompassing all of the experiences at school (Wiles & Bondi, 1998). In contemporary literature, the following definitions can be found. A curriculum is “a particular way of ordering content and purposes for teaching and learning in schools” (Walker, 2003, p. 5), and “a specific blueprint for learning that is derived from content and performance standards” (Wiggins & McTighe, 1998, p. 4). Related to this definition are a set of curriculum documents and perspectives of teachers and schools. In addition, a curriculum is also conceptualized as planned experiences (Terwel & Walker, 2004), such as “planned learning experiences that the educational institution intends to provide for its learners” (Uys & Gwele, 2005, p. 1). Further, Lattuca (2007) defines curricula as “sites of interaction among instructors, learners, and the content to be learned” (p. 39).

Curriculum work is important for various reasons. First of all, curriculum fosters student learning as it is believed that it is the “interaction of individuals and curricula that results in learning” (Lattuca, 2007, p. 39). Curriculum is a vehicle for students’ gaining status by acquiring credentials conferred by institutions (Tilly, 1998). Curriculum work is also important to a nation because it relates to what teachers teach and what students learn, thus helping “to shape our identity and our future” (Walker, 2003, p. 3). Not only that, curriculum is a lens for examining social change as “the history of the higher education curriculum is, at heart, a history of the development of national systems, their educational goals, and how they modified educational programs to serve those goals” (Lattuca, 2007, p. 40).

Curriculum work can happen in different arenas. They can be classrooms, schools or school systems, and public policy forums, which respectively represent the instructional level,
the institutional level and the policy level of curriculum work (Walker, 2003). Thus, responsibility for curriculum is widely shared among individuals, such as teachers, curriculum professionals and leaders, and among organizations, such as government departments, professional agencies and curriculum development bodies (Walker, 2003).

On the practice level, domains of knowledge in curriculum, or domains of curriculum, are also multiple, including curriculum development, curriculum design, curriculum implementation, curriculum evaluation, curriculum change, and curriculum policy (Behar, 1994). In particular, curriculum development is “a process where the choices of designing a learning experience for clients (students) are made and then activated through a series of coordinated activities” (Wiles & Bondi, 1998, p. 2). This definition is used in the dissertation.

Depending on the level of the curriculum, curriculum development can be a national process and an institutional process (Uys & Gwele, 2005): it is a national process as national regulatory bodies develop a standardized curriculum for specific professional programs, such as nursing; it is an institutional process when certain organizational structure, such as the curriculum committee, intervenes in developing the curriculum for use within an institution.

The steps of curriculum development have gone through some changes over the years. According to an earlier seminal publication, curriculum development has the following steps (Taba, 1962, p. 12):
- Diagnosis of needs;
- Formulation of objectives;
- Selection of content;
- Selection of learning experiences;
- Organization of learning experiences;
- Determination of what to evaluate and means of doing it.

In a more recent publication (Uys & Gwele, 2005, pp. 25-26), the steps consist of
- Establish the context and foundations;
- Formulate the outcomes or objectives;
- Select a curriculum model and develop a macro-curriculum
- Develop the micro-curriculum
- Plan for the evaluation of implementation and outcomes
Comparing the two sets of procedures, one can see the commonalities that both include a situational analysis that involves examining the context and needs of the curriculum, as well as formulation of learning objectives or outcomes. The difference is that Taba’s model appears to be content-based whereas the Uys and Gwele model is open to different curriculum models and recognizes the macro- and micro-levels of the curriculum, that is, the program-level and course-level curriculum. While the macro- and micro-levels of the curriculum are both important to curriculum development, the micro-curriculum seems to be the determinant of curricular changes, as Walker (2003) has pointed out that “curriculum change doesn’t count until teachers change the classroom curriculum” (p. 19). In addition, the Uys and Gwele model includes a self-regulatory piece—curriculum evaluation so that the implementation and outcomes of the curriculum can be monitored.

It is important to note that the philosophical underpinnings of curriculum are contested. Making a distinction between motives underlying behaviours of curriculum professionals and articulated beliefs held by them, Schiro (2008) distinguishes between the phases of “curriculum ideology” and “curriculum philosophy.” To Schiro, four curriculum ideologies have been at war with each other in the past hundred years: the scholar academic ideology (emphasizing knowledge of academic disciplines); the social efficiency ideology (emphasizing the needs of society and attaching importance to competencies and accountability); the learner-centred ideology (emphasizing the needs of individuals and the growth of learners); and the social reconstruction ideology (emphasizing the role of education in facilitating the construction of a more just society).

An emphasis on clearly defined learning outcomes is considered a feature of learning-centred curricula (Hubball & Burt, 2004) or a learner-centred curriculum (Cleveland-Innes & Emes, 2005). A distinction between outcomes and objectives is noted: while learning outcomes identify the overall impact of the course on learners, objectives explain what the instructor is responsible for in the course, thus representing the instructor’s intention (Ascough, 2010). The best curriculum is believed to be derived from the learners’ point of view and their desired achievements, and specify what the learners will do, not just what the teacher will do (Wiggins & McTighe, 1998). Based on this thinking, there is a shift from a curriculum paradigm toward a learner-centred paradigm (Cleveland-Innes & Emes, 2005). In the curriculum paradigm, the material to be covered, as expressed in the syllabus, is central; the learners do their best to master
it by whatever means. In the learner-centred paradigm, the needs and individual powers of the learners in relation to the curriculum material hold centre stage, and the learners take on the role of participants to co-create their learning experiences. Inclusion of outcomes is recognized as a key identifier of a learner-centred curriculum, where explicitly articulating learning outcomes becomes a major principle (ibid., p. 97). The outcomes-based approach to curriculum development seems to fit well with the learner-centred ideology according to Schiro’s (2008) typology.

In line with the learner-centred approach, using learning outcomes or objectives is advocated as good practice for course design and curriculum development in contemporary literature. Learning outcomes or aims are placed at the centre of a curriculum development process and inform the components of teaching, learning, assessment and evaluation (Cowan & Harding, 1986; Stefani, 2004-05). Instructors are urged to take into account both teaching goals and learning outcomes in their course design so that content and student learning outcomes can be integrated seamlessly into the course (Benassi & Goldstein, 2012). Actually, specifying learning outcomes is the first step in course design. Svinicki and McKeachie (2011) recommend instructors to begin their course design process by preparing for teaching goals and student learning outcomes. Ascough (2010) has differentiated the nomenclature of outcomes, outputs and objectives, and introduced a tripartite model of course design that involves a sequential procedure of identifying student learning outcomes, determining student outputs, planning teaching and learning objectives, and then composing the course description. In Particular, Wiggins and McTighe (1998) has recommended “backward design,” which is a curriculum design that “starts with the end – the desired results (goals or standards) – and then derives the curriculum from the evidence of learning (performances) called for by the standard and the teaching needed to equip students to perform” (p. 8). The model consists of three sequential stages: identifying desired results; determining acceptable evidence; and planning learning experiences and instruction. Morrison, Ross, Kalman, and Kemp (2011) distinguish between “terminal objectives” and “enabling objectives” in that the enabling objectives represent subobjectives leading to accomplish the terminal objectives.

The outcomes-based curriculum seems to be in greater demand in professional education than in general education. Medical education is spearheading this movement. An independent commission report involving 20 professional and academic leaders from various countries
around the world, entitled *Health Professionals for a New Century* (The Lancet, 2010), has advocated for a comprehensive reform in the training of healthcare professionals. Their recommendations for instructional reform include “adopt[ing] competency-based approaches to instructional design” and “promot[ing] a new professionalism that uses competencies as objective criteria for classification of health professionals and that develops a common set of values around social accountability” (The Lancet, 2010, p. 3). Similarly, in the report *The Future of Medical Education in Canada* released by the Association of Faculties of Medicine in Canada in 2010, one of the recommendations is to adopt a competency-based, flexible approach, stating that “MD education must be based primarily on the development of core foundational competencies and complementary broad experiential learning” (p. 7).

The strong external demand for the outcomes-based curriculum has much to do with the rising external pressure for quantifiable measurements for assessing student learning (Diamond, 2008). A drive for this is the accreditation standards of professional associations in which the expectations for an outcomes-based educational model are embedded. Thus, the demands for the outcomes-based approach do not only arise from the educational point of view but also represent a top-down process (Ascough, 2010). This use of the outcomes-based approach appears to fit well with the social efficiency ideology in Schino’s (2008) typology.

A note should be made here about terminologies used when discussing the outcomes-based approach. Suskie (2009) defines learning outcomes as “the knowledge, skills, attitudes, and habits of mind that students have and take with them when they successfully complete a course or program” (p. 23). When the term “competence” or “competency” is used, it reflects use of the outcomes-based approach. In Rychen’s (2004) competency framework, competence is defined as “the ability to meet demands or carry out a task successfully, and consists of both cognitive and non-cognitive dimensions” (p. 7). Thus, competence / competency are defined and observed in the context of actual performance tasks; this explains why professional programs tend to use the term competence or competency to represent student learning outcomes. Further, there has been a shift of meanings of “competence” over time. The connotations have changed from its “old” use in terms of behaviour-oriented skills to its “new” use as a more integrated approach of developing integrated clusters of knowledge, skills and attitudes (Mulder, Gulikers, Biemans, & Wesselink, 2009). In this sense, the new use of “competence” is equivalent to how learning outcomes are usually understood.
In this section, definitions of curriculum, procedures for curriculum development, and different curriculum models are reviewed. In particular, the outcomes-based approach to curriculum development is given much attention. The review shows that the outcomes-based approach not only reflects the learner-centred ideology but also represents the social efficiency ideology when it is used by professional programs, especially for accreditation purposes.

**Interconnections between EQA and Curriculum Development**

This section discusses the interconnections between EQA and curriculum development as their connectivity represents the focus of inquiry of this dissertation. The review of literature is presented in three areas: (a) the outcomes-based approach to postsecondary education; (b) a shift towards outcomes-based quality and quality assurance mechanisms; and (c) whether outcomes-based quality assurance and outcomes-based curriculum development could converge in postsecondary education.

**The outcomes-based approach to postsecondary education.**

Contemporary postsecondary education is increasingly oriented toward learning outcomes (Allan, 1996; Ewell, 2005; Nusche, 2008). This orientation is not only seen in the expectations for professional programs through professional accreditation requirements, but also in postsecondary education in general. The outcomes-based approach has been explicitly identified in documents that govern postsecondary education on the international arena. In a CEDEFOP (2009) publication, learning outcomes are recognized as having such functions as reference-level descriptors, a tool for relating theoretical and practical learning, and a vehicle of quality assurance, and are used to inform two broad areas: identifying national qualifications at the system level as well as designing and developing curricula. In its comprehensive review, an OECD publication *Tertiary Education in the Knowledge Society* (Santiago, Tremblay, Basri, & Arnal, 2008) has identified seven trends¹ in today’s tertiary education (i.e., postsecondary education) and recognized quality as a major challenge to contemporary postsecondary education. As a recommendation for designing a quality assurance framework, increased focus

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¹ Those seven trends are expansion of tertiary education systems, diversification of provision, more heterogeneous student bodies, increasing focus on accountability and performance, new funding arrangements, new forms of institutional governance, global networking, mobility and collaboration (pp. 14-5).
Definitions of learning outcomes can be found in various sources. In addition to the one mentioned earlier (Suskie, 2009), Ewell (2005) states that learning outcomes “are properly defined in terms of the particular levels of knowledge, skills, and abilities that a student has attained at the end (or as a result) of his or her engagement in a particular set of teaching/learning experiences” (p. 4). In practice, learning outcomes are represented in a set of outcomes statements – “statements of what a learner knows, understands and is able to do after completion of learning” (CEDEFOD, 2009, p. 18) (that is, the desired outcomes of learning); on the other hand, learning outcomes are used to discuss students’ academic achievement (that is, the actual outcomes of learning). These definitions suggest that learning outcomes are a special kind of student outcomes that is directly related to learning in terms of knowledge, skills and abilities (Ewell, 2001, 2005), and they have cognitive, affective and behavioral domains.

It is worthwhile to examine the broader postsecondary environment in order to better understand the increasingly prominent outcomes-based approach to postsecondary education. From the perspective of social philosophy, Barnett (1994) has acutely observed that social changes in the knowledge society: shifts from “knowing as contemplation” to “knowing as operation” (p. 15), from “higher education in society” to “higher education of society;” from a relationship of “higher education → knowledge → society” to a reverse one of “society → knowledge → higher education” (p. 22); and a shift in the curriculum, where “action elements have become more explicit and more significant parts of the curriculum” (p. 48). As a result, while modern society is reaching for other definitions of knowledge and reasoning, such as outcomes and competencies, higher education yields to the external definitions of knowledge from society and is falling in with the requirements being put its way. Arguably, when postsecondary education has become instrumental to the knowledge society, the notions of outcomes and competencies as defined by the society have consequentially stood more prominent than ever. Accordingly, the external demands from the society for postsecondary education have become more tangible than ever.

Another related factor is that accountability drives many on-going occurrences in postsecondary education, including outcomes-oriented endeavours. Sigler (2007) has called the contemporary period of higher education as the Age of Outcomes. Numerous calls for greater
accountability have shaped this Age of Outcomes: prospective students and parents are demanding data on what returns they will realize on their investments; accrediting agencies are demanding that higher education institutions provide outcomes metrics; grants and donors are increasingly demanding data on the return obtained from their grants and gifts. Sigler, as a senior manager of a U.S. university, argues that in order to thrive in the Age of Outcomes, higher education managers “will have to make a major paradigm shift from a process orientation to one that is stakeholder-focused and outcome-oriented” (Sigler, 2007, p. 17). In this context, the outcomes-based approach is not only demanded in the realm of professional education, but has permeated into the whole postsecondary education system.

**A shift towards outcomes-based quality and quality assurance.**

The quality of an educational system can be examined from three perspectives: the inputs to the system, what happens within the system (the process), and the outputs from the system (Killen, 2000). A shift from resource-based quality to outcomes-based quality was noted in the 1980s (Terenzini, 1989). The shift has evidently continued. Improving quality of learning is considered the aim of using the learning outcomes approach (Biggs & Collins, 1982; Biggs, 2003). It is argued that when the quality of postsecondary education is viewed as “value-added” (Bogue, 1998), learning outcomes will inevitably enter into the framework of quality measurement: How can quality be determined without knowing the gains from the entry level to the exit level (i.e., the learning outcomes)? Thus, learning outcomes are the most important of all the quality indicators (Coates, 2010). Three assumptions are behind the use of articulated learning outcomes for the purpose of fostering educational quality: clarity of focus as expressed in specified learning outcomes will enhance teaching and learning processes; a commitment to ensuring that all students have access to and succeed with high quality outcomes enhances equity in education; and articulated learning outcomes will provide better accountability than looking at quality in terms of inputs such as hours of instruction (Willis & Kissane, 1997).

In terms of quality assurance, learning outcomes represent part of the quality measurement framework (Finnie & Usher, 2005). Articulation of learning outcomes is believed to fulfill the dual purposes of quality assurance mechanisms and quality enhancement mechanisms so that they can be bridged (Willis & Kissane, 1997). Therefore, outcomes articulation has become an indispensable part of many quality assurance systems. For instance, accreditation in North America, either on the institutional level or on the program level, is very much output or
outcomes based (Westerheijden, 2001). As another indicator, increasingly adopted qualifications frameworks in quality assurance mechanisms in North America, Europe and Australia also tend to be outcomes-based. In the U.K., for example, explicit learning outcomes and referencing against benchmarks are used in the quality assurance framework of the Quality Assurance Agency (Jackson, 2002). This shift in emphasis from inputs to outputs is entwined with the emergence of the student-centered approach and the development of expertise in learning outcomes (Harvey, 2008). In addition, assessment of learning outcomes is viewed as one of the approaches to quality assurance (Nicholson, 2011) and a primary means of improving institutional quality (Nettles, Cole, & Sharp, 1997).

As a common quality assurance mechanism, accreditation has become a driving force for learning outcomes assessment and quality assurance. As Ewell has observed, a large share of the institutional attention to assessing student learning outcomes “can be attributed directly to the actions of accreditors” (Ewell, 2001, p. 9) and greater influence on assessment comes from accreditation bodies than from government agencies (Ewell, 2009).

**Convergence between EQA and curriculum development?**

The literature review above suggests that on one hand, quality and quality assurance have gradually taken on the outcomes-based approach and on the other hand, a curriculum development model can be outcomes-based. As such, both quality assurance and curriculum development seem to move towards the use of learning outcomes as a common approach. Given this same orientation, one might presume that the translation of outcomes-based quality assurance policies into outcomes-based curriculum development practice would be a fairly smooth process. However, it does not appear to be this simple in reality. Literature below demonstrates that although efforts have been made in some scenarios to integrate quality assurance and curriculum development into one connected process, there exists conceptual work that deliberately separate the two. In practice, there are cases where quality assurance policies affect the curriculum in postsecondary institutions. But there is no straightforward answer to the question as to whether EQA mechanisms and curriculum development could converge or not. Convolution and complexity remain on both conceptual and practical levels.

The interconnectivity between the outcomes-based approach to quality assurance and to the curriculum appears to be represented in a model developed by Mansfield and Mitchell (1996). The model (Figure 2) delineates a series of top-down connections that flow from occupational
competence (i.e., the learning outcomes) to learning and assessment practices (i.e., the components of a curriculum) using a Competence, Standards, Assessment, Learning and Qualifications (CSALQ) model. It starts with occupational competence, defined as “being able to meet the technical requirements specific to the occupation, manage and control breakdowns and variance, coordinate different activities to meet overall objectives, and adapt and modify to meet the requirements of different environments” (Mansfield & Mitchell, 1996, p. 67). It should be noted that the notion of competence reflects a broad, integrated view of competence as it describes learning outcomes in terms of work roles, rather than the discrete skills, knowledge, attributes of the worker and work tasks. What is expected in work roles, both now and in the future, is described in terms of occupational standards. From those standards the curriculum is derived. The curriculum consists of what the individual learners need to learn to achieve the standards (i.e., learning) and how the learners will demonstrate that they have achieved the standards (i.e., the assessment system). A method of functional analysis is used to develop the occupational standards on the basis of occupational competence so that competence and standards are bridged. Through a qualifications process, a set of occupational standards are subjected to formal assessment. In this CSALQ model, the competence (i.e., the learning outcomes) plays a key role, guiding and directing the entire process.

The CSALQ model suggests a set of social relations that link all the stakeholders together. The standards, which are typically expressed in quality assurance policies, are informed by competence or learning outcomes, constitute the essential linkages to learning and assessment (i.e., the curriculum). In this process, learning outcomes, quality assurance policies and the curriculum are integrated into a whole. The stakeholders involved in this process include a professional or vocational body that defines the competences and standards; an authority body that oversees the qualification process; academic staff that delivers the competency-based curriculum and facilitates competency-based learning; students who need to achieve the goal of attaining those competencies; the academic department and the postsecondary institution that have an interest in the students’ learning outcomes; and the employers who ultimately test whether or how well the students have attained the competences required by the occupation. As such, the competence-based model illustrates how a competence-based quality assurance mechanism works out in the context of a vocational qualifications framework. A missing piece in this model is that assessment and learning are desirably in an interactive relationship as these two
components relate to each other in the curriculum (Morrison et al., 2011). Figure 2 shows the modified model.

![Figure 2. The Competence, Standards, Assessment, Learning and Qualifications](Source: modified from Mansfield & Mitchell, 1996, p. 85)

Developed in light of the National Vocational Qualifications framework in the U.K., the CSALQ model is certainly what Voorhees (2001) called an “industry-based model” of competence-based learning and appears to represent a general model for professional accreditation and professional education. In a “general education model,” some parts, vocational competence for instance, may be worded differently. However, the basic flow of the process remains the same; that is, the competence or learning outcomes generate a set of standards for quality assurance purposes, and the standards affect such curricular activities as learning and assessment.

Jackson (2000) attempted to bridge the gap between political imperatives, as expressed in policy documents, and the reality of academic practice by creating a process model that links “what is to be learnt” with “what is actually learnt” via a “process of learning” (p. 138). The model (Figure 3) consists of program specifications and a progress file: the program specifications link the “intended outcomes” with the “processes that enable outcomes to be achieved” and the progress file connects the “processes that enable outcomes to be achieved” with the “outcomes achieved.” The program specifications facilitate the connection between the intended program outcomes (i.e., those specified in quality assurance policies) and the unit outcomes in the program (i.e., those outcomes in the curriculum). Jackson also argues that
achievement of desired learning outcomes is a shared responsibility of both the policy of program specifications and the learners’ own learning experience. It is a vision to connect these two areas and by so doing, a synergy is created to make a real difference to the quality of learning. Jackson does not conceive the existence of a conflict between top-down and bottom-up approaches to policy implementation. Rather, he maintains that while the policy is driven top-down, it is actually being created bottom-up by those most affected by it.

Both Mansfield and Mitchell’s (1996) CSALQ model and Jackson’s (2000) outcomes-based learning model demonstrate that practices of curriculum development and quality assurance can converge through the learning outcomes. These connections probably explain why the notion of outcomes was seen as the linchpin of the national qualifications for both vocational and non-vocational programs in the U.K., a significant shift from the previous scenario where the national qualifications distanced themselves from any concern with the curriculum (Burke, 1995).

On the reverse side, the dimensions of the learning outcomes approach are polarized in Proitz’s (2010) analytic framework. Proitz sees the phenomenon of learning outcomes as an “institutional fact” that is conceptualized along two dimensions: purpose orientation and learning orientation (Figure 4). The dimension of purpose orientation consists of curriculum development on one end and accountability on the other; and the dimension of learning orientation consists of “process-oriented, open-ended and limited measurability” and “result-oriented, full-ended and measurable” at two ends (Proitz, 2010, p. 123). Thus, curriculum development and external

![Image](image_url)
quality assurance are conceived as two separate ends of a continuum, if not dichotomous, within the learning outcomes approach. The polarized relationship between accountability and curriculum development in Proitz’s framework may explain why there exists an underlying tension between accountability and improvement, as discussed earlier in the first section of Chapter 3.

Literature also shows that quality assurance principles and schemes can affect the practices of curriculum development in different ways. Khalifa, Aboaba and Shafie (2012) studied how a new outcomes-based accreditation mechanism operating since 2000 had oriented the curricula of engineering programs at a Malaysian university and a Nigerian university toward an outcomes-based paradigm. Kayyal and Gibbs (2012) reported how the requirements for a quality assurance model (ISO9001) had been applied to the principles and structures used for a curriculum transformation process at the medical school of a Syrian university. MacAskill, Goho, Richard, Anderson and Stuhldreier (2008) presented a three-stage Quality Assurance in Curriculum strategy that had been used at Red River College, a community college in Manitoba, Canada since 2000; the strategy was drawn upon international perspectives and practices regarding educational quality and quality assurance. All these initiatives that integrated quality assurance into curriculum development aimed for realizing quality improvement in the curriculum.

Literature reviewed above suggests that quality assurance mechanisms outside postsecondary institutions and curriculum development practice inside those institutions, the two seemingly separate realms, could be connected through the use of learning outcomes and outcomes-based standards although this may not be the only approach. It is also suggested that when quality assurance is applied to curriculum development, it could help improve the

*Figure 4.* Proitz’s (2010) analytic framework for examining literature on learning outcomes
curriculum, rather than serve the purpose of control and accountability. So the question is how to facilitate the process in which quality assurance schemes could inform, guide and foster curriculum development.

**Summary**

This chapter has reviewed three areas of literature that are relevant to the study: (1) the impacts of EQA on postsecondary education; (2) curriculum development; and (3) interconnections between EQA and curriculum development. While the literature review suggests that EQA and curriculum development could interact with each other, it also poses two questions: Does EQA lead to quality improvement? Could the outcomes-based EQA and outcomes-based curriculum development converge conceptually and in practice?

In the next chapter, I will build the conceptual and analytical frameworks of the study, which are based on conceptual work regarding the influences on curriculum development and EQA impact models.
Chapter 4. Conceptual and Analytical Frameworks

A conceptual framework is a visual or written product, one that “explains, either graphically or in narrative form, the main things to be studied—the key factors, concepts, or variables—and the presumed relationships among them” (Miles & Huberman, 1994, p. 18). A conceptual framework is evaluated against how effectively it represents what really exists and is actually occurring (Maxwell, 2012b).

The conceptual framework for this dissertation was informed by the following four areas of literature: (1) external influences on curriculum development; (2) process causality and the realist approach to impact analysis; (3) conceptual models of impact of external quality assurance (EQA); and (4) the importance of the context and connectivity between the global and the local.

External Influences on Curriculum Development

The development of curricula for postsecondary education is subject to a number of factors. Lattuca (2007) examined the curricula in higher education from historical and international perspectives and brought to the foreground internal and external factors that influence courses and programs; and these factors include students, institutional contexts, and prevailing social and cultural forces that shape what happens to the curriculum.

Lattuca and Stark’s (1997, 2009) Academic Plan Model delineates the influences on curriculum development that come from inside and outside a postsecondary institution. The model views the curriculum as an academic plan, and assumes that the faculty plays a key role in curriculum development. The academic planning process is influenced by a variety of internal and external factors. As shown in Figure 5, the academic plan consists of seven decision points: purposes, content, sequence, instructional processes, instructional resources, and assessment of student learning and evaluation of the course/program. In the academic plan, there is also an adjustment component, where instructor may need to make changes during or after a course is taught (Path A). In addition, the model also acknowledges the influence of some sociocultural and historical factors. These factors are from outside the institution, such as the labour market, the government and accreditation standards etc., as well as from inside the institution. The internal influences are further divided into institutional-level ones, such as mission, resources, and institutional policies, and unit-level ones, such as program goals, faculty beliefs and disciplinary characteristics. Thus, the Academic Plan Model not only provides an overall picture
of a curriculum development process but also underscores the importance of taking stock of the external influences on the curriculum development process. The model mirrors the accountability-oriented environment in today’s postsecondary education.

Figure 5. Lattuca and Stark's (2009) Academic Plan Model

**Process Causality and the Realist Approach to Impact Analysis**

The notion of “process causality” and the realist approach to impact analysis were important for this research project that aimed to analyze the impact of external quality assurance mechanisms on curriculum development.

Impact analysis is related to program evaluation. Unlike program evaluation, impact analysis concerns demonstrating and explaining the effects of a treatment or a program, instead of evaluating the worthwhileness of the program (Mohr, 1995). In his book *Impact Analysis for Program Evaluation*, Mohr (1995) disclosed the logic of inference behind various research designs for conducting impact analysis, including the qualitative method. Impact analysis deals with causation, which is typically rooted in a counterfactual definition of causality, that is, “a comparison of what did appear after implementing the program with what would have appeared had the program not been implemented”; thus, the difference between the measure of the
“resulting” state of the world and the estimates of the counterfactual is the estimated program impact (p. 4). To estimate the counterfactual, quantitative methods, such as regression, are usually used. In a regression analysis, the regression coefficient and the difference of means are equivalent modes of expressing the treatment’s impact (Mohr, 1995, p. 110). In contrast, the qualitative method of impact analysis does not rely on the counterfactual definition of causation, and therefore requires other approaches.

To explain the qualitative approach to impact analysis, Mohr (1982, 1995, 1996) distinguishes between “variance theory” and the “process theory.” The variance theory involves precise measurement of differences and correlations, and is thus associated with statistical analysis; the process theory deals with events and the processes that connect them, and is based on an analysis of the causal processes, thus lending itself to the in-depth study of one or a few cases. This affirms the value of case studies for providing causal explanation and conducting impact analysis (Maxwell, 2004a). In a similar vein, Maxwell (2004a, 2004b, 2012a, 2012b) distinguishes a realist approach to causal explanation from a positivist regularity approach. The regularity approach treats the actual process of causality as an unobservable “black box” and focuses on discovering whether there is a systematic relationship between events, or observed regularities in associations of events; thus, research using this approach aims to estimate the effects of a treatment or a program. This is the logic that quantitative studies typically adopt. In contrast, a realist approach sees causality as the actual causal mechanisms and processes that are involved in particular events and situations; thus, research using the realist approach aims to establish the “qualitative nature of social objects and relations on which causal mechanisms depend” (Sayer, 1992, pp. 2-3). Thus, the realist approach to impact analysis sees causality as processes rather than variables and regularities. This process view of causality is called “process causality” (Anderson & Scott, 2012).

Literature suggests the following ways to detect and trace process causality.

- Generative mechanisms, events and experiences as domains of reality. Realists believe that the world consists of three domains of reality: mechanisms, events and experiences. That is, the processes that generate events constitute the real domain, in which generative mechanisms or causal powers exist independently with a tendency to produce patterns of observable events under contingent conditions; patterns of events, whether they are observed or not, constitute the actual domain, along with experiences; and the
experiences that may be obtained by direct observation constitute the empirical domain (Bhaskar, 2008). Realists also consider that the causal impacts are not fixed but are contingent on their environment or the context (House, 1991; Sobh & Perry, 2005; Sayer, 2010).

- Process analysis. The realist approach fundamentally sees causal explanation as a matter of identifying the actual processes that resulted in a particular outcome in a certain context (Abbott, 1992; Maxwell, 2012a). In congruence with the realist approach, a case study design is believed to have the capability to uncover the causal processes linking inputs and outputs within a system—through comparison, eliminative induction and analytic induction (Hammersley, Gomm, & Foster, 2000; Robinson, 1951).

- The intrinsic value of the context to causal explanation. From a realist perspective, causal explanation is primarily a local phenomenon, and valid explanations must be based on an understanding of local processes in context (Maxwell, 2012b). As Pawson and Tilley (1997) maintain, “the relationship between causal mechanisms and their effects is not fixed, but contingent” (p. 69), that is “mechanism + context = outcome” (p. xv); it depends on the context within which the mechanism operates. The causally relevant contexts for understanding a phenomenon include both the immediate physical and social situation and the broader social and cultural contexts (Maxwell, 2012b).

- The importance of intentions, beliefs and meanings for causal explanation. Realist social scientists see the mental phenomena such as intentions, beliefs and meanings held by participants in a study as essential parts of the causal mechanisms operating in that setting, and as real as physical phenomena (Huberman & Miles, 1985; House, 1991; Maxwell, 2012a; Sayer, 1992).

- Operative reason and factual causation. According to Mohr (1999), operative reason, defined as “the reason that actually operated to produce the behaviour performed” (p. 74), is the strongest among all contemporary reasons for a certain behavior; thus determination of the causes of intentional human behaviours involves a search for the operative reasons behind the behaviours (p. 75). Factual causation refers to this logic: “X was a factual cause of Y if and only if X and Y both occurred and X occupied a necessary slot in the physical causal scenario pertinent to Y” (Mohr, 1999, p. 73). The idea of a “necessary slot” means “if something did not occupy that particular functional slot (and it
happened in this case to be X), Y would not have occurred, the spirit of the counterfactual definition is preserved”; in other words, factual causation relies on a counterfactual claim (Mohr, 1999). Thus, a clue to establishing causation between X and Y is a statement to the effect that if X had not had happened, neither would Y.

The realist approach to impact analysis can be viewed as a method of qualitative causal analysis. It demonstrates and fits well with the power of qualitative causal analysis, which Miles and Huberman (1994, p. 147) described as below. The approach that Miles and Huberman took is actually realist (Maxwell, 2012b).

Qualitative analysis, with its close-up look, can identify mechanisms, going beyond sheer association. It is unrelentingly local, and deals well with the complex network of events and processes in a situation. It can sort out the temporal dimension, showing clearly what preceded what, either through direct observation or retrospection. It is well equipped to cycle back and forth between variables and processes—showing that ‘stories’ are not capricious, but include underlying variables, and what variables are not disembodied, but have connections over time. (italics in original)

In summary, although impact analysis deals with causal explanation, it is important to distinguish between a process view and a regularity view of causality and between a qualitative design and a quantitative design for examining causality (Mohr, 1995; Maxwell, 2012). This distinction is particularly important to make given the general belief held in academia that qualitative studies are not considered sufficiently rigorous or generalizable to establish causality (Anderson & Scott, 2012) and causation is typically established through randomized controlled trial (Cook, Scriven, Coryn, & Evergreen, 2010). This qualitative study found the notion of “process causality” and the realist approach to impact analysis relevant in that these concepts helped unpack a process of EQA impact on postsecondary education into various components (i.e., generative mechanisms, events and experiences) and provided intellectual support for reasoning about the EQA impact.

EQA Impact Models

Although a good number of EQA impact studies have been published, conceptual work on EQA impact is not often seen in the research literature. Two conceptual models shed light on understandings of EQA impact.

Based on their empirical study that drew upon experiences in 29 institutions and 14 countries, Brennan and Shah’s (2000a, 2000b) EQA impact model distinguishes levels and mechanisms of impact, with the levels being system, institution, basic unit and individuals, and
the mechanisms being rewards, policies/structures and cultures, as shown in Figure 6. Impact through *rewards* refers to the effects of the published results of quality assessment on funding, reputation and influence; impact through *policies and structures* can be the internal quality assessment processes that are created in response to the requirements of external quality assessment and the recommendations made in the external assessment reports; and impact through changing *cultures* can arise from the self-evaluation process and the effects of institutional quality assessment procedures. In addition, the EQA impact is also influenced by the context on the national and institutional levels as well as the extent and methods of state steering of postsecondary education. Brennan and Shah find that in some contexts, most of continental Europe for instance, curriculum-related matters are decided at least formally by the state; in other contexts, such matters are decided within individual postsecondary institutions. Brennan and Shah (2000a) also make it clear that the conceptual model is concerned with the relationship between quality management and institutional change.

![Figure 6. Brennan and Shah's (2000a) model of the impact of quality assessment](image)

The strength of the Brennan and Shah model is two-fold: They recognize the importance of the contexts in which different EQA mechanisms could occur and the various levels at which the impact of EQA materializes; and they categorize the actual impact into three areas— rewards, policies/structures, and cultures. However, they fail to give adequate attention to the *processes* in which how EQA mechanisms could impact various levels within a postsecondary education
system. This gap can be filled by Scheuthle and Leiber’s (2015) conceptual model of EQA impact.

Based on Coleman’s (1990) social theory, Scheuthle and Leiber (2015) have conceptualized a process-based EQA impact model, where the propositions of EQA impact begin and end at the institutional or macro level, but in between dip to the level of the individual or micro level, as shown in Figure 7. Specifically, EQA policies and mechanisms generate certain preferences among those individuals who implement the policies and mechanisms; those individuals adopt certain kinds of actions; and certain actions on the part of individuals bring about institutional change. Thus, the model displays the interactions between the institutional macro-level and the individual micro-level of actors, which is exhibited by (1) a macro-to-micro movement; (2) a micro-to-micro individual-action component; and (3) a micro-to-macro movement. As such, the model helps examine the process in which the EQA mechanism brings about institutional change.

In his voluminous book *Foundations of Social Theory*, Coleman (1990) presented a conceptual framework to explain behaviour of a social system. There are three components within the framework: “the effects of properties of the system on the constraints or orientations of actors; the actions of actors who are within the system; and the combination or interaction of those actions, bringing about the systemic behaviour” (p. 27). The three components bring about two transitions: a macro-to-micro movement and a micro-to-macro movement. The system behaviour is conceived as being “the behavior of a system of actors whose actions are
interdependent” (p. 12) and could be an abstraction. The framework emphasizes the interdependence of actions and the various ways in which actions combine to produce the macro-level system behavior, thus reflecting a set of processes between organizational actions and individual actions. Coleman also illustrated how the framework fit with Weber’s (1904) classic sociological work on the association between the Protestant ethic and the growth of capitalist economic organization.

In light of Coleman’s (1990) framework, the inquiry of this dissertation appeared to explore the following proposition: The prominent features which characterize the EQA mechanisms for Ontario postsecondary education impacted the curriculum development in Ontario postsecondary institutions in certain ways. Based on the realist approach to impact analysis and Scheuthle and Leiber’s (2015) conceptual model of EQA impact, the process in which the proposition could work may look like this (see Figure 8): A system-wide EQA mechanism interacts with the characteristics of an Ontario postsecondary institution, and the interaction give rise to certain generative mechanisms that enables an event within the institution. The event affects individuals involved in the event and generates certain individual perspectives, which in turn bring out certain actions and experiences. Those actions, collectively, lead to possible changes in curriculum development. In the meantime, the event also generates certain perspectives or responses in terms of curriculum development within academic units of the postsecondary institution. Thus, the EQA impact process involves interactions between the macro-level or the system-wide EQA mechanism and the meso-level or the event within the institution, as well as the interactions between the meso-level or the event within the institution and the individual micro-level. The framework also connects the event with generative mechanisms and with cross-level processes. In light of the analytical framework, the analysis of this study aimed to achieve two objectives: (a) to find out about the association, if any, between a system-wide EQA mechanism for Ontario postsecondary education on the macro-level and the curriculum development at the program and course levels, or the development of the macro-level and micro-level curriculum in Uys and Gwele’s term (2005), at Ontario postsecondary institutions, which is represented by the dash line with a question mark in the graph; and (b) to map out the EQA impact process in which the system-wide EQA mechanism impacted the curriculum development in terms of generative mechanisms, the event, and experiences related to the event.
The Importance of the Context and Connectivity between the Global and the Local

Context matters. Contextual knowledge is requisite for the field of comparative education. The question of context reveals much about the history of comparative education and the paradigmatic tensions between the positivist and interpretative traditions in comparative education (Crossley, 2009). The importance of the context was emphasized in the earlier literature in comparative education (see Hans, 1967; Kandel, 1955). When scholars revisit the topic, many have offered deeper insights. Crossley (2008, 2009) calls for raising sensitivity to cultural context, bridging cultures and traditions, and celebrating and valuing differences. Sobe and Kowalczyk (2012) distinguish the Context with a “big C” from the context with a “little c,” contending for the Context to be a matter of concern rather than a matter of fact, and drawing greater attention to how objects and contexts come to be conjoined. In this dissertation, the importance of the context resonates with the realist approach to impact analysis, as presented in the second section of Chapter 4.

Connectivity between the global and the local is a proposition in comparative education literature to bridge the global/local dualism. With an intensified globalization process in the
world, the discussions of the context have been extended beyond the local and national contexts to the realm of the global and the relationship between the global and the local becomes an increasingly prominent concern. Arnove (1999) calls for greater emphasis given to the global dimension of comparative education while recognizing the scientific and pragmatic dimensions. Marginson and Rhoades (2002) have proposed a “glonacal agency heuristic” that intersects the global, national and local dimensions in comparative higher education research. Bartlett and Vavrus (2009) make a distinction between vertical and horizontal comparisons, arguing for vertical studies to develop a thorough understanding of the particular at the local, national and global levels and analyze how the understanding generates similar and different interpretations of the phenomenon under study.

While quality assurance mechanisms for postsecondary education are primarily administered under the local jurisdiction, the topic of quality assurance is a global concern, as discussed in depth in the first section of Chapter 2. The conceptual perspectives on the context and emphasis on the interactions between the global and local are thus necessary to this dissertation and extend the lens through which to examine quality assurance issues from the local to the global level. They are aligned with the macro-, meso- and micro-levels in an EQA impact process, as discussed in the third section of Chapter 4. The earlier chapter (Chapter 2) on the global and local contexts of quality assurance also reflects this deliberate consideration.

Those perspectives also give rise to a multi-leveled approach to analyzing the phenomenon under study, i.e., the EQA impact process in this dissertation. To overcome the weaknesses in studies using a single-level approach, Bray and Thomas (1995) proposed an alternative framework for analysis. The framework is graphically presented as a cube that has the dimensions of geographical/locational levels, nonlocational demographic groups, and aspects of education and of society. There are seven levels in the geographical/locational dimension: world regions/continents, countries, states/provinces, districts, schools, classrooms and individuals. Bray and Thomas argued that those studies focusing on the higher level, where countries are grouped into larger regions, for example, tend to portray education systems as homogeneous identities, thereby obscuring the features that distinguish one country from another; and that those studies focusing on the lower levels may fail to give careful consideration to factors at the higher level, thus failing to draw out the implications of higher-level forces. Thus, a multilevel analysis design helps achieve complete and balanced understandings. Manzon (2007) reviewed a
number of studies with different units of analysis using the multi-leveled approach, including a study that analyzed educational policy making in the 26 cantons (states) of Switzerland (Hega, 2001), which was a state/province-level analysis.

Although the study in this dissertation was conducted within one jurisdiction—Ontario, a province in Canada, and did not involve a comparison with another jurisdiction, multilevel analysis remained relevant and crucial, actually constituting a contribution to comparative education literature. Alexander (2001, p. 511) made the following statements to explain how pedagogy used in the classroom can be related to the broad society.

> [P]edagogy does not begin and end in the classroom. It can be comprehended only once one locates practice within the concentric circles of local and national, and of classroom, school, system and state, and only if one steers constantly back and forth between these, exploring the way that what teachers and students do in classrooms both reflects and enacts the values of the wider society.

Similarly, the impact of EQA mechanisms on curriculum development can only be understood when one situates it within both the local context—in this case, the context of Ontario, a province of a democratic society of Canada, as well as the global context of quality assurance.

**Summary**

In summary, based on the research question and the purpose of this study, four interconnected perspectives shed light on the conceptual framework of the dissertation: (1) external influences on curriculum development; (2) process causality and the realist approach to impact analysis; (3) EQA impact models; and (4) the importance of the context and connectivity between the global and the local.

Based on these perspectives, Figure 9 was drawn. The figure represents the conceptual framework for the study. The figure shows that the local is connected with the global, and that system-wide EQA mechanisms has an impact that comes from outside postsecondary institutions on curriculum development, which is situated within a specific educational environment of a postsecondary education institution.
Figure 9. Conceptual framework for the study
Chapter 5. Research Design and Methodology

Creswell (2003) distinguished three approaches to research: (a) detailed procedures of data collection and analysis, called “methods;” (b) general procedure of research, called “strategies of inquiry;” and (c) philosophical assumptions about what constitutes knowledge claims, called “research paradigms.” In this chapter which focuses on the research design and methodology of the dissertation, I will first discuss the related research paradigms and strategies of inquiry before elaborating on the details of research design and methods for data collection and analysis.

All these considerations were made to address the research question for the dissertation: How did the external quality assurance policies and processes that emerged from 2000 to 2014 impact curriculum development in Ontario postsecondary education? This question was approached from two perspectives: the policy perspective and the institutional or local academic unit perspective.

Research Paradigms

Research paradigms are knowledge claims or philosophical assumptions (Creswell, 2003). Guba and Lincoln (1994) define paradigms as “the basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways” (p. 105). Major research paradigms include positivism, postpositivism, critical theory, constructivism, advocacy/participatory, and pragmatism, each involving a distinctive meaning-making process (Creswell, 2003; Guba & Lincoln, 2005). Not being a part of this list, critical realism has been given inadequate attention in the discussions of research paradigms; this is also an observation noted by Maxwell (2012b). However, the paradigm of critical realism informed this dissertation as it provides a philosophical underpinning to examine the impact of an EQA mechanism on curriculum development using a qualitative research design.

Critical realism has emerged as a powerful new direction in the philosophy of science and social science since the publication of Roy Bhaskar’s A Realist Theory of Science in 1975 (Archer, Bhaskar, Collier, Lawson, & Norrie, 1998). A number of works have introduced critical realism and discussed its applications to various fields of study (Archer et al., 1998; Bhaskar & Hartwig, 2010; Cruickshank, 2003; Gerrits & Verweij, 2013; Iosifides, 2011; Maxwell, 2012b). The following assertions about critical realism are found most relevant to this study. First, critical realism is realist as it poses a challenge to the postmodernist and social constructionist
stance in arguing that a researcher can obtain knowledge of a reality that exists independently of being a representation of it (Cruickshank, 2003).

Second, critical realism is critical in positing that a researcher’s task is to continue to improve the interpretation of reality, rather than to seek a definitive and absolute “truth” (Cruickshank, 2003). In this sense, its epistemology is relativist. For critical realists, structure and agency need to be linked and linked via the idea that social structures are viewed as emergent properties so that “structures were created by the actions of individuals in the past, and now have causal properties in their own right” (Cruickshank, 2003, p. 3). Critical realism is also critical in a political sense as critical realists emphasize the need for the researcher to move from facts to values via explanatory critiques (Cruickshank, 2003). The “explanatory critique” makes it explicit that “an objective study can actually discover values that it did not assume beforehand” (Bhaskar & Collier, 1998, p. 387), thus “open[ing] up the possibility of extending realism into the realm of values and morality” (p. 389).

Third, critical realism examines the effects of a process by using the language of causality to describe the world while accepting that any analysis of causality is partial at best (Gerrits & Verweij, 2013). The causality is embodied in Bhaskar’s (2008) argument that “the causal structures and generative mechanisms of nature must exist and act independently of the conditions that allow men access to them” (p. 46) and the realist ontology that generative mechanisms, events and experiences comprise the overlapping domains of reality (Bhaskar, 2008). Analysis of causation is a distinctive feature of critical realism and for critical realists causation is not regularity-based or seeking to search for repeated occurrence, but process-based or depending on identifying causal mechanisms and how they work (Sayer, 2000). This is how the notion of “process causality” discussed in Chapter 4 as part of the conceptual framework fits into the critical realism paradigm.

In his endeavours to explore causal explanation in qualitative research, Maxwell (2012a, 2012b) has found that critical realism is a conflation of ontological realism and epistemological constructivism and reasonably argued that this combination rejects what Guba and Lincoln (2005, p. 203) called “ontological-epistemological collapse,” which sees ontology as a reflection of epistemology.

Ontologically, realism is premised upon a “real” but imperfectly and probabilistically apprehensible reality (Perry, Reige & Brown, 1999). Realists believe that there is only one
external reality that exists independently of the researcher’s mind, a person’s perceptions are a window on to that external reality, and several perceptions of that reality must be triangulated to develop a better picture of it (Perry et al., 1999; Sobh & Perry, 2005). The realism paradigm posits that social reality is real and complex in an open system, and that complex causality is real and can be researched (Gerrits & Verweij, 2013). A realist researcher’s task is to discover, identify, describe and analyze the structures and generative mechanisms that underlie events and experiences; and this task often involves qualitative research techniques, particularly case study design (Perry et al., 1999). The causal explanation process is contingent (Sayer, 2010). The researcher also has to “identify the contingent causal powers that are operating in the particular situations under research and the ways they combine and interact in order to create the particular events observed … to seek the underlying reality through the dark veil that hides it” (Easton, 1999, p. 79, 81). For research design, realism emphasizes the importance of prior theory, data triangulation and replication or selection of cases (Sobh & Perry, 2005).

Constructivists believe that reality is socially constructed (Berger & Luckmann, 1966) and that participants can construct meanings of a situation and forge the situation in discussions or interactions with others. As Lee (2012, p. 411) put it, “there are multiple constructions of reality and knowledge with relative criteria for evaluating interpretations” and that the inquirer and the knowable interact to reach a “subjectivist epistemology.” Thus, the constructivist paradigm assumes “a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and respondent cocreate understandings) and a naturalistic (in the natural world) set of methodological procedures” (Denzin & Lincoln, 2005, p. 24). Constructivist researchers attempt to capture different perspectives and examine the implications of different perceptions (or multiple “realities”) (Patton, 2002). They often address the processes of interaction among individuals and focus on the contexts in which they live and work in order to understand the settings of the situation; and they also recognize that their own perspectives shape their interpretation (Creswell, 2003). Some constructivists also attempt to “give voice” to the disenfranchised, the underprivileged, the poor, and others outside the mainstream (Weiss & Greene, 1992, p. 145).

Constructivism involves causal explanation. Finnemore and Sikkink (2001) have distinguished causality in constructivism paradigm from casual explanation in other paradigms by pointing out that many constructivists think more broadly about the nature of causality. Partial
and contingent claims underpin the constructivist causal explanation as constructivists favour the “small-t” contingent claims, rather than claims to all-encompassing truth or “big-T” claims (Price & Reus-Smit, 1998). For constructivist researchers, understanding how things are put together and how they occur is not enough; going beyond it and trying to explain how they cause a certain outcome—the constitutive explanation—is more important (Finnemore & Sikkink, 2001). The fact that constructivists attach importance to the causal process, contingent explanation and the context is compatible with the understandings of causality in critical realism.

Price and Reus-Smit (1998) have revealed three core ontological propositions of constructivism: the emphasis of normative or ideational structures as well as material structures; the importance of identities to constituting individuals’ interests and actions; and the mutual constitution of agents and structures. These assertions are commensurate with the agency-structure propositions of critical realism discussed earlier (Cruickshank, 2003). This suggests that there exists a confluence between constructivism and critical realism. From the research perspective, the fine lines between the two paradigms may become blurred (Finnemore & Sikkink, 2001) and critical realism and constructivism can be used together to inspire a deepened analysis, as illustrated well by Fiaz’s (2014) case study.

This dissertation was an EQA impact analysis study. Impact analysis entails a causal explanation (Mohr, 1995). Taking a process view of causality, the study aimed to inquire into the underlying mechanisms, and the actual events and experiences related to those mechanisms and events in order to examine how EQA policies and processes impacted curriculum development in Ontario postsecondary education. The study was based on the premise that there exists a reality about the impacts of system-wide EQA policies and processes on curriculum development in Ontario postsecondary education and on the conviction that I was able to obtain the knowledge about the reality although I, as the researcher, was not part of the communities of those mechanisms nor was I directly involved in any work of curriculum development. Following a realist research design, the study started with the recognition of prior conceptual perspectives in relation to the research question—external influences on curriculum development, identified EQA impact models and the importance of the context to EQA impact analysis, as discussed in the conceptual and analytical frameworks in Chapter 4. My task was to better understand and interpret the reality, make contingent knowledge claims (the “small-t”
claims according to Price and Reus-Smit, 1998) instead of seeking one absolute “truth,” and explore the values embedded in the reality in my discussions of the findings.

The study approached the research question from both policy design and policy implementation perspectives. By doing so, the study presented various perceptions about the impact of the EQA mechanisms—the “multiple realities” as perceived at the policy level as well as the institutional or local academic unit level which included departmental and individual perspectives. It intended to construct knowledge about reality, rather than constructing reality itself, thus reflecting the constructivist approach (Shadish, 1995). The study was also designed to give voice to frontline faculty members as their opinions tend to be oblivious in literature compared with other stakeholders of quality assurance issues (Newton, 2000). It assumed that the knowledge is conjectural and the evidence for it is circumstantial, depending on different settings. The context was very important to the study and constitutes a separate chapter (Chapter 2) in this dissertation. Not only the global and local contexts of quality assurance but institutional contexts were also of great relevance to the study. The findings were contingent upon the contexts and the actual reality was expected to be different as perceived by different stakeholders. All this shows that the study was also constructivist.

**Strategies of Inquiry**

The study employed case study and policy analysis as the strategies of inquiry.

**Case study.**

In a case study, the researcher “explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple source of information, and reports a case description and case themes” (Creswell, 2013, p. 97). Hence, a case study is defined as “an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident” (Yin, 2014, p. 16) and should rely on multiple sources of evidence. It is specified by boundedness and activity patterns (Stake, 1995). A case study is “both a process of inquiry about the case and the product of that inquiry” (Stake, 2008, p. 121); thus, the case study approach represents both an analysis process and a product of the process (Patton, 2002). While case study research is not essentially
qualitative (Stake, 2008), it is often considered to be a major qualitative approaches to research inquiry (Creswell, 2013).

Literature shows that case study researchers need to attend to two issues: contexts and triangulation. Well-constructed case studies are holistic and context sensitive (Patton, 2002). Contexts are important to case studies; and as cases respond differently to different situations, the interactivity of main effects and the context can require the particular scrutiny of case study researchers (Stake, 2008). As case studies rely on multiple sources of evidence, triangulation plays an important role in clarifying meaning, and identifying diversity of perceptions and even multiple realities (Patton, 2002; Stake, 2008).

Case study design was appropriate to this dissertation for the following reasons. First, the dissertation was concerned with analysis of system-wide EQA policies for Ontario postsecondary education and their impacts, and case studies are common to analysis of policy implementation and impacts (Elmore, 1979/80; Taylor, Rizvi, Lingard, & Henry, 1997). Second, as discussed in Chapter 4, contexts were important to this study in the conceptual framework and informed data collection and result interpretation. Third, a case study design provides appropriate settings for the impact analysis in this dissertation. Fourth, for the purpose of the study, outcomes-based education (OBE) initiatives were selected as the case, with each being situated within a bounded system and interpreted within the specific context during the period of 2013 to 2014. This reflects the features of case study research as discussed above.

OBE initiatives were defined as purposeful actions undertaken by postsecondary providers directed at defining, teaching toward, and assessing learning outcomes in their educational practice (modified from Jones, Voorhees, & Paulson, 2002). OBE initiatives were chosen to be the cases of this study because they could either embody outcomes-based pedagogical design or reflect the policy-based orientation towards learning outcomes, as discussed in the literature review in Chapter 3, thus crystallizing the interactions between quality assurance policies and curriculum development practice—the two areas of investigation under this study. Hence, the focus on OBE initiatives could help maximize the understandings of the phenomenon under study, that is, the impact of external quality assurance on the curriculum. This satisfies the criterion of primary importance to case selection in case study research—to offer opportunity to learn (Stake, 1995, 2008).
Regarding the typology of case study research, three types of categorization are identified in literature. Schofield (1990) distinguishes case studies that study what is, what may be and what could be. “Studying what is” refers to studying the typical, the common or the ordinary; “studying what may be” means researching on likely educational issues for the future; and “studying what could be” means locating situations that are expected to be ideal or exceptional on some a priori basis and studying them to see what it is actually going on. Stake (1995, 2008) identifies three types of case study in terms of its functionality: (a) An intrinsic case study, which is undertaken because one intends to better understand the particular case itself; (b) an instrumental case study, which is conducted mainly to provide insight into an issue or to redraw a generalization while the case itself is of secondary interest although playing a supportive role; and (c) a collective case study, which is an instrumental study extended to several cases that are studied jointly in order to investigate a phenomenon. Yin (2014) classifies case studies into four types, which are represented by a matrix of four with being single-case or multiple-case as one dimension and being single unit of analysis (holistic) or multiple units of analysis (embedded) as the other dimension.

In light of those categorizations, this dissertation involved case studies that studied “what is” as it adopted a realist approach to examining what was actually going on. It was a collective, instrumental case study design where multiple cases were investigated to examine the impact of external quality assurance mechanisms on curriculum development. While the cases selected were interesting examples in themselves, they were primarily intended to provide settings for looking into another issue—the EQA impact. A report involving an intrinsic case study design based on the data collected for this dissertation was published by the Higher Education Quality Council of Ontario in 2015 (Liu, 2015a).

Another perspective that was relevant to this study is called “vertical case study.” According to Bartlett and Vavrus (2009), a vertical case study is “a multisited, qualitative case study that traces the linkages among local, national, and international forces and institutions that together shape and are shaped by education in a particular locale” (pp. 11-12). In their exemplary article for the vertical case study approach, Vavrus and Bartlett (2012) demonstrated how learner-centred pedagogy became an instance of globalized localism at six Tanzanian secondary schools. Bartlett (2015) further elaborates on the axes of the vertical case study approach—the vertical (across levels), the horizontal (across locations) and transversal (across time and space)
so that the notion becomes a heuristic tool to connect the global and the local. In this light, the present study was an attempt to employ the vertical case study approach by linking the perspectives of the individual, the academic units, the institutional, the provincial and the global vertically as well as the perspectives of the university sector and the college sector in Ontario postsecondary education horizontally.

**Policy analysis.**

This dissertation adopted a broad definition of *policy*, which is not merely an officially accepted government directive but “the resultant of the interplay between the key actors involved on issues relating to the structure, function and character of higher education systems,” thus incorporating the dynamics that shapes the system through the interactions of those actors (Meek, Leo, Goedegebuure, Kivinen, & Rinne, 1991, p. 455). Policy can be in the forms of laws and regulations, or products of other arenas, such as decisions about school policy or regulations, or directions for action; it is an instance of social practices that constitute social life (Fulcher, 1989). Thus, in this study, the quality assurance policies for Ontario postsecondary education included not only formal policy documents but also the legislations and operational documents that defined the nature of quality assurance processes and informed their implementation.

As the study involved an investigation of the policies behind the EQA mechanisms for Ontario postsecondary education, it was policy research in nature. Three orientations in qualitative work are identified in policy research (Maguire & Ball, 1994): (1) elite studies, which focus on “key players” in the development of a policy and involve either an examination of the long-term policy trend through life history methods or interviews for specific contemporary educational policy developments; (2) trajectory studies, which involve elite studies of policy text production as the first stage in the research agenda and then follow a specific policy through stages of gestation, text production, and the implementation of the policy into practice in case studies; and (3) implementation studies, which focus on interpretation and engagement in policy texts and the translation of these texts into practice. This dissertation was primarily an implementation study design although how the policies were developed and what intentions were embedded in the policy development stage was also taken into account to develop a better understanding of the policies.

Implementation research, as a major strand of policy analysis, has evolved with shifts in its approaches. Earlier literature (McDonnell & Elmore, 1987) identified two generations of policy
implementation research: the first generation focused primarily on whether results were consistent with intentions of policy makers; and the second generation focused on variations in the response of individuals and institutions to policies, and on the conditions of successful implementation. The first one represented the “classical” hierarchical model and a noticeable consistent shift away from the classical model was identified in studies that appeared in the 1970s (Nakamura & Smallwood, 1980). More recently, Datnow and Park (2009) discussed three perspectives for examining the policy implementation process: technical-rational or fidelity, mutual adaptation, and sensemaking / co-construction. Each of these perspectives has assumptions about policy design and implementation. The technical-rational orientation assumes a policy process as a top-down sequential and linear development and sees the role of policy makers as controlling the organization; it ignores or downplays the influence of the local context. The mutual adaptation perspective assumes that local factors dominate policy outcomes and underscores the importance of bottom-up interpretations and responses to policy intentions. Both technical-rational and mutual adaption assume that execution rather than the design of a policy is the root of failed implementation. The sensemaking / co-construction orientation assumes that public policy is a continuous process and its formulation is inseparable from its execution. It also assumes some degree of social construction at the local level that foregrounds policy implementers, whose beliefs and experiences are believed to play a mediating role in policy implementation. Thus, it does not assume that policy is the only or major influence on individual behaviours; rather, individuals at the local level do indeed make decisions that affect not only policy implementation, but sometimes also the policy itself.

The present study did not intend to examine how the perspectives and actions at the local level would affect the policy itself; this reverse impact would probably take place in the longer term than the time span allowed for the study. Rather, the study assumed that local factors played an important role in affecting how policies were implemented and added variations to policy implementation. Thus, it mainly adopted a mutual adaption perspective in Datnow and Park’s (2009) term, and fell into the second generation of policy implementation research according to McDonnell and Elmore’s (1987) categorization.

In alignment with the thinking that underlies both the mutual adaption perspective and the sensemaking and co-construction perspective is a bottom-up backward mapping approach to implementation research, as an alternative analytic strategy to a top-down forward mapping
approach (Datnow & Park, 2009). In his article *Backward Mapping*, Elmore (1979-80) provided detailed and insightful elaborations of both the forward mapping and backward mapping approaches. *Forward mapping* views implementation as “a hierarchically ordered process” (Elmore, 1979-80, p. 605), in which the one that is closer to the source of a policy has greater authority and influence; and the ability of a complex system to implement the policy depends on the establishment of clear lines of authority and control. The analysis using the forward mapping approach begins at the top of the policy process—the policymakers’ intent, and proceeds to define what is expected of implementers at each level of the hierarchy of authority. The policy outcome is measured and evaluated against the original policy intent. This analysis method stems from the conventional techniques of management science and decision analysis, and reinforces that myth that implantation is controlled from the top (Elmore, 1979-80). Arguably, forward mapping represents a positivist approach to implementation research.

*Backward mapping*, on the contrary, regards policy implementation as “a dispersed and decentralized process” (Elmore, 1979-80, p. 605), in which the one that is closer to the source of the problem has greater ability to influence the implementation of the policy; and the problem-solving ability of a complex system depends on maximizing discretion at the point where the problem is most immediate, rather than hierarchical control. Therefore, the analysis using backward mapping relies primarily on “informal devices of delegation and discretion that disperse authority” instead of “formal devices of command and control that centralize authority” (ibid., p. 605). It concentrates on factors that can only be indirectly influenced by policymakers: the knowledge and problem-solving ability of lower-level administrators; incentive structures that operate on the subjects of policy; bargaining relationships among political factors at various levels of the implementation process; and the strategic use of funds to affect discretionary choices. The reasoning starts at the bottom of the policy process or the point of the problem. The researcher needs to develop a good understanding of the mechanisms for implementing policy choices at the lower level of the complex system as well as the reciprocal nature of authority relations. The reciprocity means that the *formal authority*, in the form of policy statements, travels from top to bottom in organizations; and the *informal authority*, which derives from expertise, skills and proximity to the essential tasks that an organization performs, travels in the opposite direction. For purposes of implementation, the formal authority is heavily dependent upon specialized problem-solving capabilities further down the chain of authority. In addition,
the researcher also acknowledges that coalition and bargaining are essential to the process of implementation. This means that policy outcomes will never be evaluated as discrete and determinate measurable ends. Rather, the definition of success is predicated on “an estimate of the limited ability of actors at one level of the implementation process to influence the behavior of actors at other levels and on the limited ability of public organizations as a whole to influence private behavior” (ibid., p. 604).

This dissertation deliberately drew upon assumptions and reasoning associated with the backward mapping approach to policy implementation research. Although in the results chapters (Chapters 6 and 7), the intentions of the EQA policies are reported first in this dissertation, the focus of the analysis was placed on disclosing the generative mechanisms, the associated event, and the perspectives and experiences at the local level. These perspectives were, in turn, mapped back to the requirements and protocols in the EQA policies and processes. By doing so, the study intentionally paid greater attention to the voices at the lower end of the chains of the authority.

Finally, policy analysis distinguishes the “macro,” “meso” and “micro” levels of analysis. The macro, meso and micro issues can be those that impact the whole policy making apparatus such as global economic pressures, the intermediary levels of policy making such as a national policy, and policy making at the local level of schools, respectively (Taylor et al., 1997). On the other hand, there exists a tension between “the general” and “the local.” That is, although localism and recontextualization of ideas is important to understand educational policies comparatively and globally, the policy analyst needs to attend to the local particularities of policy design and enactment as well as beware of the general patterns and commonalities or convergence across localities (Ball, 1998). In other words, policy analysis requires “an understanding that is based not on the generic or local, macro- or micro-constraint or agency but on the changing relationships between them and their inter-penetration” (Ball, 1998, p. 127). These two perspectives suggest that a policy analyst should take into account the macro-, meso- and micro-levels of a policy process as well as the interactions among them.

In that light, the study distinguished the macro, meso and micro levels of implementing the system-wide EQA policies and associated mechanisms, as shown in the analytical framework in Figure 8 (see the third section of Chapter 4), when examining each case. How the macro-, meso- and micro-levels of a policy process interacted were examined in each case study. The analysis
also attended to the general themes and patterns that emerged across cases, and the results are reported in the second part of Chapters 6 and 7.

**Details of Research Design**

This study employed a qualitative research design that incorporated the ontological and epistemological elements of critical realism and the methodological elements of case study and policy analysis. Interviewing and document analysis were the primary methods for data collection. The design also adopted what Maxwell (2013) called an interactive approach to qualitative research, whereby different components of a design—goals, conceptual framework, research questions, methods and validity—“form an integrated and interacting whole, with each component closely tied to several others” (p. 4). In light of the approach, the research paradigms and strategies of inquiry (discussed in the first two sections of Chapter 5) as well as the conceptual and analytical frameworks (discussed in Chapter 4) for this study all underwent modifications after data collection so that the new insights from the collected data could be accommodated and all the components could achieve coherence.

Specifically, the study was carried out on two broad levels: the system-wide policy level and the level of case studies (institutional or local academic unit level). The two processes ran parallel during the data collection process. On the macro or system level, I interviewed a total of 15 individuals regarding the contexts and the processes where respective quality assurance policies and mechanisms for the university and college sectors had been developed and implemented. The target informants were those who had been involved in the policy-making process, or those who were actively involved in the policy implementation process at the time of the data collection. They were identified through the websites of the three quality assurance agencies—the Ontario University Council on Quality Assurance (or the Quality Council), the Ontario College Quality Assurance Service (OCQAS), and the Postsecondary Education Quality Assessment Board (PEQAB), or through the referrals by those who had been interviewed. The interview questions (see Appendix B) focused on the problems that quality assurance policies were intended to address; and the potential impacts of those policies on educational practice as expected by the policy makers, especially on curriculum development. In addition, I also reviewed the policy documents as well as the background documents that pertained to the quality assurance processes overseen by the three agencies. The policy documents were accessed via the
related agency websites. Some of the background documents were provided by a couple of key informants who had been heavily involved in the policy development processes.

On the local level, I conducted case studies of seven carefully selected outcomes-based education (OBE) initiatives at seven Ontario postsecondary institutions, each representing a distinct scenario of implementing different aspects of OBE. The reasons for focusing on those OBE initiatives in this study were explained earlier in the discussion of using case study research as a strategy of inquiry in Chapter 5.

To identify the cases for this study, I employed the purposeful sampling strategy on the basis of OBE features. I went through a purposeful case selection process, where I systematically searched on the websites of all 43 English-speaking publicly assisted postsecondary institutions in Ontario for possible candidates and then communicated via meetings or emails with at least one academic staff or administrator at 22 institutions, which are mostly located in Western, Eastern and Central regions of Ontario. Due to limited resources, I did not visit the other half of the Ontario postsecondary institutions. During the search process, I used an information request form and a self-designed, literature-based outcomes-based education implementation inventory (see Appendices Ai and Aii) to help gather information and gauge the extent to which OBE was implemented in those initiatives. The considerations for making the final selection were that the selected cases would reflect the “best practice” of OBE, represent a distinct aspect of OBE implementation, embody a “hidden story” that had not been available in any public media, and have a disciplinary focus on arts and sciences, instead of professional education. The detailed search and case selection processes are documented in a report published by the Higher Education Quality Council of Ontario (Liu, 2015a). After two months’ search (mid-July to mid-September, 2013), I identified seven OBE initiatives, three located at three colleges and four residing at four universities. Tables 3 and 4 show the seven selected cases and the OBE elements associated with each case (Liu, 2015a, p. 15 & p. 36). These cases are labelled to be consistent with ones to be reported in Chapters 6 and 7.

When the seven case studies were mapped with the policies and mechanisms led by the three quality assurance agencies, the multiple-case, multiple-context design can be illustrated in Figure 10. Three policy contexts existed for this project. University cases U1 to U4 were situated in Context A, which represents the EQA processes under the Quality Assurance Framework overseen by the Quality Council; college cases C1 to C3 were situated in Context B, which
represents the EQA processes overseen by the OCQAS; and Case C1 was also in Context C, which represents the EQA processes overseen by the PEQAB.

Table 3. 
**Selected OBE initiatives by sector and level**

<table>
<thead>
<tr>
<th>Level</th>
<th>Colleges</th>
<th>Universities</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional-level</td>
<td>C1: New program development process; C2: Program review process; C3: Curriculum mapping process</td>
<td>U1: Technology-supported curriculum mapping process; U2: Senate-approved university learning outcomes</td>
<td>5</td>
</tr>
<tr>
<td>Faculty/School-level</td>
<td>-</td>
<td>U3: Outcomes-oriented policy and practice at an arts and social sciences faculty</td>
<td>1</td>
</tr>
<tr>
<td>Program-level</td>
<td>-</td>
<td>U4: an interdisciplinary science program</td>
<td>1</td>
</tr>
<tr>
<td>Total count</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 4. 
**Selected cases and associated OBE elements**

<table>
<thead>
<tr>
<th>Cases</th>
<th>OBE elements within each case</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1: New program development process at a college</td>
<td>Critical performance statement, which is instrumental to articulating course and program learning outcomes</td>
</tr>
<tr>
<td>C2: Program review process at a college</td>
<td>Program-level learning outcomes, as represented in the provincial program standards or program descriptions, and employer expectations</td>
</tr>
<tr>
<td>C3: Curriculum mapping process at a college</td>
<td>Alignment between course-level with program-level learning outcomes</td>
</tr>
<tr>
<td>U1: Technology-supported curriculum mapping process at a university</td>
<td>The process is a catalyst for helping to define program-level learning outcomes</td>
</tr>
<tr>
<td>U2: Senate-approved University Learning Outcomes at a university</td>
<td>Defining university-level learning outcomes</td>
</tr>
<tr>
<td>U3: Outcomes-oriented policy and practice at a university arts and social sciences faculty</td>
<td>Development of course-level learning outcomes required by the faculty policy</td>
</tr>
<tr>
<td>U4: Interdisciplinary science program at a university</td>
<td>Outcomes embedded within research projects</td>
</tr>
</tbody>
</table>
At each research site, I interviewed both academic administrators, including educational developers, and faculty members through the snowball technique, in which names were recommended by the key contact person and I approached some of them by using the contact information posted on the institutional website. In total, 31 academic administrators and 33 faculty members at the seven sites participated in the study (see Table 5 for details). The vast majority of these interviews were conducted during the period of September 2013 to May 2014, with different timing for the seven cases. The specific timeframe for the data collection for each case will be reported along with the findings in Chapters 6 and 7.

The focus of the interviews was on two main concerns: (1) how the OBE initiative and related quality assurance policies (if there are any) had impacted their educational practice; and (2) how the implementation of the outcomes-based approach to program-level or course-level educational practice, as demanded by quality assurance policies if applicable, intersected with their own teaching beliefs. The second area would inform how personal beliefs affected the implementation of EQA policies or related activities. A list of interview questions can be found in Appendix C.

Figure 10. Case study design for the dissertation
Table 5.  
*Data sources for case studies*

<table>
<thead>
<tr>
<th>Cases</th>
<th>Descriptions</th>
<th>Interviewees</th>
<th>Related Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Academic administrators (including educational developers)</td>
<td>Faculty members</td>
</tr>
<tr>
<td>U1</td>
<td>Technology-supported curriculum mapping process at a university</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>U2</td>
<td>Senate-approved University Learning Outcomes of a university</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>U3</td>
<td>Outcomes-oriented policy and practice at an arts and social sciences faculty of a university</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>U4</td>
<td>An interdisciplinary science program at a university</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>C1</td>
<td>New program development process at a college</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>C2</td>
<td>Program review process at a college</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>C3</td>
<td>Curriculum mapping process at a college</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

The research protocol for this study was first approved by the Social Sciences, Humanities, and Education Research Ethics Board of the University of Toronto on May 30, 2013, and was kept open till May 29, 2016 after two granted annual renewals. Two separate consent forms were used for interviews with policy administrators and academic staff (see examples in Appendices B and C). A separate ethics review procedure was pursued at all seven research sites. Six research sites granted approval to the research protocol, with one site requiring no separate ethics review submission. At all seven sites, I obtained the administrative consent from a senior academic administrator before conducting the case study.
I strictly followed the research protocol during data collection, including ensuring voluntary participation and written consent of the interviewers, and maintaining confidentiality at all the research stages. I fully respected the participants’ preference for the time and location for the interview, and their wish for being recorded or not. The vast majority of the interviewees consented to being recorded. Most of the interview data were transcribed by Rev.com, Inc., which signed a client non-disclosure agreement for confidentiality purposes. To protect the institutional identity and confidentiality of the participants, I used a combination of a letter “U” for a university or a letter “C” for a college and numerical letters to represent participating institutions (for example, U1 and C1) and numerical codes to represent individual participants at each research site (for example, U1_1 and U1_2) while reporting the findings in this dissertation. The same protocol was followed in the published HEQCO report (Liu, 2015a) and conference presentations.

Following the backward mapping approach to policy implementation, during the data collection process I did not assume that quality assurance mechanisms had hierarchical control over the curriculum, nor did I assume that the outcomes-based approach was superior; instead, I relied on the voices of those on the ground at the end of policy implementation to reflect upon the legitimacy of the approach and investigated how the EQA mechanisms might have affected their day-to-day educational practices. In that spirit, I incorporated this short paragraph into the consent form for academic staff: “I will not assume that quality assurance mechanisms have hierarchical control over the curriculum. Nor will I assume that the outcomes approach is superior. Instead, I will be all ears to your voices to reflect upon the legitimacy of current quality assurance policies” (Appendix C).

The constructivist paradigm informed my data collection. The study assumed that interviewing, as a research method, was a means of social production of knowledge and considered the knowledge construction as an outcome of the interactions between the interviewer and the interviewee (Kvale & Brinkmann, 2009). Thus, interview knowledge was socially constructed in the interaction of the knower and the known, and was co-authored by both the interviewer and the interviewee (ibid.). This epistemological assumption underpinned how I conceived of and conducted my interviews during the data collection process.
Methods of Data Analysis

Content analysis was applied to both interview data and documents. Content analysis is a “qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings” and the core meanings can be themes (taking a categorical or topical form), or patterns (a descriptive finding) (Patton, 2002, p. 453). Three types of coding can be used in content analysis: open coding or data-driven coding for data exploration; axial coding where codes from the conceptual framework are allocated to chunks of text; and selective coding for comparisons and interpretations (Gibbs, 2007; Sobh & Perry, 2005). During the coding and categorization processes, a researcher should examine convergence (i.e., recurring regularities) and divergence (i.e., new patterns by extension, bridging and surfacing, or deviant cases), and determine substantive significance (Patton, 2002, pp. 465-7).

In my content analysis, I mainly used axial coding for data in each case, based on the elements in the analytical framework—generative mechanisms, the event, the perspectives of local academic units, the perspectives and actions of individuals, the perceived impact of system-wide EQA mechanisms on curriculum development, and the connectivity between the global and the local. To identify the generative mechanisms, I used the techniques and hints suggested by the realist approach to causation—attention given to the context, intentions and beliefs, as well as operative reason and factual causation, as summarized in the second section in Chapter 4. NVivo software (Bazeley & Jackson, 2013) facilitated this analysis process. Then I reviewed all the data for each code and identified patterns in terms of convergence and divergence through data triangulation. The convergent perceptions were used to strengthen the arguments whereas divergent perspectives were considered to indicate the complexities of the reality, as guided by Sobh and Perry (2005).

For each case, I fit the findings into the elements within the analytical framework and examined the relationship among them. This mapping process aligned with what Yin (2014) called use of logic models as an analytic method for case study research as in the mapping empirically observed phenomenon was matched with theoretically derived framework. The mapping method also reflects what Miles and Huberman (1994) introduced as the deductive approach to building causal networks. I, the researcher, started with the impact analysis via a literature-based logic model, as shown in Figure 8, and then “tested out” the initial logic model using data from the field study by generating a logic model that displayed specifics of a local
scenario. Using this mapping approach, at the end of reporting each case in the findings chapters (Chapters 6 and 7), I have included a logic model, along with a narrative, to summarize the findings from the case.

To strengthen the findings, I also attempted to develop a logical chain of evidence for each case study by following Miles and Huberman’s (1994) advice on data analysis. Building a logical chain of evidence requires “painstaking verification at each step,” and that “relationships have to make sense” and “the chain must be complete” (Miles & Huberman, 1994, p. 260). I tried to use the logical chain of evidence as a tool that worked in concert with the logic model. The purpose was to verify and support my findings on the logical impact process that flowed from the EQA mechanism to the outcome in each case. This graph is also reported at the end of findings for each case in Chapters 6 and 7.

Yin (2014) suggested four general strategies for analyzing data from case studies: relying on theoretical propositions, working your data from the “ground up,” developing a case description, and examining plausible rival explanations. In this dissertation, I primarily used the strategy of relying on theoretical propositions as my analysis heavily relied upon the analytical framework identified in Figure 8 in Chapter 4. I also examined plausible rival explanations as a secondary strategy as it was found from collected data that accreditation requirements constituted another external source of influence on curriculum development in postsecondary education. Efforts were made to examine the effects of the accreditation requirements. In addition, a case description was developed and the key contact person for each case was invited to review the description and provide feedback.

A multi-case design usually involves a cross-case analysis, which helps enhance generalizability of the study, strengthen the findings, and deepen understanding and explanation (Miles & Huberman, 1994; Yin, 2014). For the purpose of cross-case analysis, I employed two techniques recommended by Yin (2014)—pattern matching and cross-case synthesis. As Figure 10 shows, the seven case studies were divided into three groups based on the different EQA contexts to which they had been exposed. For the four cases within Context A, or the university group, I first created a word table to compare the findings that had emerged from data for both the outcome—the perceived impact of system-wide EQA mechanisms on curriculum development and the common elements in the four logic models—the generative mechanisms, the event, the perspectives of local academic units, and the individual perspectives and actions in
order to identify patterns that were congruent or divergent. Then I synthesized those patterns for the university group and reported the findings from the cross-case analysis in Chapter 6. Following the same approach, I analyzed the three cases in the Ontario college sector and presented the findings in Chapter 7.

Finally, it is worth mentioning that several practical tactics that Miles and Huberman (1994) suggested were found helpful to the data analysis process, including noting patterns and themes; making contrasts and comparisons; clustering; factoring; building a logical chain of evidence; and making conceptual/theoretical coherence. These tactics helped the analyzing process to proceed from observables to unobservables and from specifics to abstraction, thus systematically assembling a coherent understanding of the data.

Quality Indicators

Impact studies involve the issues of internal validity and external validity. Internal validity establishes that the impacts were indeed caused by the object under study (e.g., the policy or the program). External validity addresses the question of generalizability of the findings, that is, to what extent the study findings are relevant for other contexts (Bruns, Filmer, & Patrinos, 2011). Yin (2014) uses construct validity, internal validity, external validity and reliability to evaluate the quality of a case study research design; of these indicators, construct validity and reliability are mostly established in the data collection process whereas internal validity is established in the data analysis stage and external validity is built in research design.

Data quality was an important consideration from the beginning of this study. A list of case study questions as well as interview questions had been carefully designed and made handy for review before each interview was conducted. During the semi-structured interviews, I asked supplementary questions to clarify or verify my interpretation of what the interviewee had just shared with me. The answers from the interviewees were found to be largely spontaneous, rich, and relevant, thus contributing to the good quality of interview data according to the quality criteria for an interview identified by Kvale and Brinkmann (2009).

I listened to all the recordings and reviewed all the interview transcriptions to ensure their consistency with the recordings. A case description was prepared about each case on the basis of the interview data and documents collected and was sent to the key informant of each case for review and verification. Most interviewees were presented with the interview transcript or the
In this study, internal validity was established mainly through constructing a reasonably solid conceptual framework as well as a defendable analytical framework for identifying an EQA process and relying on the analytical framework for data analysis. By doing so, external validity was also strengthened.

Literature shows that a contested issue about case study research is generalization or external validity (Gomm, Hammersley, & Foster, 2000). It has been agreed in literature that the assumptions behind the classic concept of generalizability, such as dependence on determinism, inductive logic, freedom of time and context, do not fit the logic behind generalizability in qualitative research (Lincoln & Guba, 1979; Yin, 2014); and generalizability in qualitative research is by no means statistical generalization that is based on sampling inference. Therefore, scholars have reconceptualized the generalizability of qualitative case study research and sought after alternatives.

Lincoln and Guba (1979) conceptualized generalization of findings from a case study as a tentative working hypothesis rather than a conclusion; and whether the working hypothesis applies to another context depends on the degree of transferability, which is a direct function of the congruence or “fittingness” between the two contexts. Although the transferability and fittingness perspective does not appear to help with a research design as it leaves the generalization to the responsibility of readers rather than researchers (Gomm, Hammersley, & Foster, 2000), it does lend support to the possibility of generalization among cases with similar contexts. Yin (2014) posits that generalizability in case study research is concerned about analytical generalization, by which the cases are conceived of as opportunities to shed light about some theoretical concepts or principles; the theoretical propositions that went into the initial design of the case study form the groundwork for an analytic generalization. The task of the researcher is to corroborate, modify, reject or advance those theoretical propositions (Yin, 2014, p. 41). Thus, the notion of analytical generalization supports that a research design needs to be built upon a sound theoretical basis.

In this dissertation, the seven cases included in the study were selected on the basis of a well-articulated definition of OBE initiatives in a similar study (Jones, Voorhees, & Paulson,
2002) and two literature based instruments (Appendices Ai and Aii). The analytical framework for the EQA impact process (see Figure 8) was constructed on the basis of a theory-based EQA impact model and a realist approach to impact analysis, as explained in the third section of Chapter 4. As such, the findings from this study could illustrate how the notions of OBE initiatives and the process-based EQA impact analysis might analytically apply to other contexts than Ontario.

The conclusions drawn from each case study were re-examined using the tactics such as checking for representativeness and checking for researcher effects, which are suggested by Miles and Huberman (1994) for testing or confirming findings. This reflective and self-critical analysis of data quality issues is included as part of the Reflection and Summary section at the end of the report about each case.

The final note on data quality is reflexivity, which is an indicator of analytic quality in qualitative research (Berger, 2015; Gibbs, 2007). Reflexivity is “the process of reflecting critically on the self as researcher, the ‘human as instrument’” (Guba & Lincoln, 2005, p. 210). It is to interrogate different aspects of the self of a researcher regarding how research efforts have been shaped by the subjectivity brought by the researcher into the research process. Reflexivity helps enhance the accuracy of the research and the credibility of the findings, and keep the research process ethical (Berger, 2015).

Maxwell (2013) makes it explicit that personal goals constitute one of the contextual factors that influence a research design. In this study, my personal goals intertwined with the research objectives and oriented the research process in certain ways. Before conducting this study, I had been a quantitative researcher for a number of years. While continuing to improve my quantitative skills, I embarked on the journey of a qualitative study for my doctoral dissertation. I hoped to use the opportunity to learn qualitative research design and related skills such as interviews and qualitative data analysis. I would like to better understand case study methodology and policy analysis and delve into literature of comparative and international education. This research project certainly helped “get my feet wet” in these areas and not only that, I had to be skillful and insightful in order to produce work of good quality. Issues related to learning outcomes have been an area of my research interest. Rather than approaching it from a quantitative point of view, the study allowed me to examine it from the qualitatively-based policy and curriculum perspectives and compared these perspectives with those of an otherwise
quantitative design, such as the “process theory” versus the “variance theory” in impact analysis Mohr (1982, 1995, 1996). This comparison made me more conscientious in research design and justifying my decisions. In addition, the quantitative side of my research skills may also have helped interpret the data in certain ways.

In addition to the research-based self, I also brought a socially and personally created self into the research process. In their book *The Social Construction of Reality*, Berger and Luckmann (1966) fully recognized the reciprocity in the typificatory schemes that enter into face-to-face situations, where the two persons in an interaction apprehend each other in a typified way; and the typifications affect the interactions on an ongoing basis. Similarly, in a face-to-face interview, the interviewer and the interviewee typify each other. In all my interviews with policy administrators and academic staff, as a self-reflection I had been presumably typified as “a Ph.D. student,” “a Chinese woman” and “a speaker with English as a second language,” which may have patterned their face-to-face interactions with me. The typification process did not seem to become problematic for the purpose of my study, as Berger and Luckmann (1966) cautioned against; on the contrary, as a result of those impressions that I had left on them, some of the informants appeared to be very patient when communicating with me and to make efforts to articulate themselves as clearly as they could.

From the critical realism perspective, studying “others” does not pose a problem as it posits that a researcher can obtain knowledge of a reality without being part of it (Cruickshank, 2003). Studying “the unfamiliar” freed me from taking things for granted and allowed me to approach my interviewees and case studies from a fresh and different viewpoint. At the same time, it did present challenges as it probably took me a longer time to fully comprehend what it was like to be in certain situations and I had to be more diligent in analyzing and triangulating my data.

**Summary**

This chapter has explained the research design and methodology of the study from the broad research paradigms and strategies of inquiry to the details of the research design and data analysis methods. Quality indicators of the study have also been discussed. Basically, to address the research question, the study drew upon critical realism as the research paradigm and involved interviewing policy makers or implementers of EQA mechanisms for Ontario postsecondary education and analyzing related documents as well as conducting seven case studies of
outcomes-based education initiatives at different Ontario universities and colleges. The data collection mainly occurred during the period of 2013 to 2014. While examining the EQA impact, the study necessarily also concerned the EQA policy implementation.
Chapter 6. Findings from the Ontario University Sector

This chapter presents the findings from the EQA policies and mechanisms for the Ontario university sector and the four case studies at four Ontario universities. The chapter consists of two parts. It starts with reporting the policy perspective on the association between the Quality Assurance Framework, or QAF, and the curriculum through the analysis of documents and interview data. Then the findings from four case studies are reported in the following sequence:

- The institutional context;
- The event;
- The generative mechanisms;
- The institutional or departmental perspectives;
- The individual perspectives and experiences;
- The connections between the global and the local; and
- The perceived impact of the system-wide EQA mechanism on curriculum development.

The reporting of the findings from each case closes with a “reflection and summary” section that provides a reflection on data quality for the case, a logic model that summarizes the key elements of the findings in the EQA impact process in light of the analytical framework presented in Figure 8, and a logical chain of evidence to support the findings on the flow from the EQA mechanism to the outcome in each case. The chapter ends with a report of the findings from a cross-case analysis.

Association between the Quality Assurance Framework and the Curriculum

Three sources of information were drawn upon to find out about the association between the QAF and curriculum development: (1) the policy document—QAF and Guide (OUCQA, 2014), along with a guideline issued by the Ontario Council of Academic Vice-Presidents (OCAV) and a guide released by the Council of Ontario Universities (COU); (2) archives that informed the development process of the QAF; and (3) data from six individual interviewees regarding the development or implementation of the QAF.

Findings from the QAF and the two supporting documents.

The QAF is not about the curriculum itself; however, it relates to aspects of the curriculum. In the 29-page QAF, the term “Degree Level Expectations” appears in 17 paragraphs and the phase “learning outcomes” shows up in 22 paragraphs, often along with “Degree Level Expectations.”
The Degree Level Expectations (DLEs) represent the academic standards of Ontario’s universities and consist of the Graduate University Degree Level Expectations (GUDLEs) and the University Undergraduate Degree Level Expectations (UUDLEs). According to the OCAV Guidelines for University Undergraduate Degree Level Expectations (2005), the OCAV had developed the DLEs, and the Guidelines were endorsed by the Council of Ontario Universities in December 2005. The OCAV subsequently incorporated UUDLEs as an appendix of the Review and Audit Guidelines of its Undergraduate Program Review Audit Committee (2006). According to the OCAV Guidelines (2005), Ontario universities are expected to use the DLEs as “a threshold framework for the expression of their own degree level expectations,” which are expected to be consistent with the OCAV UUDLEs, and may go beyond it. The QAF documents that the GUDLEs were adopted by the Ontario Council of Graduate Studies in January 2005 and as part of the UPRAC process June 2008 was set as the implementation date for the UUDLEs (OUCQA, 2014).

The COU Guide, Ensuring the Value of University Degrees in Ontario, identifies three key components for quality assurance of university education in Ontario by stating that “Ontario universities ensure the quality and value of university degrees through learning outcomes, Degree Level Expectations (DLEs), and the Quality Assurance Process and Framework” (COU, n.d., p. 7), and provides their definitions. Learning outcomes “define what a student should know, and be able to do, after successful completion of an assignment, activity, class, course or program.” (p. 7). DLEs are “frameworks (also called “degree profiles”) describing what students should know, and be able to do, after successful completion of a degree program at the bachelor’s, master’s and doctoral degree levels” (p. 7); the DLEs are designed to describe skills and abilities “in general terms in order to represent the widest range of degrees, from arts and humanities to professional programs in specialized disciplines” (p. 8). The COU Guide also indicates the connections among the three components. The DLEs are “the academic standards of [Ontario] universities” and “at the heart of the Quality Assurance Framework” (p. 3); learning outcomes are used to align individual courses with the DLEs (p. 7).

These connections suggest that quality assurance for Ontario universities is based on the use of the DLEs and learning outcomes. A chart can be derived to illustrate the relationship among the three components that can serve as a policy framework of the quality assurance process for the Ontario public universities (Figure 11). Important to note is that learning
outcomes are an important component in the outcomes-based approach to curriculum development (Wiggins & McTighe, 1998).

Figure 11. A policy framework of quality assurance for public universities in Ontario
QAF: the Quality Assurance Framework; DLEs: the Degree Level Expectations

Further, the COU Guide suggests how the use of DLEs and learning outcomes could impact curriculum development at Ontario universities. Each public university in Ontario is expected to use the DLEs as “a starting point, or foundation, for the expression of its own, more specific DLEs” (COU, n.d., p. 9); and “by explicitly stating the aim of each level of university education, Ontario’s DLEs guide faculty members and administrators as they develop degree programs, courses and curriculum” (p. 8). The Guide, as stated below, recognizes the value of using learning outcomes as helpful to faculty and departments in planning and assessment as well as to student learning.

Learning outcomes are the basis for how the student will be assessed and evaluated. All students who pass the course must be able to demonstrate that they have met the objectives for the course. The determination of learning outcomes helps faculty to shape courses and assignments that in turn help students achieve these outcomes. This allows university instructors and departments to plan courses and programs that help students develop the appropriate knowledge and skills for each degree level set out in the Degree Level Expectations. (p. 10)

DLEs and learning outcomes also impact the quality assurance process when they are applied to the development of new programs and the review of existing programs—two key components in the QAF. The QAF “requires the approval of new programs by the Quality Council and the review of existing programs by universities, which are also subject to Council
audit” (COU, n.d., p. 7). Thus, Ontario universities are subject to the Quality Council’s approval of new undergraduate and graduate programs, and the Council’s periodic auditing of the universities’ internal quality assurance processes, a significant part of which is cyclical reviews of ongoing programs. The QAF requires that “each proposal for a new program must identify learning outcomes, and show how they are consistent with DLEs and the university’s mission” (ibid., p. 12) and that “each cyclical review of an existing program must identify and measure learning outcomes to determine whether they have been achieved” (p. 13). The COU Guide recognizes the purpose of achieving accountability in using DLEs and learning outcomes by stating that “the QAF focus on Degree Level Expectations and student learning outcomes ensures a solid foundation for accountability, not just to students but also to faculty, administrators and governing bodies of the university, and for government and the public” (p. 13).

As demonstrated above, the two documents developed respectively by the OCAV and the COU represent a certain level of interpretations of the QAF in terms of the association between quality assurance and the use of DLEs and learning outcomes.

**Findings from the archives.**

The second data source for this analysis was a set of achieves stored at the Archives Office of the University of Toronto. A member who used to be on the Quality Assurance Transition / Implementation Task Force donated some of the documents that had been drafted and circulated during the period of 2007 to 2010 for archive storage, and directed me to the source.

Those archives show that the initial draft of the QAF was completed in April 2009 and after a number of discussions and revisions in 14 drafts, the final draft was available for approval in October 2009, with an implementation date set for September 1, 2010.

In a document entitled “Policy Directions and Summary of Major Elements of the New Quality Assurance Framework” created in early April of 2009, the DLEs were included under the heading “other features of the Quality Assurance Framework” (p. 8). It was stated that

It is expected that for both new program proposals and cyclical reviews, the institution will address the requirements of the Undergraduate and/or Graduate University Degree Level Expectations, which identify the knowledge and skill competencies that are understood to reflect progressive levels of intellectual and creative development. Each university has undertaken to determine and describe the degree level expectations that will apply to its undergraduate, master’s and doctoral programs. These requirements were developed by OCAV and OCGS in 2005 and approved for implementation that
year, stemming from a request from MTCU in response to an initiative of the Council of Ministers of Education – Canada (CMEC) for the development of pan-Canadian degree standards.

This indicates that the DLEs had been created to ensure the degree standards of Canadian universities, thus serving the purpose of quality assurance from the very beginning of their development. It also suggests that the DLEs were an integral part of the QAF from its conception.

It seems that the contents in the QAF related to learning outcomes and DLEs did not raise a lot of discussions when the QAF was developed. A major discussion noted in the archives was how to assess the outcomes. Below were the comments made by a Task Force member on the statement “appropriateness of the proposed methods for the assessment of student achievement of the intended program outcomes and degree-level expectations” on page 6 of the second draft dated May 7, 2009:

So how is some committee (?) of the Quality Council going to make the call about the appropriateness of the proposed methods for the assessment of student achievement of the intended program outcomes and degree-level expectations. Are they expecting the course outline for each possible course that might be included in the program to allow them to make this judgment? Who will have the academic expertise to make this kind of assessment?... We knew that after specifying degree learning outcomes would come measuring them – but we are miles off this at this point in time!

Other than that, the inclusion of learning outcomes and DLEs seemed to be acceptable and unquestionable at the beginning of the QAF development.

**Findings from the interviews.**

Interviews with six individuals who played different roles in developing or implementing the QAF suggest the following three areas in which the QAF could impact the curriculum.

First, an intended impact of the QAF was to push for a more student-centred curriculum, as commented by a Quality Council staff member.

What I hope and what I think the intention of the quality assurance framework is that the curriculum is much more about students now than possibly it was in the past. The quality assurance framework now, when you sit down to write a new program proposal, forces faculty to think about, ‘What do we want the program to do in terms of what we want students to take away from us?’ Instead of me saying, ‘I want a program in which I can teach my favorite course because it happens to be on my very precise narrow area of research.’” (Quality Council staff member, March 27, 2014)
Second, the authority granted by the QAF to the Quality Council for new program approval potentially brings about changes on new program proposals, as an Appraisal Committee member observed below.

So I mean there's been a movement towards learning outcomes and I think that's been filtering through the universities to the extent that the guidelines require new programs to have learning outcomes and we insist that they do have those learning outcomes, then it probably has been a significant change in the way new programs are launched on the university sector. (Appraisal Committee member, May 2, 2014)

This view was shared by the Quality Council staff member, who stated that

We’re finding for the most part those proposals are much better now. The universities are learning as they get the feedback from the Appraisal Committee. They’re learning how to present their learning outcomes… The expression of curriculum in proposals that come to the quality council has changed quite a bit because there’s a requirement to focus on learning outcomes and methods of delivery and methods used in the teaching and learning in order to meet those learning outcomes. (Quality Council staff member, March 27, 2014)

It is also interesting to note that by the time those interviews were conducted, the Quality Council had not yet rejected a single new program proposal but had provided repeated learning opportunities and a considerable amount of consultation and support for helping new program proposals meet the requirements in the QAF. This is illustrated by the following two quotes:

We’ve actually gone out to do quite a few workshops in universities about how to present a new program proposal and show them some examples of the formats in which universities are presenting their learning outcomes against their degree level expectations, how are they their curriculum maps, how did the learning outcomes map to courses in the degree level expectations. The appraisal committee sends them back to the university if they don’t have the material in there…. We’ve been back and forwards with some universities many, many, many, many times. During that process, they learned how to develop a program that’s based on the quality assurance framework evaluation criteria (Quality Council staff member, March 27, 2014)

I don't think we've ever ... We've not ever turned a program down, but we have had programs which have decided having gone into the process to withdraw their proposal before the Appraisal Committee have made a recommendation. … So these are not proposals which we've turned down in a sense, but we've been involved in them ongoing discussion in a way of indicating our concerns about how you're going to ensure that you have the professional social work faculty in place to be able to structure the program and to be able to teach it right . So I think we've been going back and forth on those. (Appraisal Committee member, May 2, 2014)

Third, the QAF helps reinforce the use of the outcomes-based approach. Two interviewees shared the comments to that effect.
Those faculty who don’t want to come into a room to talk about learning outcomes wouldn’t be coming into the room to talk about learning outcomes in the absence of a quality assurance policy that said, “You must do this. It’s required.” 100% of universities signed on to it being required. (Quality Council staff member, March 27, 2014)

For many years, (the Ontario Council of) Graduate Studies had a process – it was outcomes oriented. Although they approved outcomes, they never used them until the quality assurance process came into being with the establishment of the Quality Council. At the undergrad level, the OCAV, Ontario Council of Academic Vice-presidents, had a sub-committee, UPRAC, the Undergraduate Program Review Advisory [Audit] Committee. Its job was to oversee the periodic program of reviews in the universities and they began to use DLEs in that process. Little by little, outcomes-oriented education became required in Ontario. Then, when the scheme was put into place, it was clear that it was required. A set of elements – examination and assessment of students’ achievement should be consistent with the outcomes, teaching should be consistent – those ideas came to the fore finally when we had the full Quality Council. But we did it step by step. So that’s really how it happened. We made it possible for universities to become accustomed to thinking in terms of outcomes. (Taskforce member, October 30, 2013)

It is important to note that most interviews were taking a cautious stance when being asked about the impact of the QAF. They admitted that it was at an early, developmental stage and therefore it would be hard to make a definitive judgment. The interviewed Quality Council staff member added the following comment at the end of the interview.

A lot of what I say is speculation because I can’t answer definitively with evidence. It’s informed speculation, so I just say that as a caveat to what I say. If you ask, ‘Are students achieving learning outcomes that they didn’t in the past as a result of this?’ I don’t know the answer to that. ‘Should somebody be able to answer that question better than they could four years ago?’ Yes. “Will get better in the next four years?” Yes. Because it is a work in progress specially that part of it. Figuring out what metrics and measurements to use and so on. That’s where a really interesting discussion is going on right now. (Quality Council staff member, March 27, 2014)

Similarly, one of the interviewed Audit Committee members commented on the impact that “We are so early in the process. The impact is abstract at this stage” (March 30, 2015). The interviewed Appraisal Committee member provided positive comments on the immediate effects of the mechanism but found it hard to comment on the future.

So to say, ‘Have we been successful?’, I think we can certainly say that of the programs that we've approved, we've ensured that they are going to ... at least the university has got the structure to create a quality program and that we've indicated the resources they need to deliver that quality program... I think you have to look five, ten years down the line as when you start having graduates out as programs to say, ‘Well, do they meet the learning objectives, the quality control that the baseline we've set for them, whether they
meet that or not?’ … In terms of the process, I think it works extremely well. I think we're pretty efficient in dealing with it and I think we process the material quite quickly. Does it meet the objectives of ensuring quality control? I think it's too hard to say at this stage here. (Appraisal Committee member, May 2, 2014)

Finally, changes in organizational structure were noted as immediate or short-term effects of the QAF implementation. The interviewed Appraisal Committee member observed that “I think universities are spending more time on quality assurance programs and creating its uniform structure for all their programs but as I said, it's been three years; it's still a state of development” (May 2, 2014). The interviewed Quality Council staff member also shared that

Those universities that are setting up offices of quality assurance and appointing people, sometimes they’re doing it in an efficient way by appointing their dean of graduate studies into that role because the dean’s roles have changed dramatically with this new systems. Some of them are now are responsible for quality assurance for the whole university and they might have a new job title like vice provost for quality assurance or vice provost to academic in quality assurance or vice provost to quality assurance in graduate study. That’s an efficient use of the university resources. (Quality Council staff member, March 27, 2014)

Summary

The data presented above from three data sources pointed to these observations:

- The DLEs and learning outcomes are recognized as important components contributing to the quality of university education in Ontario. They are used in the QAF as instrumental tools to ensure accountability in the quality assurance processes. Faculty members and academic units of Ontario universities are expected to use the DLEs and learning outcomes to guide their educational practices in program and curriculum development as well as in student learning assessment.

- The DLEs and the associated outcomes-based approach were adopted in the thinking of the Task Force members when they first created the QAF. In the process of QAF implementation, the outcomes-based approach can be reinforced by the QAF-prescribed quality assurance processes such as new program development and cyclical program reviews.

- The interviewees shared that the QAF potentially could impact the curriculum but it was easier to evaluate the immediate impact of the quality assurance processes themselves, such as changes in organizational structure, than to assess the impact
Evidence from the Four Case Studies at Ontario Universities

This section presents the findings by each case study and then compares the findings from the four cases for a cross-case analysis.

Single-case Analysis

For each case study, I have followed the realist research paradigm by organizing my data into the three domains that represent the reality—mechanisms, events and experiences (Bhaskar, 2008). Due to the importance of the context to each case, I first present the institutional context, and then the event, followed by the generative mechanisms and the experiences of different groups of stakeholders. This event-mechanisms-experiences format shows the results from the process analysis. Under the subheading of Experiences, I have organized the findings by the institutional, the departmental and the individual. I have also teased out the evidence from interview data about connectivity between the global and the local and about perceived impact of system-wide EQA mechanisms. I have concluded the report for each case by mapping the key findings upon the analytical framework shown in Figure 8 to illustrate the EQA impact process and building a logical chain of evidence to support the findings in the Reflection and Summary section.

Case 1 at University A

Six individual interviews and a set of institutional documents and website information informed the findings for Case 1 at University A. Among the six interviewees, two provided an institutional view of the case; four were affiliated with three academic units and were in a position to provide departmental views. Five of these interviews were conducted during the period of November 2013 to February 2014, with the last one occurring in April 2015.

The Institutional Context

University A is a comprehensive, urban university with a student enrolment of more than 38,000, of whom 94% are undergraduate students.

The Event: Technology-Supported Curriculum Mapping

University A introduced a web-based curriculum mapping tool in 2011, the first year the QAF was implemented and required each public university in Ontario to develop its own Institutional Quality Assurance Process (IQAP). The tool was used in the processes of program
review, curriculum renewal and new program development to facilitate the alignment of program learning outcomes with the DLEs.

The curriculum mapping process at the university was illustrated by a chart posted under the “curriculum development” panel on the website of the teaching and learning office of the university, as shown below in Figure 12a. The chart illustrates that the first step in curriculum development was to describe the program’s goals and outcomes. It was then followed by designing teaching and assessment methods, and finally by reviewing and refining the program. On the same webpage, another chart (Figure 12b) showed the processes in which program goals informed course learning outcomes in design and the student achievement of program goals was examined through assessment of student learning in the achievement of course learning outcomes. Further, a template matrix, part of which is shown in Figure 12c\(^2\), was also provided to demonstrate the mapping of the program goals against the DLEs so that faculty members could determine whether the identified program goals had addressed all the outcomes of the DLEs. All these resources demonstrate that the university prepared a variety of resources to help faculty members and academic units to develop an outcomes-based approach to teaching and learning and facilitate the process in which program goals could be aligned with the DLEs.

According to the key contact person for the case study, who had also designed the curriculum mapping software and played an instrumental role in using the software to facilitate the mapping processes at various academic units (U1_2, educational developer, November 18, 2013), a curriculum mapping process typically went through the following steps. The first step was to develop program learning outcomes, which had not been in place at most departments before the curriculum mapping exercise. Once the program learning outcomes were in place, the information was entered into the software to compare the program outcomes with the DLEs. In the meantime, all the courses offered by the department and the program-related courses offered by other departments were entered into the software. Then the faculty members in the program were assembled for a meeting at a computer lab, where every member did the mapping between their own courses and the program learning outcomes in terms of the levels of “introduced”, “reinforced” and “proficient”, or IRP. Once the mapping was finished, a report could be printed.

\(^2\) The graph is used here to demonstrate how the program goals were aligned with the outcomes statements in the DLEs. The words under “Depth and Breadth of Knowledge” are those outcomes statements, which can be found in the Appendix of the QAF and Guide (OUCQA, 2014).
out to show the overall picture of the curriculum for the program. The report that revealed the strengths and weaknesses in the curriculum was later used as a tool to stimulate conversation among faculty members about the curriculum. The results from that conversation could lead to some concrete changes in the curriculum and could become part of the periodic program review. The mapping could also be done on the level of teaching methods and assessment methods. A courses-to-program goals matrix and a course methods and assessments matrix were provided as templates in the Periodic Program Review Manual, Part 1, published in October 2012.

Figure 12a: Define/Refine Outcomes and Develop Teaching Methods & Assessments

Figure 12b: Program Goals and Program Learning Outcomes

Figure 12c: Depth and Breadth of Knowledge and Knowledge of Methodologies

Figure 12. Charts and templates posted on the institutional website of University A

The software for curriculum mapping was designed to have a few functions (U1_2). It was designed to compare the Undergraduate Degree Level Expectations, or UDLEs, with departmental learning outcomes. It also allowed instructors to identify what levels of learning outcomes their courses aimed to enable students to achieve—introduced, reinforced or proficient,
and list their teaching methods and assessment methods they had used in their courses. When additional functionality was added, instructors would be able to view all the assignments that contributed to the development of a certain learning outcomes throughout the whole program. As the report generated by the software used color coding for each achievement level, readers were able to visually identify problems in the curriculum, such as the gaps in laddering, unreasonable sequencing, and duplications (U1_5).

The advantages of using technology for curriculum mapping were seen in a few ways. It enabled real-time adjustments (U1_1). Further, rather than taking a series of steps to produce a report, once all the data had been entered into the database-based software, a report that demonstrated the relationship between teaching methods, assessment methods and learning outcomes could be generated right away (U1_2); so it was believed to be a time saver.

**Generative Mechanisms**

Several individual and institutional factors were found to enable the technology-based curriculum mapping process to happen at University A.

On the individual level, the project had an initiator. An educational developer first initiated the idea of using a software tool to facilitate the curriculum mapping process in 2010. She brought the idea to a senior administrator of the university, who agreed to seek assistance from the computer services office to design the tool. The educational developer was not only familiar with a typical curriculum mapping process but also had a visual art background, which made the design process relatively easy.

On the institutional level, the initiative was a result of multiple events that happened to the university approximately about the same time, as the interviewed senior administrator explained.

A coincidental series of events that all happened around the same time. So, the Degree Level Expectations were articulated by COU [Council of Ontario Universities]; and a year after that, my position was created - there was no ViceProvost, Academic prior to 2009 and 2010; the hiring of xxx [the name of the educational developer]; and the requirement that we would update our curriculum policies and create the IQAP. All of these happened at the same time. … I think it became easier to sell the idea to other programs that were looking at program review, and as soon as we realized that there would be many programs doing review, the idea of going from a manual process to a more automated one made sense, I think (U1_1, senior administrator, November 18, 2013)
Being able to recognize the value of curriculum mapping to curriculum improvement was also found helpful to developing a university-wide curriculum mapping process as the senior administrator further expounded using a case of program review.

And one other very fortuitous event also happened at the same time: one of our programs was undergoing program review, and it was an education program, and because the faculty members of that program are all educators, they were enthusiastic to kind of test-drive the curriculum mapping process. And what they found was they'd been hearing from their students for years about repetitiveness and redundancy in their curriculum, and after doing the curriculum mapping they could, first of all, convince themselves that, yes, there were redundancies and repetitions in their curriculum, but not only that, they knew exactly where they were, so they could fix it. (U1_1, senior administrator)

It is important to note behind all the individual and institutional factors, the provincial context of implementing the QAF was important to the initiative at University A. The interviewed senior administrator explicitly confirmed that the initiative of developing a curriculum mapping tool was a response to the need of implementing the IQAP, which is the institutional requirement of the QAF for Ontario universities, as well as to serve the purpose of faculty engagement in the program review process. He explained the two sides of the coin as below.

The background is the introduction of the learning-outcomes based approach to the quality assurance for curriculum, which was at the initiative of OCAV, the Ontario Council of Academic Vice Presidents, which is an affiliated group of the Council of Ontario Universities. I think in 2010 or something like that, they created this series of Undergraduate and Graduate Degree Expectations, and all the universities in Ontario were meant to adopt these in their curriculum development and program review policies. So [the name of the university], of course, did that.

The purpose of the tool, our internal purpose of the tool, was really to facilitate departmental engagement with curriculum analyses for the learning outcomes approach, in particular around program review. That was sort of our motivation, to try to make faculty engagement with the process more efficient. … The thought was that a curriculum mapping tool like this would make it easier for them to tell the collective faculty base that offers the program what they think their course is doing, and then it would be easier to see overall how that fits into the big picture. So, it was really a faculty engagement tool to make it easier to get engaged with that process. (U1_1, senior administrator)

The institutional strategy of harmonizing the needs for accountability and quality improvement appeared to be more visible in the following quote.

I think from a local level, when I talk to departments that are about to set out on the program review process, that's what I tell them, I say, ‘You have to do this because we're required as a form of accountability to the taxpayers. But more importantly from
our own local perspective, this gives you an opportunity to really understand what your program is delivering and to allow you to develop messages so you can talk about it in a coherent and articulate way.’ So I think that is the benefit of the overall program review process, including the mapping. (U1_1, senior administrator)

The design process for the curriculum mapping tool was also heavily influenced by the external needs of accountability. The educational developer who had designed the curriculum mapping tool kept in mind the need to align the curriculum with the DLEs as she stated the considerations behind her design as below.

For the purposes that I had in mind, I wanted something very simple, very straightforward that would require very little time to learn.” So that instructors could, just, do the mapping easily and fairly quickly. … So I made a number of suggestions to make it simpler, cleaner. To try to really pare it down to, absolutely, the essential of what they [faculty members] needed to do, to reduce cognitive load and just make it easier to get them to accept using it.

It took me a while to work out a system to figure out how departments could demonstrate that they were addressing these Degree Level Expectations. … So I was trying to think of with this wide variety of different approaches, how I could come up with something that would allow people to actually compare what they're doing to the Degree Level Expectations. (U1_2, educational developer, November 18, 2013)

Experiences

The institutional perspectives.

The interviewed senior administrator and educational developer provided the institutional perspectives on the technology-supported curriculum mapping process.

They shared several objectives intended for the curriculum mapping process. First, it was used as a tool to facilitate faculty engagement in a typically perceived onerous program review process and encourage a collective ownership of the program. It was considered helpful for building cohesiveness in the curriculum as well as in departments (U1_1; U1_2). Second, it provided “a more holistic way of looking at curriculum” (U1_2, educational developer). Third, it was believed to be a venue for “serendipitous professional development” on teaching and learning for faculty members as the interviewed educational developer explained this as below.

Not in a heavy handed or pushy way, but in one department I was working with, they said, ‘Well, you can't really measure critical thinking’ and I said, ‘Well, have you seen the VALUE rubrics that the AAC&U have come up with?’ And they said, ‘No, I haven’t’ so I pulled them up, showed it to them and they have these wonderful categories. They have these teams of faculty members across the Unites States that work together to develop this wonderful rubrics on critical thinking and they have marvelous language. They looked at them and went, ‘Oh, well, I guess it does make sense.’ So it
provides opportunities like that for serendipitous professional development related to teaching and learning. (U1_2, educational developer)

Further, although quality enhancement of academic programs was recognized as the ultimate objective, it was also admitted that whether this objective could be fulfilled would depend on the further actions taken by the programs on the basis of the results of the curriculum mapping process as the same educational developer explained below.

You have to see whether the people actually follow up, or if they’ve noticed something through this process and they are enthusiastic and say, ‘Yes, we need to make that change’ and nothing happens. Then it's not going to make any difference. Then, it's all lip service. (U1_2, educational developer)

In addition, if the voice of a senior university administrator could represent the overall institutional perspective of the university, it can be seen that University A, as a whole, embraced the learning outcomes approach to quality assurance introduced by the QAF. The interviewed senior administrated indicated that he believed that compliance with the requirements of the QAF would help the university achieve the continuous improvement of academic programs.

I think so, to the extent that the learning outcomes approach is valid for understanding the quality of a program and for reflecting improvements, then I think the fact that the Quality Council requires these cyclic reviews is a way of ensuring that these things come together. I think this is one area where we could do more perhaps. (U1_1, senior administrator)

The departmental perspectives.

Representatives from three departments of the university were interviewed: two from the same department under the Faculty of Science, one from the Faculty of Communication and Design, and another one from the Faculty of Management. The programs at the Faculty of Science and the Faculty of Management were subject to certain accreditation requirements whereas the program at the Faculty of Communication and Design was not.

By the time of the data collection, all the three departments had been going through the curriculum mapping process as part of their periodic program reviews mandated by the IQAP. At the department under the Faculty of Communication and Design, curriculum renewal deliberately ran in parallel with the program review process so that the two processes could inform and reinforce each other.

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3 The actual names of these Faculties were rephrased to protect their identity.
Some of the departmental views were found congruent with the institutional perspectives. The representatives from the Faculty of Science and the Faculty of Management confirmed that the mapping process helped their departments think of the curriculum as a whole in the following quotes:

As opposed to looking at in a more of an umbrella, a whole program approach. I think that’s one of the benefits of having done the mapping: it allows us to look at the program as a whole. (U1_3, program chair and faculty member, Faculty of Science, November 27, 2013)

It really helped us with all our courses in balance. We should be introducing things in our first-year course, and students in their fourth-year course should have become proficient in those objectives. In our mapping, we found with some of our first-year courses, we have reached a lot of proficiency, which sort of says ‘Is that good? Should we be doing that in the first year? Is that acceptable? Why is it acceptable? What isn’t?’ It helped us with the curriculum flow as well.’ (U1_6, department head and faculty member, Faculty of Management, April 27, 2015)

The interviewed curriculum committee member from the Faculty of Science shared how the curriculum mapping process engaged almost every faculty member in his department by saying that

Six or seven years ago would be the first time that I remember. I was here that we talked about it. But we hadn’t gone through the process necessarily that strongly. But that was because the program director basically did it himself and it was himself at the time …. So and that would have been in consultation with the chair and probably the associate dean. But getting the full faculty involved this is the first time that I remember it…. We really reached everybody. I think a lot of us had informally done what we thought in our heads … But as a formal process it wasn’t until we were doing the program review that everybody stated what their opinion was about their courses … (U1_4, curriculum committee member and faculty member, Faculty of Science, January 29, 2014)

The comments made by the interviewed curriculum committee member from the Faculty of Communication and Design illustrate how the curriculum mapping process helped associate the curriculum with the DLEs as quoted below and that establishing the association was part of the considerations for initiating the technology-supported curriculum mapping process.

There’s a correlation between the UDLEs, the learning outcomes and the curriculum because it’s great to say ‘Say, we adhere to UDLEs’ and you can even go as far as saying ‘We have learning outcomes that we can identify or correlate with those UDLEs.’ If you can’t show that your curriculum is meeting those learning outcomes, then it’s irrelevant whether those learning outcomes can map to UDLEs. What this [curriculum mapping] does is this provides the evidence, the concrete evidence. It’s just not subjective what I’m saying. I think that we’re achieving this. This shows very clearly, not only that we are achieving it but exactly how we are achieving it…. It allows us to present a very clear concrete correlateable result. (U1_5, curriculum
committee member and faculty member, Faculty of Communication and Design, February 27, 2014)

Other departmental views provided additional perspectives on the curriculum mapping process. Some believed that the mapping process contributed to developing a stronger curriculum as the following quote suggests.

This [curriculum mapping] is giving us now the opportunity to develop a curriculum that is going to be extremely strong. That is going to address some of the issues that were raised with the old curriculum. It’s going to allow us to over time reduce that course drift, because every single course is going to now list objectives in the course outline. Those objectives will be from this list. The learning outcomes for this course are A, B, C, D, E. I think that that’s relevant because we currently don’t have that structure right now. (U1_5, faculty and curriculum committee member, Faculty of Communication and Design)

Others found that the mapping process was valuable for developing new course proposals and new program curricula, as the two quotes below indicate.

It was absolutely valuable to have something that was concrete instead of abstract. … Let’s give them a course that isn’t sit in the class; let’s start a new course with the lab. So let’s create that course for them. So without the curriculum review a lot of it would have still stayed abstract I think. These sorts of exercises and routinely going back to mapping what you expect courses to do and being honest about what they are doing to the best of your ability, is the only thing that can make it so that you are sure the curriculum you’re offering is right. Or if it’s wrong, give you 100% knowledge and something to argue from when creating the courses. (U1_4, curriculum committee member and faculty member, Faculty of Science)

We’re actually now in the process of generating a new curriculum that when it’s mapped against these learning outcomes should give us a much better result in terms of a more represented sample of introduction, reinforcement, proficiency across all of these levels. That’s what we’re in the process of doing now. We’re actually, in half an hour, meeting we’re going to finalize some course descriptions and a new curriculum map that we’ve done. We’re going to in the next week or so bring that back to the faculty, get their feedback and input, make any necessary changes, then send it out to other stakeholders, industry, students, alumni, get their feedback and input. Then once we have a final curriculum we’ll be writing the curriculum proposal. (U1_5, curriculum committee member and faculty member, Faculty of Communication and Design)

Representatives from two of the three departments observed that the results of the mapping process reinforced what had been known before (U1_3, U1_6), as one of them commented “It reinforces our understanding of where we’re currently and provides us with a roadmap to put a developmental plan in place.” (U1_6, department head, Faculty of Management)

The challenges mentioned by some of the interviewees included confusion about the boundaries between the levels of “introduced,” “reinforced” and “proficient,” and the difficulty
in summarizing the nuances between the levels in the mapping report, as the following three
comments suggest.

The difficulty is in the interpretation of [introduced, reinforced and proficient]; what we
never did was define what introduction, reinforcement and proficient meant. And it was
actually sort of the design of it – you let each person determine that…. The table is a good glance but you do have to be willing to go beyond this when really
assessing the mapping that’s going on in your curriculum. The numbers don’t
necessarily mean what the numbers summarize. Good, for quality assurance, yes. Do we
get all of our disciplines? Absolutely. And to the level? This is hard to say. … And I
think it would be very hard to find a way to summarize the nuances. (U1_4, curriculum
committee member and faculty member, Faculty of Science)

Whether a faculty member said something was introduced, reinforced or proficiency
was really subjective to their opinion of what that meant. One of the things that we said
was “Well, this gives us a really good picture, but how do we know if we’re all sort of
dealing on the same scale?” [We addressed that by] adjust[ing] through communication
and discussing things. We got on the same level, we understood what we were saying
and we went through literally one by one and discussed it. It was very significant time
commitment to do this. (U1_5, curriculum committee member and faculty member, Faculty of Communication and Design)

Probably one of the biggest challenges in implementing the curriculum mapping is
making sure that all of the instructors are on the same page as to what the different
levels of expertise or the goals means [i.e., introduced, reinforced, and proficient].
That’s probably the biggest challenge and when we find that there’re discrepancies
between what we received and what we expected to receive in terms of the mapping. It
usually had to do with level of expectations. (U1_3, department head and faculty
member, Faculty of Science)

Other challenges were found in possible faculty burn-out and the need to maintain
collegiality during the mapping process.

It becomes an exhausting measure because you do nothing and then four. So that was
one of the challenges, especially for courses that are beyond your own curriculum. So
that was one challenge – just the burn out, the exhaustion of trying to do all those at
once, that there has to be timing well considered when going through that. The second is
remembering to let go and allow people to have their opinions. That’s a really big
challenge. (U1_4, curriculum committee member and faculty member, Faculty of
Science)

In a nutshell, from the departmental perspectives, the perceived benevolent changes in
curriculum development included approaching the curriculum as a whole, better faculty
engagement in curriculum development, association of the curriculum with the DLEs, building a
stronger curriculum, facilitating new course or new program development, and validating what
was known about the curriculum. In the meantime, some challenges were also identified, such as
definitional issues of the three proficiency levels of achieved learning outcomes and maintaining collegiality during the mapping process.

**The individual perspectives and actions.**

When the six interviewees discussed their work experiences in relation to the curriculum mapping process at the university, they also revealed their personal perspectives on the outcomes-based approach embedded in the mapping process and some of them talked about their teaching beliefs as well. Due to their professional positions, all these individuals played an instrumental role in their departments in facilitating use of the outcomes-based approach in the curriculum development and program review process.

The interviewed senior administrator made an interesting comment on the differences in the value of the outcomes-based approach to faster-changing programs versus less fast-changing programs. He believed that the outcomes-based approach would benefit faster-changing programs more than those programs that have a relatively stable knowledge base.

So the School of Journalism is an example that the changes in the journalism industry are so far-reaching and so fast that journalism has to keep adjusting its curriculum almost constantly. So for them I think it would be valuable to keep the Degree Level Expectations and learning outcomes approach in mind as they do that. But other programs are content to let it happen once every eight years. I think for some programs, that may be acceptable. Some very well-established disciplines, for which undergraduate education is foundational, maybe. I'll take my own discipline of chemistry as an example. What we teach in first, second year chemistry courses now is not that much different than what I was taking undergraduate chemistry back in the 1970s. It hasn't changed that much because the foundations are the same. So maybe for those kinds of programs, and eight-year cycle is sufficient. (U1_1, senior administrator)

For the interviewed educational developer, the outcomes-based curriculum mapping process provided an alternative approach to discussing the curriculum with faculty members, thus helping reorient curriculum-related conversations to a more constructive direction.

When I first started to work as an educational developer, I knew how contentious curriculum could be because in departments, there can be factions within departments … So, if someone said to me, ‘Wouldn't you love to talk to them about curriculum development?’, I thought, ‘No.’ because I would be in the middle of these arguments. This process, the way that we've organized it, tries to avoid that all together by saying, ‘Look at your graduate, what do you want them to be and how do you get there?’ And that's a conversation that they can all participate in. It doesn't mean that there aren't going to be disputes or disagreement about the focus but it changes the aim. And by changing the aim, people I find are more cooperative and more interested,
they are actually interested in working towards that goal. … I think it gets people more likely to be engaged in a common goal. (U1_2, educational developer)

Three out of the four interviewees affiliated with departments held positive views about the outcomes-based approach. One of them talked about the benefits of the approach to both faculty and students as he had observed.

I think that as a student I would want to know clearly what I should expect from the course and what the professor is going to expect from me. If I have that clear understanding upfront then I think that as a student I’m going to be able to engage in that course to its fullest and get the most out of that course that I possibly could. From the professor’s view point it allows the professor to practice academic freedom, it doesn’t restrict a professor to sort of prescriptive type of instruction. It allows the university to take the full advantage of the diverse skills of the faculty. I think it’s fantastic. That’s one of the reasons I believe so strongly in outcome based approach. (U1_5, curriculum committee member and faculty member, Faculty of Communication and Design)

The same interviewee further elaborated on a possible drawback of the outcomes-based approach—becoming prescriptive for teaching practice.

I think the only drawback I could see is if it was taken a bit too far, one of the potential dangers of outcome based learning is to make it almost too prescriptive. You have to be able to keep your outcomes broad enough that they’re not going to restrict potential, but narrow enough that you know that you’re going to be able to have consistency across the courses, across multiple sections. I think that that’s sort of the caution. I’m not sure it’s a drawback, but I think you can almost take it too far to the point where, certainly I would not enjoy my job as much as if somebody said ‘Here’s your course outline, here’s your lecture notes, here’s your this, here’s your that and you’re going to teach this course exactly this way.’ (U1_5, faculty and curriculum committee member, Faculty of Communication and Design)

One of the interviewed curriculum committee members suggested that he had always intuitively thought about how to address certain learning outcomes in his course design although he found “writing them [learning outcomes] down is a better way to be able to discuss it with your colleagues” and “writing them down is the only way I think we’re going to accomplish that” (U1_4, Curriculum Committee member and faculty member, Faculty of Science).

On the other hand, the other interviewee from the same department shared somewhat similar “intuitive” experiences in her own course design but gave different interpretations to them. Below was the conversation.

Interviewee: When I’m thinking of designing a course, course content, and very tightly tied with that would be some of the concepts and skills that I’d like students to have by the end.
Researcher: In this [curriculum mapping] exercise, they just call those concepts the content, the skills the learning outcomes. You don’t think so?

Interviewee: It didn’t feel like it when we were doing our mapping. Probably because we really focus on some of these areas or some of these learning outcomes when we are developing and designing and then teaching and evaluating our students. Then probably when we were doing the mapping, there are some other learning outcomes that are somewhat peripheral. They think the students learn as they go, but we might not actually teach directly, or we don’t test them directly. (U1_3, department head and faculty member, Faculty of Science)

The interviewee also shared what her colleagues would do in their course development—they intuitively used the outcomes-based thinking in their actual teaching.

Interviewee: They’ll [faculty members] be thinking: What kinds of skills does that student need to have at the end of this course? That’s how they decide what they think should be in the program as a whole. Then in terms of individual courses, they usually end up teaching so that by the end of the course, those skills that they think need to be there in the students have been built up. …

Researcher: When you’re saying the faculty members keep in mind what kind of skills their students will have at the end of the program, will that be outcome based approach?

Interviewee: It is, yes. It is a type of outcome based approach that we’ve used for probably forever. It has been in use in science programs. (U1_3, department head and faculty member, Faculty of Science)

Interestingly, the same individual expressed her strong skepticism about the outcomes-based approach when it was used in the curriculum mapping process. She emphasized the accountability side of doing the curriculum mapping when she was trying to engage her colleagues in the process as in the following quote.

We gave them the message that we had no choice so we just had to do it. That is what convinced them that they just had to do it. [Researcher: Because this is the requirement from the University.] That’s right. (U1_3, department head and faculty member, Faculty of Science)

**Connectivity between the Global and the Local**

The interviewed educational developer alluded to how the curriculum mapping initiative was related to the demand on the international level for increasing the conversations about teaching and learning.

Right now, there is so much emphasis on research productivity, often to the detriment of teaching. Even though people say that teaching, research and service, the represented time on those three things would be 40-40-20, the reality, certainly in all research institutions, I think most people would say, a much higher number for research, a much lower number for teaching and then service, it depends, it will be smaller regardless. …
Maybe, this [curriculum mapping] is a sign that things were starting to shift certainly internationally if that's the case. In places like the UK, where now, they have the mandatory teacher training. (U1_2, educational developer)

**Perceived Impact of the System-level Quality Assurance Mechanism**

The initiative of the technology-supported curriculum mapping process itself demonstrates a direct impact of the system-wide quality assurance mechanism. This observation was drawn from how the two interviewees who initiated the project described the objectives of the curriculum mapping initiative. As one stated, “It's a way of establishing the alignment of the actual program curriculum with the Degree Level Expectations. That's one thing, and I think that's very important.” (U1_1, senior administrator). The other commented that “one of the things it [the curriculum mapping software] does is it compares the Undergraduate Degree Level Expectations to the departmental learning outcomes and a comparison is made” (U1_2, educational developer). Thus, the initiative was a response to meeting the requirement of compliance with the DLEs as required by the IQAP and the QAF. This finding was verified by the interviewed senior administrator during the interview.

The interviewed educational developer also emphasized that the focus of the internal quality assurance process had shifted to the curriculum due to the introduction of DLEs.

Most departments, until the Undergraduate Degree Level Expectations were introduced, self-studies were done, didn’t focus so much on the curriculum. The focus was more on providing data, lots of metrics on enrollment drop-out rates and numbers of faculty members, and particularly, the research output, which figures to some extent. But it doesn't figure to a large extent on the curriculum itself. The focus has shifted considerably because of the introduction of the DLEs, no question. (U1_2, educational developer)

The impact of the QAF on curriculum development was also evidenced by the fact that all three departments had to align their learning outcomes with the DLEs. For example, one of the interviewed curriculum committee members made the following statement. It should be noted that his comment on the Ontario government was a misconception.

Really at the end of the day what you have to be able to do is you have to be able to map these goals or these outcomes with the UUDLEs. If you can’t do that, then you’re really going to have a hard time getting it past standards, getting it past the government of Ontario because really that’s their sort of identifiers. So it is important. (U1_5, faculty and curriculum committee member, Faculty of Communication and Design)

Despite this pressing need, at all three departments program learning outcomes had been developed before they mapped the program outcomes against the DLEs, rather than using the
DLEs as a starting point for the outcomes development, as the COU Guide, Ensuring the Value of University Degrees in Ontario (COU, n.d.), advised. Two interviewees explained how they had used the DLEs.

We took them [DLEs] as a separate piece. We had them as a framework and a backbone but the verbiage was very much what we would like students to be able to do, and align them with the DLEs as a secondary go-through to map and critique our program. (U1_6, department head, Faculty of Management)

After we’ve collected the data for our internally developed goals, the ones that we developed just for the chemistry program. Then we mapped each of those goals against the provincial goals. (U1_3, department head and faculty member, Faculty of Science)

Two of the three departments —the ones under the Faculty of Communication and Design and the Faculty of Management—felt that their home-grown program learning outcomes neatly matched with the DLEs although the process was iterative. It was also found that for some faculty members, the program learning outcomes, the DLEs and the accreditation requirements were inherently consistent as the program outcomes had been developed by taking the DLEs and the accreditation requirements into consideration. However, for others, there was such a huge discrepancy between program learning outcomes and the DLEs that it became a challenge to align the two. The following two quotes illustrate the vastly different perspectives from the two interviewees from the same department at the Faculty of Science.

Our specific ones, which are these program goals, which basically are a version of the degree level expectations that would map to the university overall, general Degree Level Expectations becomes part of it, and in that we said, ‘Well, this adherence to this accreditation requirement matches this Degree Level Expectation category.’ And we are confident that as we add and subtract courses because we’ve gone through this exercise, we are going to be able to both maintain our degree level expectations and our accreditations because we thought of them together, we didn’t separate them. … There’s nothing in our body’s accreditation that violates quality assurance. Like I mentioned before that it actually is more restrictive. Quality assurance is actually quite broad in what your goals can be. But to be accredited as a degree you need a narrower focus. But that doesn’t supersede anything in the quality assurance from the structures (U1_4, curriculum committee member, Faculty of Science)

We had to come up with a whole bunch of different objectives that we would like to have in our graduates and then we needed to map those against the provincial guidelines. That was probably one of the harder parts – making sure that we had something that aligned with each of the provincial guidelines. In some cases we had to add a couple of objectives even though we didn’t think that they were all that important just so that we could meet all of the provincial guidelines as we were told they were requirements. Then we met all the people who taught the chemistry courses to map what we do against the outcomes that we had identified. The outcomes that we’re really
measuring are ones that we can relate to as opposed to the provincial guidelines. (U1_3, department chair and faculty member, Faculty of Science)

An unidentified impact of the outcomes development and curriculum mapping exercise suggested by the interview data was that perhaps due to the challenges in aligning program learning outcomes with the DLEs, some departments attached greater importance to certain learning outcomes than they would have without the QAF and the DLEs. At the department within the Faculty of Science, communication skills and professional conduct were identified as part of the program learning outcomes as a result of the mapping process. The department head explained it this way.

[Before the department got into the program review and curriculum mapping processes, students’ communication skill] was somewhat important but I’d say that most people probably didn’t think about it too much. [Researcher: This process made people think more.] That’s right because we had identified it as a goal. … I think that, we always would prefer that our students are better at writing and other types of communication so it opens up, helps us have discussions about how we could improve some of our students’ skills in communication…. We have some of these items or goals that are almost a result of the provincial guidelines. For example, some of the professional conduct and the autonomy and awareness in particular. They appear that there’s an emphasis on them in their goals here and that’s because we need to happen there in order to meet the provincial guidelines. If we were left alone in a vacuum to create our own guidelines, those would probably appear in different guise. (U1_3, department chair and faculty member, Faculty of Science)

The interview data from one interviewee reveal that the barriers to the positive impact that the QAF could exert on curriculum development included lack of faculty buy-in, challenges in outcomes assessment, confusion about the purposes of the DLEs, and the competing factor of accreditation requirements. The quotes related to these aspects are as follows.

Lack of faculty buy-in: We also had problems because not everybody buys into the concept of doing the mapping. Most people don’t see the value in doing it.

Challenges in outcomes assessment: The impact of the exercise on some of the goals is going to be very minor if there’s any impact at all. Some of the problem lies in our ability to measure how well we meet some of the goals. It’s very difficult to meet goals of autonomy and awareness in a program like chemistry. It’s more facts driven.

Confusion about the purposes of the DLEs: It’s unclear that having these goals and having mapped them, aside from changes that we might make internally to reposition some of our courses or introduce some new activities, particularly some writing types of activity to the courses, it’s difficult to know what value the province sees in having these goals.

The stronger impact of accreditation requirements on academic programs: The other thing is that the chemistry program is accredited. In Canada there is an accreditation
body for chemistry. Because of that accreditation, we have more or less set of expectations in terms of what types of courses should be in the program, numbers of hours of labs, numbers of hours of lecture in chemistry. What that means is that most chemists have a more or less unified mindset across the country, actually even in whole North America. … It’s very standard types of courses that are offered, and to differ from that becomes very difficult especially if we want also to encourage students to be able to transfer from one university to another. If we align more with our goals, then any type of transfer is not going to happen because our goals are going to be very different from the goals and the way we lay them would be different from another institution. (U1_3, department head and faculty member, Faculty of Science)

Finally, the interview data also suggest the foundational role of program learning outcomes in the curriculum mapping process. Two of the interviewees concurred on this.

In these eight goals plus their subsections, we manage to get from everybody the piece that was in their mind. Oh our students can’t write well. Well, what does that mean? Where do we need them to be at? What level do we need them to be at, say they write at a level that we are satisfied with from our program. And then how are we going to accomplish that? Right? If you don’t know what you want to accomplish, you can’t ask the question about how are we going to accomplish it? Do we have the right framework or do we need a new framework? … We shifted ourselves so it’s a very, very good foundational step because it’s easy to try and track one idea. It’s very hard to track multiple ideas without writing them down so that you can summarize them. (U1_4, curriculum committee member, Faculty of Science)

Where we are right now is we are very confident that we have strong learning outcomes, we know where those learning outcomes fit into the government framework of UDLEs. We know that we have no unmapped learning outcomes, meaning that they all fit within the UDLEs. We know that we have no UDLEs that are without a learning outcome and we also know based on our current curriculum where we’re doing things well and where we’re not, based on these things. That’s to me a fantastic process, because it actually gives you a foundation to build upon. Curriculum can be very nebulous, especially because everybody has a very idealistic view in their head as to where curriculum should go. All the ideas are wonderful and they are positive and they can all contribute in a great way, but they can also be exact polar opposites of one another. This actually gave us a concrete starting point. (U1_5, curriculum committee member and faculty member, Faculty of Communication and Design)

Reflection and Summary

Data quality.

The six interviews, despite the relatively low number, provided rich data for this case study. The interviewed senior administrator and educational developer were heavily involved in designing and implementing the technology-supported curriculum mapping tool and well represented the institutional voices of the initiative. The other four interviewees were key members from three departments in quite distinct disciplines—each related to science,
technological design and management. As faculty members who played administrative roles in their departments, they offered different insights about the curriculum mapping initiative. Although it is hard to say that those three disciplines represent the major disciplinary areas of the university, the diverse observations made and opinions expressed by the four individuals were likely to represent the varying voices of the faculty members about the initiative under study.

In the analysis in the previous sections, triangulation was applied to interview data to identify congruent and inconsistent patterns in themes. The evidence from one of the interviews from the Faculty of Science who voiced confusion and skepticism about the institutional initiative and the system-wide quality assurance requirement of DLEs was intentionally granted heavier weight in the reporting of the findings in order to present the challenges encountered by her as well as her colleagues in the curriculum mapping process.

Given these, it appears fair to argue that the data collected from University A were well-representative of the curriculum mapping initiative in terms of the process as well as the themes in the perceptions of the process.

**Mapping of a logic model.**

When the findings from the analysis of the curriculum mapping process—the event, the generative mechanisms, as well as the institutional, departmental and individual levels of experiences—fit in the analytical framework shown in Figure 8, the EQA impact process for Case 1 at University A looks like the chart in Figure 13.

The initiative of technology-supported curriculum mapping at University A was a direct response to the DLE requirement in the QAF. It was a result of individual initiation and the institutional strategy of harmonizing the needs for accountability and quality improvement in the context of QAF implementation.

From the institutional perspective, the curriculum mapping software was designed to provide a tool for faculty engagement, present a holistic way of examining the curriculum, and create a venue for professional development. Another important objective was to facilitate the implementation of the QAF and the DLE requirement.

From the departmental perspective, some views were congruent with those institutional views, such as a holistic approach to the curriculum, faculty engagement, and association of the curriculum with the DLEs; other views included beliefs that the curriculum mapping exercise helped build a stronger curriculum, develop new courses and programs, and reinforce what had
been known about the existing curriculum. Challenges were also identified, including how to identify and interpret the three achievement levels (i.e., introduced, reinforced, and proficient). Some departments also experienced divided views about the influence of accreditation requirements on the curriculum as compared with the impact of the provincial quality assurance mechanism.

From the individual perspective, various views were held regarding the outcomes-based approach embedded in the curriculum mapping process. While some saw multiple benefits, others felt a number of challenges. Some faculty members’ teaching practice had actually been intuitively outcomes-oriented prior to exposure to the curriculum mapping exercise but they failed to see the value when it came to the curriculum mapping process.

Those individual perspectives affected the actions that some individuals took when they undertook the curriculum mapping exercise in their program review process.

**A logical chain of evidence.**

A logical chain of evidence can be induced from the findings and is presented in Figure 14. The chain goes as follows, with each step being supported by the interview data.

The provincial context of implementing the QAF at all public universities affected University A in the work of an educational developer as well as the institutional strategy that aimed to harmonize accountability and improvement. Thus, a technology-supported curriculum mapping tool was designed and the related process was initiated at the university. The initiative had its objectives, such as complying with DLEs, facilitating faculty engagement and fostering a holistic way of looking at the curriculum. The implementation of the initiative, therefore, affected both departments and individuals. On the departmental level, some of the perspectives were congruent with the institutional objectives, suggesting that those objectives had been realized. On the individual level, faculty members held different views about the outcomes-based approach embedded in the initiative. Supportive attitudes facilitated the implementation of the curriculum mapping initiative whereas confusion and skepticism expressed by some of the faculty members became a barrier to achieving the objectives of the initiative within departments.

The chain of evidence verifies that the QAF had a direct impact on local departments and individuals within University A through an institutional initiative—technology-supported curriculum mapping.
QAF

GENERATIVE MECHANISMS
- Individual factor: project initiator
- Institutional factor: harmonizing accountability and improvement;
- Provincial context: QAF implementation

THE EVENT/THE INSTITUTIONAL
Technology-supported curriculum mapping
Objectives:
- faculty engagement;
- seeing the curriculum as a whole;
- professional development

THE DEPARTMENTAL
- Congruent with institutional views;
- Additional views;
- Challenges identified;
- Divided views on the impact of accreditation

THE INDIVIDUAL
- Various views on outcomes-based approach: support and skepticism;
- Some faculty members intuitively used the outcomes-based approach

ACTIONS

Figure 13. EQA Impact process for Case 1 at University A
Figure 14. A logical chain of evidence for Case 1 at University A
Case 2 at University B

The findings about this case study were informed by two data sources: (1) interviews with eight faculty members and school-level administrators, and nine academic administrators responsible for university-wide issues; and (2) published and unpublished institutional documents. One of the participants was interviewed twice as his administrative position changed. All interviews were conducted from August to November, 2013, except the second interview with the same individual in August 2015. At one session, two individuals were interviewed together as they preferred.

The Institutional Context

University B is a medium-sized institution. In 2013-14, the university had an enrolment of approximately 16,600 full-time and part-time undergraduates and approximately 2,000 full-time and part-time graduate students (2013-14 Undergraduate Calendar).

Notably, a set of Learning Objectives were created and approved by the Senate in 1987. The set of Learning Objectives appeared in the Undergraduate Calendar until the 2014-15 academic year. The 2013-14 Undergraduate Calendar stated that these Learning Objectives “are a set of objectives described in terms of the desired characteristics of educated graduates, and are used in part to guide educators in their development of courses and programs” (pp. 2-4).

The Event: Senate-Approved University Learning Outcomes

The university’s Senate approved two sets of University Learning Outcomes (ULOs)—one for undergraduate programs and the other for graduate programs—at Senate meetings in December 2012 and May 2013. The Senate also established that all undergraduate and graduate programs of the university should incorporate the approved ULOs no later than September 1, 2016. Prior to the Senate approval, the members on the Board of Undergraduate Studies, a committee under the Senate, had unanimously approved the motion to recommend to the Senate that the ULOs be approved and implemented.

The ULOs consisted of five broad categories of learning outcomes and associated rubrics, which were intended to provide flexibility and latitude for various disciplines to fit their own

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4 The Learning Objectives consisted of ten areas: literacy, numeracy, sense of historical development, global understanding, moral maturity, aesthetic maturity, understanding of forms of inquiry, depth and breadth of understanding, independence of thought, and love of learning.

5 The five categories of learning outcomes were critical and creative thinking; literacy; global understanding; communication; and professional and ethical behaviour. Under each category, there are four sub-items, with each being presented under the levels of “introduce”, “reinforce” and “master”, thus forming a matrix of rubrics.
needs. They were developed in reference to the U.S.-based LEAP (Liberal Education and America’s Promise) initiative and through two years of broad consultation with faculty, staff, students and employers.

Since the university created its home-grown set of learning outcomes, the university community chose to align the learning outcomes of its academic programs to the ULOs rather than the DLEs as one interviewee explained below.

Interestingly enough, we hear less about DLEs at [the name of the university omitted] than other institutions do because in our IQAP you will see that our 1987 Learning Objectives were first related back to DLEs for the province. That alignment was communicated in the IQAP such that our commitment to DLEs is communicated through both the Learning Objectives and now through these institutional learning outcomes. … It is critical to communicate in this process that even when many institutions in Ontario are focusing their efforts on DLEs, because we already had institutionally defined Learning Objectives, we weren’t actually engaged with the conversations related to DLEs because we are really confident that our university-level learning outcomes align perfectly with the DLEs. (U2_1, educational developer, August 30, 2013)

However, the university did not ignore the existence of the DLEs but created a document to demonstrate the alignment between the ULOs and the DLEs. While it was decided that the Learning Objectives created in 1987 “be retained as inspirational guides” (Senate meeting minutes, December 5, 2012, p. 7), the old set of the Learning Objectives was also aligned with the new set of ULOs.

**Generative Mechanisms**

Eleven out of the 17 interviewees shared their thoughts on what made the event happen. Their comments can be grouped into two areas: (1) pressure from the increasingly accountability-oriented educational environment and (2) several institutional factors.

A senior administrator explained that the initiative of establishing a set of university-level learning outcomes for approval of the Senate began with the senior university leadership’s anticipation of increased accountability demanded on the part of universities.

And in the report [the Provost’s White Paper] she actually makes it very explicit, saying that she predicts increasing calls for accountability, that we would need to demonstrate the value of undergraduate education. That's really part of what she said. So when you look at this, you can see how this learning outcome thing could end up with being one of the final pieces to this point of this process. So this notion of call for accountability, [name of the Provost] was ahead of our time in predicting the increased demands for this. That's when it started. (U2_2, senior administrator, September 9, 2013)
The pressure from the broad accountability-oriented environment was also articulated by six other interviewees. Below were two typical comments.

So, I think it's much larger. I think it's also been largely driven by the accountability agenda that's been evidencing learning or pressure that we're getting. So, I think maybe- - I think there's a lot of things that come into view towards that. (U2_4, educational developer, September 25, 2013)

I think probably a large part of it is what was happening around the institution, what's happening in Europe, what's happening in the US. The increased attention on the effectiveness of post-secondary education, no question, probably drove part of it, because 10 years ago in my recollection, there wasn't a lot of discussion about this at our institution. I think the environment around us is doing that. … Maybe we're coming out of the sand a little and looking around and starting to learn about what others are doing to improve teaching, and we're saying, ‘Universities are not immune,’ that they should not shut off to those inputs that they can learn from what others have done. (U2_14, school-level administrator and professor, November 14, 2013)

Institutional factors identified by interviewees included forward-thinking leadership, an institutional tradition of using the outcomes-based approach, institutional culture, use of a proactive and pre-emptive institutional strategy to deal with the accountability requirements, and contribution of grass root work at some academic unites.

Five interviewees shared their high regard for the forward-thinking senior leadership of the university. One of them explained the contributions of senior leadership to engaging the university communities in quality improvement in teaching and learning.

At the leadership level, both [names of the Provost and an associate Vice-President] have taken a forward-thinking but collaborative approach to developing these outcomes. That has both increased capacity and built awareness. Even if you look at the development of institution-wide learning outcomes, how it involved with focus groups from a variety of people and a variety of disciplines, which involved staff, faculty, and administrators. Ensuring there was a collaborative engagement in the process has really helped to focus on process than solutions, to really build capacity throughout the institution to see this as a tool to help inform practice. That could help inform discussion, and that could help inform the change. They’ve taken a very positive approach to focusing, advancing and strengthening the quality of teaching and learning on campus, rather than, from a quality assurance perspective. (U2_1, educational developer)

Five of the interviewees commented on the role of the 1987 Learning Objectives in building an institutional culture of using the outcomes-based approach. Some felt that those Learning Objectives were contributive to the formulation of the new ULOs.

It was very good that they started that because they really laid the groundwork for the present ones that we have. I think they made the campus more open to outcome based
education because of that original list. They were published in the course calendar so that the students would see these objectives, and hopefully wanted to achieve them when they were here. (U2_2, senior administrator)

Very quickly, it was realized that even though we had an outcomes-based framework that was developed in 1987, the Learning Objectives then defined were not necessarily measurable; they were educational goals. What is interesting is that those Learning Objectives had already been explicitly incorporated into the governance. So when new programs were proposed, new courses were proposed, there was an explicit requirement that any new proposals were forwarded to the curriculum committee, through the program committee, through the Board of Undergraduate Studies, and finally through the Senate, had to explicitly articulate and define how they were aligning the new course or the new program with the Learning Objectives within the institution. So we’ve been doing this for a fairly long time. (U2_1, educational developer)

Others, nevertheless, suggested that those Learning Objectives played a limited role compared with other factors, as one commented below.

I think there was the history of it; there was no question. What I think we've done in the last ten years was doable without any tradition. … I don't think it's the tradition that did it. I think it was a combination of the leadership, senior and operational, and the fact that, it might be true, we actually do care about student learning. (U2_4, senior educational developer)

Further, the interviewed senior administrator explained how the ULOs carried forward the tradition set by the 1987 Learning Objectives but attempted to overcome their limitations.

In the fuller document, that's the one that went to the Senate, we made a reference to the fact that we are not eliminating learning objectives. Basically we are showing how things are connected to some extent. My pitch to the community has basically been that it is not as if we don't believe or we are simply disregarding the university Learning Objectives because they have been foundational in our thinking about things. But we have to accept that in terms of measuring or assessing certain things for quality assurance purposes and even for continuous improvement, we need to have some kinds of standards that are more easily measured. (U2_2, senior administrator)

Seven interviewees commented on the roles of institutional culture and suggested that the initiative fit the institutional culture better than the DLEs required by the QAF. One commented that “I think also it was done not as a huge special initiative, but rather the ongoing work of evolving of educational orientation.” (U2_4, senior educational developer). The interviewed senior researcher explained how the ULO initiative came out as an effort to fill the gap between the old Learning Objectives and the DLEs that were not seen fit with the institutional culture.

Everybody knew about the old list and was trying to use them in the courses but it was not working well. So we heard a lot of challenges just to implement this list. That original list wasn’t developed in the same kind of long-term process that the new list was developed. It was just prescribed. So you have, on campus, people were trying to
use a list that’s really out of date and not working very well. And then you have one coming out of the government, which I think people would like better but still didn't quite fit our culture. So that left a space open for the new list to come incorporating both from the old University list and the UUDLEs (U2_3, senior researcher, September 23, 2013)

Eight interviewees identified the proactive and pre-emptive institutional strategy as an important factor that made the initiative happen. An associate dean of a school commented that the ULO initiative was a “pre-emptive response” to the system-wide requirement for quality assurance and accountability (U2_5, October 7, 2013). This was echoed by another interviewee, who stated:

I think it was a response to it. I think it was a recognition that that's the way that education, higher education is going and we need to help to bring that as a leader as opposed to do the minimum or be the follower. (U2_4, senior educational developer)

Another interviewee suggested that the senior leadership of the university held up a pre-emptive strategy to handle external requirements.

We’ve had a senior administration which has been watching the government very closely and engaged with government. There has been a philosophy here in our senior administration that it is better to influence the government or influence public policy in a direction that we like as opposed to being forced into a policy direction (U2_9, school-level administrator and professor, October 18, 2013)

This pre-emptive thinking was reflected in how the interviewed senior administrator explained what would have happened if the university had not developed its own ULOs and the importance of consultations prior to the Senate approval.

Whereas if I say we adopt the UDLEs as it is as our university learning outcomes, we would have had a big revolt, say, ‘Come, we weren’t consulted; these things don’t fit like us.’ Through the consultations including through the Board of Undergraduate Studies – that’s the governance piece before we go to the Senate, we had changes made right there because people were starting to make some very good suggestions. I thought, ‘Yeah. That makes sense. I’m willing to revisit that.’ And when we went to Senate, nobody voted against it. (U2_2, senior administrator)

The pre-emptive strategy was used not only to deal with the system-wide DLE requirement but also to handle the pressure from employers, as the interviewed researcher who played an instrumental role in developing the ULOs suggested below.

The government is promoting this list - UUDLEs. What we are saying is, we develop our own list and it includes the ones on your list, so let us use ours. What will happen eventually, I think, is that's schools that don't have your own list will have to use the prescribed one from the government. We want to do it ourselves. We wanted to be independent of what the government said you had to do. I think they would come down
and say all the universities have to use and probably going to say this list [UUDLEs]. But this doesn't include the 'introduce', 'reinforce' and 'mastery'.

When it started, there was fear that sometimes the employers were trying to take over. They can't tell us what to do. We are independent, academic freedom and all these things. Over the years, it’s just been a realization that we can have those learning outcomes but not in the situation the employers are telling us what to do. (U2_3, senior researcher)

Three interviewees suggested that balancing accountability and quality improvement was another strategy being used to promote the use of ULOs and the outcomes-based approach to university education. The interviewed senior administrator explained this well.

So on one hand there was a quality assurance process and then, there is productivity and the issue of accountability. But for us it’s always being seen as two sides of the same coin – on one hand we can say we need to be accountable in terms of what we deliver; on the other hand we can say this is the way we make sure that we have continuous improvement in the education that we provide to our students. For me at least it’s the same thing. Some people may focus more on one than the other; but for me, the ability to document what we do also gives us the ability to reflect on what we do, and therefore improve. It’s the same puzzle for me. … Everybody, no matter what discipline they are in, can actually look at those pieces as part of their own internal process of continuous improvement. Now on accountability side, it allows us to have five things about which I can report to the government no matter how we measure things not necessarily always in the same way. (U2_2, senior administrator)

The interviewed senior educational developer shared a similar view.

I think we do need to have a framework. And I think it does set the agenda, that is, the university outcomes are something we're all accountable to in the academic program … Attention by the educational development office, integration into program review and to professional school accreditation. And I think building those in have turned what we're doing from more voluntary continuous improvement to combining the accountability agenda and the continuous improvement goals of the education. (U2_4, senior educational developer)

The strategy of balancing accountability and quality improvement was also used at the school level. This was suggested by the response made below by an associate dean to my question as to whether the ULO initiative would enhance the quality of academic programs offered at the university or contribute to the continuous improvement purpose.

That's what I'm saying to you is that that's my primary reason for doing this. There is the accountability piece. But for me, in my gut, the reason why I'm pushing this is because I think it can improve the quality of our programs. … I think our Provost would agree with that 100% but what tends to filter down is a little more around the accountability pieces and we have to do this. … To me, what I talked to faculty, I tend to minimize the accountability piece, although if it's appropriate, I'll bring it up. First and foremost, it's all about, everybody here cares about the quality of the programs, and if you can
convince them that this will have an effect on the quality, they'll be there. (U2_14, school-level administrator and professor)

Finally, the groundwork that had been going on at various academic units was also found contributive to the development of ULOs. The same associate school dean who made the comment above also explained how the work at his school in learning outcomes development had interacted with the university initiative of developing the ULOs.

It was a very productive thing for us to do was to start having these very independent discussions at the level of degree programs and let that inform what they had started here [university learning outcomes]. That was how we influenced the development of these [ULO]. …Then it just so happened that some of the degrees started to work on their learning outcomes and the timing was right that they could influence each other…. it worked well, but I think it happened that way a little bit by happenstance then, so not by design. It came together nicely. (U2_14, school-level administrator and professor)

The importance of the groundwork was concurred by the interviewed senior educational developer, who had a university-wide view of the use of the outcomes-based approach.

We started working at quite a grass roots level on developing and assessing those learning outcomes. So, it's almost like we've had two parallel tracks going at the same time and now those are coming together for the Senate approval of the outcomes …. And coming from [the name of the Provost] and her group around getting the conversation going, around outcomes, and around undergraduate education and creating that kind of momentum and those kinds of ongoing conversations. And at the same time at the grass roots level having the faculty mostly from a continuous improvement standpoint, not an accountability standpoint. And those happened – we knew what they were doing and they knew what we were doing and we were all working along on parallel tracks. (U2_4, senior educational developer)

**Experiences**

**The institutional perspectives.**

The interviewed senior administrator, two educational developers and a senior researcher provided insight on the impact of the Senate-approved ULOs on some of university practices.

The Senate approval of the ULOs was believed to be of great significance to the university. The senior researcher who provided research support to the development process agreed that the Senate approval had given legitimacy to the ULOs (U2_3). The interviewed senior administrator suggested that the Senate approval had provided the university with a fresh beginning to use learning outcomes to inform educational practices.

It’s more than significant because in the end it is no longer an act of the administration. It’s no longer management decision to do something. It’s an agreed upon process by our senate which is composed of the students and faculty members…. The fact that we have
the university-level learning outcomes is both an end to something and a beginning of something else. It's just a process of transition from talking about it to now having something concrete we can move from, and then expand on that. (U2_2, senior academic administrator)

One of the interviewed educational developers, who had involved in developing a guide to learning outcomes development and assessment for the university, commented that the ULOs informed the actual university practices at various levels, particularly the continuous improvement of academic programs.

At the broadest level, the learning outcomes are meant to help the university to broadly articulate and evidence learning outcomes at the program level, at the level of the major and even down to the course level. The overall intent is much broader and the purpose is much broader. It helps inform our everyday teaching practices as well as our program-level planning and development, and our ability to account for and evidence what, when and how students are learning during their studies at the [the name of the University]. I would take a step further – the learning outcomes are being applied at all levels…. So they are meant as a foundation to the planning and to the evaluation of all programs …What we are trying to do in our curriculum review processes is to bring them down to a level, where they have levels of specificity that they can be assessed and measured. Faculty are confident that in a way, they are measuring and assessing learning outcomes. …I’m gonna emphasize that something that we would strongly advocate for here is that they are used as a process to help inform continuous improvement of our programs first and the foremost. Second, quality assurance flows from that process of continuous improvement. (U2_1, educational developer)

The other interviewed educational developer emphasized the importance of program-level learning outcomes when the ULOs were put in place.

It [the ULOs] does set the agenda, that is, the university outcomes are something we’re all accountable to in the academic program, and then meaning need to be made of them at the individual program level and so you would use those outcomes as one of the key resources when developing program outcomes, and to be sure that they are embedded, that we can link a course, to program, to university, to province-wide. (U2_4, senior educational developer)

The departmental perspectives.

The departmental perspective was informed by interviews with seven associate deans or department chairs and one learning specialist. These individuals had diverse disciplinary backgrounds, including language and literature, geography, hospitality and tourism management, food science, biological science, and physical and engineering science. Two of the involved programs had program accreditation requirements to meet, in addition to the institutional-level requirements, such as the ULOs. In addition, two staff members from the library and one from the Office of the Student Life were interviewed regarding the student service perspective of the
initiative. All these departments were actively involved in using learning outcomes to inform their practices and generally embraced the outcomes-based approach on the departmental level.

The two departments subject to external accreditation requirements had been proactive in using learning outcomes for a number of years. One of them explained their proactive stance by associating it with their close connections with the industry.

"I think part of the reason we were maybe a little bit ahead of the game on that stuff is because of the industry. We work a lot with the industry. We have to be able to communicate with them. We've always had a lot of industry research chairs here, industry-sponsored chairs, and we have to be able to communicate with them as well. It was partly just the context in which we do our work that made it more expedient for us to master those skills." (U2_11, program chair, November 22, 2013)

Both of the two interviewees from those departments shared that their departmental work was more guided by the accreditation requirements than the university requirements. One of them shared that he himself, as a learning specialist, linked the disciplinary outcomes with the institutional outcomes to ensure that both sets of needs were met at the same time. Yet, he still affirmed the value of the ULOs as below.

"Overall, we do not exist as a profession only... We are part of the institutional community. It is important for us to figure out how to fit in a bigger picture. It (ULO) gives an opportunity to... Our students can actually champion that they have met all those five areas of outcomes. For me, it is not a cultural shift but a reinforcement. It creates a common language. It provides a mechanism for us to relate to other people and for people to relate to us. There is a common currency to it, both externally and internally." (U2_15, learning specialist, November 14, 2013)

In addition, a director of a school with both accredited and non-accredited programs did not agree that discipline-specific outcomes required by accreditation agencies would be a completing factor for the ULOs.

"I wouldn't say they're competing, I'd say they're complimentary because they are professional skills usually specific areas so I think they're complimentary to what is being done with the university-level learning outcomes. They can go parallel." (U2_9, school-level administrator and professor)

Both the interviewees from those two accredited programs shared that using learning outcomes was part of the departmental practice without much objection from their faculty members. But they faced challenges in learning outcomes assessment, such as developing better tools and providing more resources.

Five interviewees were from three disciplines not overseen by external accreditation bodies: two with science backgrounds, two in language and literature, and one in geography.
According to them, all the three academic units had been actively involved in learning outcomes development by the time they were interviewed in the fall of 2013. The degree-level learning outcomes for all the Bachelor of Science programs had been developed when the ULOs were being developed in 2011 to 2012, and the development of program-level outcomes for individual programs were in process by the fall of 2013. All programs in the School of Language and Literature had program outcomes in place by the end of 2012 and were working on incorporating course-level outcomes into all course syllabi in the fall of 2013. The Department of Geography had developed its own program-level learning outcomes as a result of a voluntary undergraduate curriculum review five years before.

All these academic units were ahead of many other departments and programs of the university in terms of outcomes development but their motives varied. The interviewee from the Department of Geography commented that the departmental initiative of outcomes development was not driven by any external pressure or the IQAP in any way.

That was never driven by IQAP. It’s never been a top-down; this is always bottom-up. It is our geography-driven. … There is internal influence, which comes from us, as a sense of where we are as a discipline. So definitely internal. In terms of institutional influence, there has been an expectation in the last year that we explicitly integrate what the university wants into our own assessment plans, which is what we’ve done. Of course, that’s come from the provincial level, the accountability. I don’t know where the IQAP fits sometimes; to me it is more the province’s mandate and they want universities to be more accountable. Yes, IQAP is part of that. (U2_6, department-level administrator and professor, October 7, 2013)

Interestingly, the departmental chair had a close personal relationship with the director of the teaching and learning centre. This coincidence makes one hard to dismiss the possibility that the personal relationship may have played a role in enabling the department to become one of the first ones that participated in voluntary curriculum reviews when the reviews were first initiated.

At the School of Language and Literature, the personal conversion of the school leader into the outcomes-based approach of teaching and learning played a significant role in the outcomes development process at the school level. One of the interviewees, a former director of the school, admitted that “I’ve been very aggressive, I guess, promoting learning outcomes for the School of Language” (U2_12, October 23, 2013). Prior to that, he had gone through dramatic adjustment in his teaching approach. The transformation started when he attended a teaching institute offered by the teaching and learning centre of the university. In fall 2012, he led a committee composed
of section heads in the school to meet almost every week for three months to craft learning outcomes for every individual programs and the overall learning outcomes for the school.

For the development of the degree-level outcomes for the Bachelor of Science programs, the interviewee who played a leadership role in those programs emphasized two contributing factors: his personal belief in the outcomes-based approach and deliberate use of a proactive strategy to cope with the pressure from the IQAP review.

I think there were two things. One was discussions around learning outcomes and outcome-based approach had started a few years earlier, and I for one was a convert. I really felt that this would improve the clarity of our goal. I think it provides more transparency to students. I actually embrace it as an important element of good teaching practice. I just felt we needed to do it because it was the best thing for the quality of our programs. That's one. The second, which can't be minimized either, is the quality assurance process and we knew that the Bachelor of Science was going to be up for review in 14, 15 … I decided that this was an initiative we needed to start and that was a year and a half ago because we wanted to have learning outcomes in place for that assessment. … I think I recognize that as a valuable opportunity. When we have that quality assurance process in place, it's easier for me to sell the importance of this and acting on it now. (U2_14, school-level administrator and professor)

Although the overall experiences of outcomes development were generally positive at the three academic units, they still encountered resistance to the outcomes-based approach albeit to varying degrees. The resistance from faculty at the School of Language and Literature seemed to be felt most strongly.

There’s a resistance. And a lot of it has been written. There’s also some cynicism um, as to their [learning outcomes] efficacy for students to understand what they are all about. And the other resistance that you keep hearing is that it really reduces everything to a very general denominator, a very low common denominator, arguably, and it doesn’t address a lot of the other skills that we expect students to attain. … They are cynical towards the process because all they see is the skills. I think the inherent issue is we are all very much, um, connected to our own disciplines. If you do French literature, that’s what you love. That’s the subject matter that you wish to convey. That’s the subject matter that you want to excite your students with. That’s the important thing and then, to be reducing all this down to just basic skills seems almost just disrespectful to the higher goal that we have. (U2_5, school-level administrator and professor, October 7, 2013)

The cynicism was also associated with little felt impact of the ULOs on the school, as the same interviewee commented below on how the Senate-approved ULOs had affected the school.

I don’t think there is very much yet, and again, in part it is because the cynicism that you’re confronted with from faculty, in part it is because there’s a certain degree of resistance. In part it is because people don’t necessarily understand what the reason behind them is. (U2_5, school-level administrator and professor)
In comparison, not much resistance was felt among the faculty members with the science background. Perhaps, it was related to how school-level administrators presented the issue to the faculty, as the interviewed administrator for the Bachelor of Science programs shared below.

Arguing that it was an important thing to do for the quality of our programs, I didn't receive any resistance that I remember on that, but I just think it helped to say, 'Here's when the Bachelor of Science will be going through the quality assurance review. Here's what we need to have in place for that,' and everybody completely supported that. They want the BSC to be in a strong position when it goes through that review. (U2_14, school-level administrator and professor)

Regarding the impact of the ULO initiative on the educational practices, the same interviewee commented that the initiative would have immediate impact on new programs, that the impact on existing programs would be up to individual schools, and that enhanced accountability and improved student experiences would be long-term impacts he could see.

It's early, but there are a couple of levels to that. I think the biggest effect is … The one is that we've now modified … because of the quality assurance process, any new courses that are proposed by the [the name of his college] or any other college on campus, they have to go through an approval process. But to receive approval, they have to have learning outcomes associated with them, and they have to show or they have to address how that new course or that new program addresses the university learning outcomes. That wasn't there before. That’s an impact on new programs. Now, the question is, what about the existing one? That's partly what's happening here is that we're trying to work down to make sure the individual majors have developed their own learning outcomes. Then the rest after that, it depends again on the particular college.

There's the whole accountability piece and one can always hope that by doing these things, the function of the universities in the public eye is … I don't have a problem with being more accountable in that sense. I'm hoping that that will be at a longer-term effect, but first and foremost, it's just improving the experience for the students. … I think if that's carried through, it can really change the way students see their own learning, and that's why I'm doing it. That's the main reason. (U2_14, school-level administrator and professor)

Three staff members from two student services departments were interviewed about their experiences and observations related to the ULOs. At the Office of Student Life, a set of eight outcomes for extra-curricular activities were developed and finalized in 2012, and the initiative of developing those outcomes had begun in 2010. The interviewee recognized that the outcomes developed for Student Life and the ULOs served different purposes and that although the ULOs had been designed to inform academic programs, they also had the potential influence on her job.

We started the process before this one and then these were released and my job, in my mind, was to ensure that, at the very least, there were some connection between these
and what we came up with in Student Affairs. (U2_13, staff member at Student Life, October 23, 2013)

Similarly, two staff members from the library suggested the potential impact the ULOs would have on their work.

What this gives us a framework where you can see the flow through. You can see the sequencing of learning and the sequencing of skills and a lot of the skills. … This information has helped with the library collection, what the collection, what the resources will be provided to the university.

Yeah, and also the kinds of services that we provide. (U2_7, two staff members at the library, October 7, 2013)

**The individual perspectives and actions.**

Almost all interviewees took a generally positive attitude toward using the outcomes-based approach to inform educational practices although many of them mentioned that they had heard the critical comments from their colleagues. The following quotes from interviewees represent some of the comments with a strong support for the outcomes-based approach.

I do strongly believe, and I have seen it happen, that because curriculum is so messy and curriculum is a bear, it is complex, learning outcomes have provided an extraordinary framework upon which to base discussions about the curriculum. So they provide that meaningful framework upon which to base discussions for something that is inherently complex. (U2_1, educational developer)

I think most faculty members would agree more or less that learning ... a student-centered learning approach, learning outcomes approach make things more interesting for the students. Therefore, our ability to recruit and retain students may very well be improved because of this approach, of learning outcomes approach. (U2_12, school-level administrator and professor)

I think it's [outcomes-based approach] basically forcing us to be more explicit about what our intentions are at the course level, at the major level, at degree level. The more explicit we can be, I think, the better. It's better for us in terms of planning, how to use our resources, in terms of planning what is an effective program of education and it's more effective for students who better understand what the expectations are. I can't see how it can lose. (U2_14, school-level administrator and professor)

Some professors felt it was not our problem to help employers with their workers. And I totally disagree with that because when students come out of university, they want to be able to get a job. There are some certain things you need for jobs, which include these skills. And skills help you to develop whatever content you want. Knowing how to read, speak, and all the other skills are very instrumental in the things that you need to do in university and after University. So that was how we came at it. The workplace idea was more in the background and it was more learning outcomes based for university students. (U2_3, senior researcher)
Even though it is outcomes-based now, I can’t imagine any discipline or department moving forward without the sense of what they are doing and why they are doing it, and whether they think they are doing it well. I think we always have different iterations of that. Now we need to write it down. Right? Every discipline is looking for some identity, and some reason for existence, and what they bring to the table, whether it is for research purposes or training students. I don’t know. I think we’re just making it more explicit. (U2_6, program chair)

I think it doesn't matter what the area is, there has to be an idea of what the outcomes are, or else you're not really sure what your goals are for your program. So I think it doesn't matter what area you're talking about. Regardless of discipline, we have to know what the outcomes are for our students. It's important for all the colleges. So I don't see there being a distinction between science or the arts or any other college or any other discipline in terms of requiring a strong idea of what your outcomes are. Again, that's really a part of good programming, good curriculum development. (U2_16, school-level administrator and professor with a science background, November 28, 2013)

When asked about whether using learning outcomes was a reaction to the QAF, the same interviewee expressed her voluntary support to the outcomes-based approach to quality assurance although her perception that the QAF came from the government was mistaken.

No, that's different. No, I know that was government pressure. But, again, we were going to do that anyway, because it's the right thing to do. So we didn't take it, in my mind, because the government said we had to do this; we did it because it was the right thing to do. So I'm not feeling government pressure. (U2_16, school-level administrator and professor with a science background)

It should be noted that the favour for the outcomes-based approach expressed by some of the interviewees may be associated with the professional positions they held at the university at the time. For example, a member on the university’s Quality Assurance Committee contended that “Not only do I think it’s [outcomes-based approach] the pedagogically appropriate thing to do, but I think it’s the politically appropriate thing to do as well” (U2_10, October 22, 2013).

A school-level administrator shared a change in his position on the outcomes-based approach, which he honestly admitted that might be related to his position at the school.

To be reducing all this down to just basic skills seems almost just disrespectful to the higher goal that we have. I think from my opinion, that’s what we’re confronted. I don’t personally share that opinion anymore, um, maybe because I’ve worked more on the learning outcomes, maybe because of the position I now hold. (U2_5, school-level administrator and professor)

Some of the interviewees acknowledged that their positive attitude toward the outcomes-based approach was related to their own teaching experiences. Below is how two interviewees shared about the changes in their teaching approaches in relation to use of learning outcomes.
I think it was the first year course experience that made the big difference to me because I had stumbled on what I realized was some of the more effective things I was doing were actually … and I didn't realize it. I had changed the way I expressed my goals for the course in some cases, and where I have done that, I'd found that it was really helping the students. Students are always living in fear that they don't know what is expected of them, and I found that when I read … it wasn't a matter of me changing the structure of the course. It was a matter of me expressing what I was expecting of them in terms of what they were going to be able to do and what they would know by the end. That seemed to make a huge difference to them. … I'm only still learning myself, but I think I had enough personal experience to convince me that there was value there.

(U2_14, school-level administrator and professor)

When I started understanding what learning outcomes were, I realized that this is a radically different way of looking at a course, particularly from student's perspective. It took me some time to understand what that shift through that radical change was but I did get it so I redid my course. I became quite convinced that I was doing something worthwhile and by putting it to practice that September, four years ago, I realized that something was quite different in the way students responded to what happened in the course. From that point on, I started encouraging my colleagues in an informal way to do the same thing. Let's say three years ago, I started … at that point, I said to my colleagues ‘You really should think about learning outcomes’ and I would send articles that I knew about, online articles about learning outcomes to my colleagues to try to think about the difference between my old fashioned way of defining course objectives and this rather different way of talking about learning outcomes. (U2_12, school-level administrator and professor, October 23, 2013)

One interviewee commented how his previous professional experiences had affected his perspectives.

I have probably 15 maybe 20 years of experience of working with quality assurance and learning outcomes [in UK] so in talking about adherence is not new to me but for some people it is new. I’m personally very supportive. I believe that it’s relevant and appropriate for us to be able to articulate what we’re trying to achieve in a program level, at the university level, at the individual course level. … Yes, I think it works well for any discipline. I see no reason why any discipline cannot do this. Given my experience in the UK, where every discipline had to do it and was able to do it, maybe you put a bit of effort and challenge to think about it, but it exists in other areas, other jurisdictions. Why we would say it can’t possibly be done here? I don’t see a valid argument. (U2_9, school-level administrator and professor)

A couple of interviewees appeared to be passively involved with the institutional initiative of the Senate-approved ULOs, as the quotes below indicate. However, their reactions may represent the situation of most of the faculty members of the university.

I think the entire process, while it was obviously going on, I didn’t really become fully aware of learning outcomes, and how they were progressing at the university until we
were tasked with formulating our own learning outcomes. (U2_5, school-level administrator and professor, October 7, 2013)

In a nutshell, it can be observed from the quotes above that personal beliefs became an important contributor to the actions they had taken in implementing the outcomes-based approach. Although it might be true in some cases where individuals expressed their favourable attitudes due to their professional positions or for some expediency reasons, others’ positive views on the outcomes-based approach was ingrained in the benefits they had received from using the approach.

**Perceived Impact of the System-level Quality Assurance Mechanism**

On one hand, the initiative of the Senate-approved ULOs was developed out of the internal needs of the university, rather than a direct response to any external requirements, as confirmed by the interviewed senior researcher (U2_3). On the other hand, several interviewees also pointed out the connections between the system-wide quality assurance mechanism and the university’s own initiative.

Two interviewees explained the association between the ULOs and the system-required DLEs. The senior researcher shared that DLEs were part of the consideration for the development of the ULOs.

Dr. xxx [name of the Vice-Provost] made it very clear that our list of the learning outcomes had to include the UUDLEs, that if the government checks our list we can say we are covering everything your list covers. We have more actually. We’re doing it in the language that would feel more comfortable. And we incorporate the introduced, reinforced and mastery. (U2_3, senior researcher)

As quoted earlier, one of the interviewed educational developers also explained how the ULOs superseded the DLEs in the university’s educational practices in the belief that the two were perfectly aligned (U2_1).

The impact of the QAF on the university initiative was described as functioning as a catalyst to the ULO implementation, as the senior administrator suggested below.

I think there was an understanding of the need to have an appropriate quality assurance process that would reflect the quality of the system on one hand and while internally we were working on or talking about curriculum innovation, and appropriate pedagogical practices, and assessing what we do. So in a way these two things are independent but they are connected. For us there was no disassociation between the two; for us, we saw it as one enabled or assisted the other one. They are not fully independent because even if the quality assurance did not exist I can tell you we would have done that anyway. What quality assurance did is to give us a little leverage to help us do it faster. I would
say it was gratefully helpful in terms of helping us move in that direction. (U2_2, senior administrator)

The educational developer also concurred with that in arguing that the QAF made the university more committed to the learning outcomes approach and granted “more confidence in communicating that both internally and externally.” She also suggested that the province-wide IQAP requirement and the university initiative worked together and complemented each other in facilitating the process of using learning outcomes at the university.

I think the IQAP provided increased motivation for people to more intentionally take an outcomes-based approach because of the requirements communicated in IQAP. It is important to recognize that there are different scales that are happening here because you have the Quality Assurance Framework, then you have institutional-level learning outcomes. They’ve provided another resource for us to engage in a conversation with faculties regarding processes that most faculties are already doing. (U2_1, educational developer)

The interviewed administrators at the school or departmental level also felt that the university initiative was inseparable from the external requirements and had much to do with the institutional strategy to address the external demand, as indicated by the following three quotes.

It’s both [addressing the internal needs and a response to what is expected from the system]. … My impression, again this is my impression, but I’m not sure if someone else’s, is that one it’s partly because we think it’s the right thing to do and by doing it without being told to do it, we can influence the agenda that works with our vision as opposed to some very generic bland vision. (U2_9, school-level administrator and professor)

I think it's a sort of both [a response to the internal need and a response to the external requirement]. I mean I think it's - it's a unique [name of the university] response to the external requirements. So, it’s – it’s as trying to define what the external requirements should look like at [name of the university]. It's a subtle distinction but I think that in the process it creates the common language and the standardization that we know is probably required by the province or certainly strongly encouraged and it hasn't maybe happened as much at [name of the university] as we've talked about over the years, and at the same time capturing the creativity and spirit of experiential education or learning outcomes and recognizing it too. So, I actually think it's sort of two birds with one stone, right? I think it – it’s a big win across campus to keep the conversation. It's also a good response to the province. (U2_7, library staff)

I think that's [a response to the call of the Quality Council] probably part of it and certainly our upper administration had played significant roles in the COU. In fact, our president, I think, was the chair or whatever they call it last year. They're trying to lead by example. (U2_14, school-level administrator and professor)
Reflection and Summary

Data quality.

The study of Case 2 at University B was an intensive one, which involved a total of 17 individuals who were able to provide in-depth insights from the departmental and institutional perspectives on the Senate-approved University Learning Outcomes (ULOs) initiative. The rich interview data provided lenses through which to examine not only the initiative, the related generative mechanisms and experiences at different levels of the university but also the views and experiences related to using the outcomes-based approach to inform educational practices.

With the assistance of the initial key contact person, in my data collection process I managed to reach out to all three key individuals who had been involved in the process of developing the ULOs as well as two educational developers who played an instrumental role in implementing the initiative. A couple of these individuals later moved to other universities for work. Using purposeful sampling, I intentionally included at least one interviewee from each of the six schools of the university and the two major student service departments so that my data set reflected views on the initiative and the outcomes-based approach shared by faculty members and administrators from a variety of viewpoints. Therefore, it can be argued that the interview data well represented the voices across the campus.

It should also be acknowledged that those individuals who held positive views on the ULO initiative were probably more likely to participate in this case study. Hence, it is likely that positive views were heard more often in my interviews. To probe into the less positive side of the process, I asked all interviewees about the challenges and frustration they had observed their colleagues feel and made sure that those experiences were reported in the findings.

Mapping of a logic model.

The evidence from the analysis of the processes – the event, the generative mechanisms, as well as the institutional, departmental and individual levels of experiences – demonstrate a story of Case 2 at University B, which can be illustrated in Figure 15.

The QAF interacted with the institutional strategy and a set of institutional factors while the QAF was being implemented at University A. The QAF exerted influence on University A through the IQAP requirements and the embedded outcomes-based approach; and the university deliberately chose its own distinctive approach in response to those accountability-oriented demands from the QAF.
Certain institutional strategies and a set of institutional factors became the generative mechanisms for initiating the event of Senate-approved University Learning Outcomes (ULOs), including leadership, institutional culture, and a pre-emptive strategy to deal with external pressure.

The university initiative interacted with the perspectives and actions of some individuals who held positive views about the outcomes-based approach as a result of their prior personal experiences or their professional positions they were holding at that time.

Those actions taken by the individuals brought about changes in curriculum development at the level of academic units. Some took a proactive approach in developing learning outcomes while others also encountered resistance to varying extents. Perhaps due to those facts, academic programs felt limited impact of the university initiative. Some student service departments saw potential impact of the initiative. Those programs subject to external accreditation tended to believe that accreditation requirements were more important than the ULOs but they also recognized the value of the ULOs.

At University B, the Senate-approved ULOs represented a pre-emptive institutional strategy to cope with external requirements from the QAF. Although the ULOs superseded the DLEs in informing the actual educational practices, the QAF functioned as a catalyst to the ULO implementation. Thus the university initiative was inseparable from the external environment. Curriculum development of academic programs at University B felt no direct impact from the QAF.

A logical chain of evidence.

A logical chain of evidence can be induced from the findings and is presented in Figure 16. The chain goes as follows, with each step being supported by the interview data.

University B keenly felt the pressure from the accountability-oriented educational environment, part of which was the compliance with the DLEs—the accountability scheme within the QAF. The demand for satisfying the external accountability requirement interacted with several institutional factors, including forward-thinking leadership, the institutional tradition of using the outcomes-based approach, the pre-emptive strategy to handle external pressure, the intention to balance accountability and improvement, and grassroot work already done at some academic units. These factors gave rise to the creation of the ULOs that were later approved by the Senate.
Some school-level administrators expressed strong support for using the outcomes-based approach to inform educational practices partly because they had positive prior experiences using the approach. Due to the leadership of these individuals, their academic units had been actively involved in creating learning outcomes and using the articulated outcomes to guide educational practices while the ULOs were developed at the university level. Therefore, the institutional initiative had limited impact on those departments but confirmed that the departmental initiatives were in line with the university’s outcomes-based strategy.

The chain of evidence verifies that the QAF did not directly impact the practice of curriculum development within academic programs at University B. Rather, the impact of the QAF appeared to be mediated by the university’s proactive and pre-emptive strategy in response to it and by departments’ own endeavours to use the outcomes-based approach. However, the QAF played a catalyst role in the creation and implementation of the ULOs at the university.
Generative Mechanisms
- Felt pressure from accountability-oriented environment;
- Institutional factors:
  - forward-thinking leadership;
  - tradition of using the outcomes-based approach;
  - a pre-emptive strategy to handle external pressure;
  - a strategy of balancing accountability and improvement;
  - grassroots work at some academic units

The Event/The Institutional Perspectives
Senate-approved ULOs
- Provided a new beginning to OBE;
- Informed educational practices

The Individual Perspectives
- Some expressed strong support
- Personal experiences;
- Professional positions

The Departmental Perspectives
- Some programs actively developed LOs but encountered resistance to varying extents;
- Limited impact on academic programs;
- Student services departments felt potential impact

QAF
Functioned as a catalyst
No direct impact

Figure 15. Impact process for Case 2 at University B
Figure 16. A logical chain of evidence for Case 2 at University B
Case 3 at University C

Interviews of seven individuals from University C, including four at the arts and social sciences faculty, along with a set of documents from the university and the faculty, informed the findings about Case 3 at University C. Five of these interviews were conducted in October and November of 2013. The other two interviews were completed in May 2014 and May 2015.

The Institutional Context

University C is a comprehensive university with an enrolment of 16,100 students, of whom 88% study in undergraduate programs. The university explicitly emphasized student-centred education in its institutional branding and website messages.

In November 2003, the Senate of the university approved a list of university graduate attributes. In 2008, the alignment of the university graduate attributes with the DLEs were established and the alignment table was approved by the university Senate in June, an implementation date set by the UPRAC for the DLEs. Since then, the Program Development Committee, a sub-committee under the Senate, conscientiously examined the use of learning outcomes in new courses and programs as well as in existing programs. Thus, the university was believed by a senior administrator to be “a leader in Ontario and perhaps in Canada for putting emphasis on outcomes-based education at the university level” (U3_6, senior university administrator, May 2, 2014).

The Event: Outcome-Oriented Policy and Practice at the Arts and Social Sciences Faculty

The Arts and Social Sciences Faculty\textsuperscript{6} of University C created a policy that required all faculty members to include student learning outcomes on course syllabi. The course learning outcomes that were expected to include in the course syllabi had to be aligned with those program-level learning outcomes that had been approved by the Senate. The policy was part of the faculty’s learner-centred strategy. The policy was passed as a motion by the Faculty Coordinating Council in the fall of 2012 and took effect in January 2013. A course outline template was created and made available to all faculty members in December 2013 to help implement the faculty policy. The faculty seemed to be the only one within the university that had such a requirement about course syllabi.

Apart from those professional programs such as engineering and nursing, the Arts and Social Sciences Faculty was believed to be most active in raising awareness of the outcomes-

\textsuperscript{6} The name of the Faculty is a modified one to protect its identity.
based approach and developing learning outcomes. This was partly because of the diversity within the Faculty, which housed 14 departments with various disciplines, and that its faculty members tended to struggle more with the outcomes-based approach than their colleagues in other faculties (U3_4, U3_6).

The expectation of including learning outcomes in course syllabi was not new; faculty members were expected to do that in 2008. However, the recent Faculty policy turned the expectation into a requirement (U3_2).

**Generative Mechanisms**

The direct trigger for formulating such a Faculty policy was to address certain student concerns as the minutes of the faculty coordinating council meeting in October 2012 stated that “in an attempt to avoid increasing complaints regarding procedural irregularities when critical information is missing from the course outline, it is imperative that all learning outcomes for the course are clearly listed on the course outlines” and the ensued discussion also entailed that “all graded activities in the class should be linked to learning outcomes that should be clearly communicated to students” (p. 5).

In the interview, the associate dean of the Faculty explained the value and benefits of the outcomes-based approach for students as the reason for the Faculty initiating the outcomes-oriented policy.

I think because we believe very strongly that the student should know what they're expected to do, and know about they're being graded on. I think it's out of fairness to the student and it's proactive educationally. Because if, you know, if I'm developing learning outcomes that I expect the students to be able to do, it shouldn't be a secret from them, but at the same time, if I actually know what I am expected to do, then I can more clearly and more surely go back to being able to do it. ... If I know what I'm supposed to be able to do then, I can work towards being able to do it. But if I'm in the dark, I may not see the value in this essay assignment or this discussion. I think it increases the student's understanding of classroom activities and their purpose, right? (U3_1, administrator of the Faculty, October 10, 2013)

Leadership at the Faculty level played a critical role in initiating the Faculty policy that required the inclusion of course learning outcomes on course syllabi. Both the former dean and the current associate dean of the Faculty were instrumental in introducing the outcomes-based approach to teaching and learning. The former foresighted dean strongly advocated for the use of learning outcomes and curriculum mapping as part of the Faculty’s five-year planning process in 2008. The role of the current leadership in orienting faculty members toward outcomes-based
education was reinforced by the other role that the associate dean took concurrently as the chair of the Program Development Committee. The committee, as a long-standing committee under the Senate, had the primary concern with maintenance of high academic standards and high quality programs and was in charge of reviewing new program proposals and major program modifications. The two roles could be meshed up as the interviewed Faculty administrator described below.

My job is a little bit weird because I'm the chair of the Program Development Committee. So it's hard to say where my job as associate dean starts and ends, and where the job as Program Development Committee chair picks up. (U3_1, administrator of the Faculty)

When commenting on the work at the Arts and Social Sciences Faculty, a senior administrator of the university recognized both the role of leadership and the dynamic processes different departments could involve.

They [the Arts and Social Sciences Faculty] have certainly shown leadership but it doesn't mean that we can count on every department to come through with this great idea on its first round all the time. They could have a new person they’ve just appointed as an undergraduate curriculum chair. It’s a very dynamic process. That dynamic process could even mean that the department is making really good headway and then they come back to revise curriculum [and found] oops, the people who are really smart in all these things are no longer involved, so somebody else is learning about it. (U3_6, senior university administrator, May 2, 2014)

It is important to note that University C, as an institution, was interested in the outcomes-based approach for a relatively long period of time, even before the system-wide quality assurance mechanism was set in place. However, when asked whether the interest in the outcomes-based approach was due to the external requirement of the system, the interviewed Faculty administrator responded that this was not the situation. He also suggested that use of the outcomes-based approach at the Faculty was part of the institutional strategy of student-centred education.

I think that [name of the Faculty] got on board early when the university did. Because it came out of the desire that has student centered education. And that was in part of recognition that we are smaller university and we could afford to be very student centered. … Student-centered approach to education was very appealing in terms of a recruitment tool and a retention tool. And, you know, I think the outcome-based education became a central part of many other things that we are doing in order to be very student-focused. (U3_1, administrator of the Faculty)

However, when asked to review the draft case description in fall 2014, the Faculty administrator added that “The initiative is also instrumental to helping support the university’s endeavours to
convince faculty members to implement outcome-based education while preparing for the Institutional Quality Assurance Process.” This suggests the influence of the institutional environment and the external quality assurance mechanism on the Faculty decision for creating the outcomes-oriented policy.

Experiences

The Faculty perspectives.

After the learning outcomes as part of the course syllabi became a requirement at the Faculty, the dean’s office received concern expressed by some faculty members regarding possible disciplinary action against professors who were deemed not to have taught toward the learning outcomes included in the outcome syllabi. Despite the faculty concern, the interviewed associate dean admitted that no formal mechanism had been established to serve that disciplinary purpose.

To facilitate the implementation of the Faculty policy, a checklist was developed for course syllabi, identifying what to be included and what regulations to follow. The associate dean mostly relied on the department heads to monitor the policy implementation as he indicated below.

Now, at this point there's no follow through on what’s happening on the individual department; the head of the department is supposed to be taking care of that and I'm not aware that we're checking on the heads. (U3_1, administrator of the Faculty)

The associate dean found it challenging to consistently communicate the messages about use of learning outcomes in course syllabi to different departments of the Faculty and he was aware of the variation that existed in the implementation process.

The problem now is getting it out to the individual faculty. This is a very big faculty, you know 14 different departments. And getting the message out consistently is difficult. And some departments are mobilizing as a unit because they are interested. Some departments are just sort of trying to ignore and doing what they have to do to get away with and trying not to have to do too much. So, I would say it's inconsistent across the Faculty but certainly we are moving more and more towards that style of education. (U3_1, administrator of the Faculty)

He also expected that the mandated cyclical program reviews would reinforce the implementation of the Faculty policy by saying “as people come out for review, under the review process they're going to be required to have all those things in place” (U3_1).
The departmental perspectives.

Three interviews with four faculty members who played leadership roles at two departments of the Faculty contributed to the understandings of the experiences and perspectives at the departmental level. By the time of the interview, one of the departments—one in social sciences—was at the early stage of their curriculum review process, which would intentionally serve as the preparatory work for the cyclical program review under the university’s IQAP framework. The other department—one in liberal arts—completed its cyclical program review a year before the interview. Neither of the undergraduate programs of the two departments was subject to external accreditation requirements.

At the department in the social sciences, the curriculum review was self-initiated to streamline its programs and fill the gaps in the existing curriculum. The main impetus for the review was the changes that had happened in the curriculum in the past five years as a result of budgetary constraints as well as some identified student concerns. As the official IQAP program review was a couple of years down the road, the plans for the curriculum review also took into account the requirements for the later program review. As the program learning outcomes had just been approved by the Senate, the undergraduate program chair was then aiming to map the course-level learning outcomes against the approved program learning outcomes. The goal was to review the program-level learning outcomes and develop curriculum maps for the three types of undergraduate programs the department offered (U3_2). The undergraduate program chair explained how she had conveyed the requirement of including learning outcomes in course syllabi this way:

What I have done to prepare that is that I sent out an e-mail that said ‘Here's what is required in course outlines’ and what I did is I provided an explanation of the format with the statement ‘upon completion of this course, students will be expected to …’. I gave an example. There's also a lot of good resources that the Center for Teaching and Learning – ‘They have some really helpful links on their site’ and I linked to the manual or the guide to developing course level learning outcomes so that they have some sort of support. (U3_2, undergraduate program chair, October 11, 2013)

She also explained how she had tried to help her colleagues using her own understandings of learning outcomes.

So far it's [communication] been on a one-to-one basis as I've answered questions that faculty members have had about learning outcomes. I've conveyed what my new perspective on learning outcomes are. I say, just how we design our methodology to match our hypothesis, this is what we're doing but for teaching and they see that. I think they're starting to understand the benefit of it. I haven't done any presentation in the
faculty and that might be something that we could go down the road. (U3_2, undergraduate program chair)

As such, the undergraduate program chair was playing a primary role in facilitating the implementation of the Faculty policy.

On the other hand, the department head who was interviewed at the same time added the following comment regarding the challenge and uncertainty encountered in implementing the Faculty policy.

Prior to this, it's hard to know even if the faculty understand what the learning outcome is. Yes there are guides to help develop them but we don't know whether or not they've checked them. We know they have to include a learning outcome but we don't know whether or not they know that indeed and if they know about whether or not they actually create learning outcome that's actually what we consider to be a learning outcome. (U3_2, department head, October 11, 2013)

The undergraduate program chair then indicated that she had experienced resistance when she brought up the idea of learning outcomes and observed some faculty members see it “as sort of a semantic exercise.” She also suggested a better way of conveying the message as below.

I think one of the things that would really help faculty members is not just to get the guidelines but to get the rationale and the usefulness behind it. I think that that's something that our university could probably do a little bit better. (U3_2, undergraduate program chair)

This learned lesson echoed with an insight shared by the interviewed staff at the teaching and learning centre.

I think a lot of the barriers are conceptual. For a lot of faculty members, they don’t understand what a learning outcome is or why you would have it, why it’s valuable. To them, it’s a hoop jump where they are required to pick meaningless words from verbs than put them on a piece of paper and send them in. When they do that then it is not useful but the whole point of the learning outcome is just to be really clear to yourself and your students about what really matters in your learning, I think. The barrier of not understanding what they are or why you would do that. It’s really the why you would do them is the most important. If they know why, they’ll figure out the what. That’s the biggest barrier. (U3_4, staff member at the teaching and learning centre, November 8, 2013)

At the department in liberal arts, the program learning outcomes were approved in fall 2013 and all the faculty members included the learning outcomes on their course syllabi by spring 2015, according to the interviewed department head. Most of them “copied and pasted the program learning outcomes onto their course syllabus. Some may have twisted a bit” and there was some “individualization” (U3_7). The Faculty-wide standardized course outline template
was also used. There was frustration and confusion among faculty members about the value of the Faculty policy, as the department head indicated below.

There was some frustration. Some thought the learning outcomes took too much space on the course outline. … In part people didn’t like necessarily being told to do it. What is this? What is this for? What is this doing? Everyone does it – ‘Fine, I’ll do it.’ … We need to separate two things: the essence of the learning outcomes and the part of putting it into the course outline. I don’t think there is a consistency there. We think these are the skills and characteristics that we would like our graduates to have. …. We are not sure why we are putting it there [in the course outlines]. Why are we doing it? Are we doing it for ourselves? Or are we doing it for our students? Not everyone would probably pay a lot of attention to it. (U3_7, department head, May 20, 2015)

Also, the department head admitted that even though faculty members cooperated in including learning outcomes into their course syllabi, they did not actually use the learning outcomes to inform their teaching.

They are cooperating for the most part [in including the learning outcomes into the course outlines]. I don’t know they’ve spent a whole lot of time thinking about it. …. They pay attention to the core part of the syllabus. … But the learning outcomes, not deliberate. They don’t draw students’ attention to it. (U3_7, department head)

This situation echoed with what the department head at the department in social sciences felt about what an “average faculty member” would look like.

I'd say I'm probably like the average faculty member. I understand now the value of learning outcomes but I was probably more intuitive in my course outline. … When I'm doing it, I would do it. I don't resent doing them but it's not like I would use them necessarily to guide how I develop my course. … But I think the average faculty would not necessarily see it as an essential need - if you're just a thoughtful person about your courses [you are just fine]. They don't really know. The fact is they need to be educated on how it can be used. (U3_2, department head)

The individual perspectives and actions.

The interviewees expressed their varying understandings about the value of course learning outcomes and the use of the outcomes-based approach. The interviewed Faculty associate dean, as a strong advocate for outcomes-based education, associated his supportive stance with his prior outcomes-based training in the field of dramatic arts as well as the value he saw in the outcomes-based approach to students’ future employment.

So, I was naturally there anyway because of what I do. But I also see the value in academic course of a student knowing that when I finish this I would be able to do the following things. … And I think in this world we're in now, the employment field is very skill-based…. I think oftentimes with young people they don't take stock of what they can do. They're just so involved in the fray of trying to get the work done that they're not reflecting on what their abilities are the end of it. So, if they're right there on
the outline, I think then, [they will feel] ‘Oh, I know I can do these things, and in fact I've been tested on it.’ (U3_1, administrator of the Faculty)

With those beliefs in mind and probably also because of his positions as the associate dean as well as the chair of the Program Development Committee, he actively participated in some training in learning outcomes at his own university and elsewhere.

At the department in the social sciences, the undergraduate program chair, rather than seeing the benefits to students, related the value of the outcomes-based approach to the logic behind the research methodology course she taught.

It appeals to the methodologist in me because, here's how we measure it is consistent with what we do in the same way that we use designer methodology in research to match our hypothesis. I see it in that terms. (U3_2, undergraduate program chair)

When asked whether she had used the course learning outcomes to guide her own teaching, she commented that learning outcomes helped her re-evaluate her assessment methods.

Absolutely. … I think in a lot of ways sometimes faculty members tend to adopt certain assessment procedures in their classes because that's what they experienced in their classes. It's like ‘Oh, I remember my professor did this type of assignment so I'll do it in mine too.’ They may not really think about what is the purpose of this. And I think that having those learning outcomes really brings that to light. Yes, it has helped me reflect on things about my courses and I've dropped an assignment because of it and I've added other aspects to my existing assignments to make it more consistent with the learning outcomes. (U3_2, undergraduate program chair)

In contrast, the head of the department in liberal arts did not seem to see much value of course learning outcomes to students; rather he better understood the benefits to faculty members.

I do think there is a value in that [the outcomes-based approach]. It does create a set of standards within the department. New people coming into the department to teach, whether sessionals or new people, could see that, and get a sense of who we are and this is what we value. … To me that’s what it is. They are important. But they are not to students themselves. We don’t know. We haven’t done any kind of study to ask them whether you have paid much attention learning outcomes. But for faculty members, it is valuable. (U3_7, department head)

The interviewed staff member at the teaching and learning centre shared her experiences working with academic units with extrinsic and intrinsic motivations to use the outcomes-based approach. She felt that it was easier to work with faculty members when they were intrinsically motivated to use the outcomes-based approach.

Working with the people who were required to [use outcomes-based approach] is harder. … Then when we did curriculum review again, it was rarely because it was
mandated, it was usually more internally driven. They came to us and we would work them through, thinking through their learning outcomes for their program and how they might think through the methods and assessments and it was more internally intrinsically motivated. That’s usually easier. (U3_4, staff at the teaching and learning centre)

The interviewed past undergraduate program chair at the department in social sciences shared that the outcomes-based approach provided a structure for the program curriculum but she also added that a bottom-up approach would be preferable.

There’s a certain structure there that makes sense because it allows for a certain consistency and allows us to really see… I think it’s very important to define where we want to get to, what we want to have our graduates of our various programs, coming out with in terms of skills, in terms of knowledge, in terms of critical thinking, in terms of the way they approach learning, all of those things. I think it’s very important to have that goal in mind and then try to shape the curriculum with that in mind. (U3_5, past undergraduate program chair, November 8, 2013)

In summary, the interviewed individuals had different views on the Faculty policy and the outcomes-based approach. It was apparent that the associate dean took a positive view about the outcomes-based approach and advocated strongly for the Faculty policy that required learning outcomes to be part of the course syllabi. However, the rationale did not seem to have been communicated consistently to some department heads so that they had their own understandings, which guided their actions in different ways.

**Perceived Impact of the System-wide Quality Assurance Mechanism**

The policy was first initiated to enhance transparency and fairness in grading and was later found to be instrumental to gearing faculty members to the outcomes-based mode of instruction as well as preparing for the Institutional Quality Assurance Process, or IQAP, of the university. Thus, the Faculty policy was congruent with the outcomes-based approach to quality assurance at the provincial level. As the interviewed senior administrator suggested below, the outcomes-based initiative at the local level was in line with the provincial context.

I think that outcome-based education at its best simply a part of guaranteeing standards across the curriculum and across Ontario. At its worst sometimes programs get cut up or they don't get approved; they don't get renewed perhaps for some peripheral problems. … I would see the continuity of purpose in the development of quality assurance and outcome-based education. (U3_6, senior university administrator)

When asked about the sources of influence that had brought about changes in the curriculum, the undergraduate program chair in the department in social sciences identified the
university mandate as one, as seen in the quote below. She also believed that the university mandate in terms of quality assurance was affected by the external quality assurance mechanism under the QAF.

One is from the university although it comes from the dean's office but I think it's the university mandate – meeting the deadline. They say you have to have these to be in compliance and therefore you have to have it by this time. That has certainly driven a lot of the change because we have to do these things. (U3_2, undergraduate program chair)

The interviewed head of the same department identified learning outcomes as a source of influence on curriculum development and made the following comment.

Right now it's [learning outcomes] not very influential because the curriculum of the program is already developed but over time, yes. From now after [the name of the undergraduate program chair] has developed and established them with the rest of the department, then it's shown how it can impact things. Its influence will increase because the fact is curriculum changes occur very slowly. Even if we wanted to change it, it would take many years. (U3_2, department head)

The findings above shows that although the Faculty policy started at a somewhat different place than quality assurance—addressing a student concern, it was found to be associated with, and fit well with, the institutional environment and the provincial context of using the outcomes-based approach to quality assurance. The “fitness” might have lent more justification to implementing the policy at the Faculty.

Reflection and Summary

Data quality.

For this Faculty-level initiative, four interviews were conducted within the Faculty and involved five participants in total and two quite different departments, which were at different stages of engaging the Faculty policy. Three other individuals were interviewed to learn about the institutional context and the institutional perspectives about the Faculty initiative. Among the five individuals affiliated with the Faculty, one was the initiator of the Faculty policy, representing the Faculty perspective; two played a leadership role in a social science department and one was a previous program chair; and another interviewee was a leader at a liberal arts department. These interviewees offered diverse views on the Faculty policy, including highly supportive attitude toward using the outcomes-based approach to inform course syllabi, the learning experiences that some program leaders themselves had about the outcomes-based approach, and the indifference and superficial cooperation among some faculty members. The
diversity reflected in the data helped enhance the data representativeness. The voices from outside the Faculty supplemented what was found about the Faculty policy.

**Mapping of a logic model.**

The Arts and Social Sciences Faculty of University C developed a policy that required faculty members to include learning outcomes in their course syllabi. How the initiative came about and affected the departmental and individual experiences is illustrated in Figure 17. It also demonstrates how the QAF impacted the Faculty initiative.

The generative mechanisms for the event included an attempt to address student concerns, perceived benefits of the outcomes-based approach to students, leadership at the Faculty level, and the outcomes-oriented institutional context.

Regarding the event, the Faculty leadership took a strong position in the benefits of the policy to students. However, leadership at the department/program level did not necessarily see the benefits to students as much. Individuals with different views took different actions to cope with the Faculty policy. While most faculty members were cooperative in complying with the policy, some failed to use the learning outcomes to inform their teaching practice.

On the departmental level, department/program heads led the process of implementing the Faculty policy. They encountered challenge and uncertainty during the process and heard frustration and confusion voiced by their colleagues about the value of the policy. The articulated course learning outcomes were found not to necessarily inform teaching and learning practices. Due to these constraints, the impact of the outcomes-oriented Faculty policy on curriculum development appeared limited in actual practice.

Regarding the impact of the QAF on the Faculty initiative, the Faculty policy was found associated with the university mandate and the province-wide quality assurance context.

**A logical chain of evidence.**

A logical chain of evidence can be induced from the findings and is presented in Figure 18. Each step of the chain was supported by the interview data.

By the time when the QAF was put into place in 2010, University C had been using the outcomes-based approach to guide its internal quality assurance process. Faculty members were expected to include learning outcomes in their course syllabi in 2008. Thus, the outcomes-oriented policy at the Arts and Social Sciences Faculty was situated in the context where both the
system-wide quality assurance system and the institutional environment oriented educational practices toward using learning outcomes.

A couple of situational factors contributed to the formulation of the Faculty policy that required faculty members to include learning outcomes in course syllabi. One was the need to address student concerns about transparency in grading. The other was the strong leadership at the Faculty level, as exhibited by the support of the former dean and the current associate dean for the outcomes-based approach. These factors, coupled with the belief in the benefits of the outcomes-based approach to students, resulted in the creation of the Faculty policy.

While the policy was implemented, some department and program heads had to learn to understand the value of the outcomes-based approach as they were responsible for the policy implementation at their academic units; at other departments where faculty members included learning outcomes into their syllabi, the learning outcomes did not necessarily provide guidance in actual teaching and learning. All these individual experiences probably affected the perspectives of departments and programs. Challenge and uncertainty were encountered at the department and program level and confusion about the value of the Faculty policy were heard.

The chain of evidence verifies that although the Faculty policy was not an outcome of the QAF impact, it was associated with the context of implementing the QAF within the province and at the university.
Generative Mechanisms
- Attempt to address student concerns;
- Belief in benefits of the outcomes-based approach to students
- Leadership at the Faculty Level;
- Outcomes-oriented institutional environment

The Event
Outcomes-oriented policy at an arts and social sciences faculty

The Departmental Perspectives
- Department heads were responsible for policy implementation
- Challenge and uncertainty encountered
- Frustration and confusion heard

The Individual Perspectives
- Faculty leadership: believed in benefits to students
- Department heads: did not necessarily see those benefits

Individual Actions
- Course learning outcomes did not necessarily guide actual teaching practice

Figure 17. Impact process for Case 3 at University C
Figure 18. A logical chain of evidence for Case 3 at University C
Case 4 at University D

Seven interviews, along with a set of institutional or program documents, informed the findings about Case 4 at University D. The key contact person for the case was interviewed twice, initially for introducing me to the program and later for sharing experiences in the IQAP program review process. The first six interviews were conducted from February to August in 2014 and the last one happened in fall 2015. Of the seven individuals who were interviewed, one was the program director, one was the program advisor, two were the teaching professors of the program, two were professors who involved in the program but affiliated with other programs within the Faculty of Science, and one was a senior university administrator.

The Institutional Context

University D is a comprehensive, research-intensive university known for its student-centred, interdisciplinary approach to learning. The university had a total student population of approximately 30,000 in 2014. Of the full-time students, 86% studied in undergraduate programs.

The Event/The Program Perspectives: An interdisciplinary science program

The interdisciplinary science program was one of the flagship programs of University D. It started in 2009 and had an annual student enrolment of 50-60 in the past few years. The program was highly selective and the students were typically keen learners with high motivation. The philosophy of the program was research-based learning as explained by the program director below.

The philosophy behind the program is to educate the students in the science in an interdisciplinary way so they understand the connections between all the sciences but also to give them a real foundation in research-based learning. So, the learning strategy is not staged-on-stage kind of teaching but it is learning through research. The whole program is based on that. (U4_1, program director, February 5, 2014)

The curriculum of the program was organized around team-based research projects throughout the four years of studies. The students were taught how to conduct scientific research in the first six weeks of their first year in the program and were then involved in interdisciplinary research projects on various topics that integrated knowledge from different scientific disciplines throughout the program. As they conducted each project, the students acquired fundamentals of various fields in science and were expected to apply the knowledge to their research projects. So unlike their peers in other science programs focusing on one single field of science, the students learned basic science in an integrated way. The research projects in the first year were highly
structured and accompanied by detailed teaching support such as tools and guidelines whereas the projects in later years became less structured and allowed more freedom for the direction students would like to take. Science literacy was also an important area of skill development emphasized in the program; thereby, the students learned how to communicate their scientific findings to others (U4_1).

In addition to its fully integrated interdisciplinary approach and inquiry-based learning, the program also featured an outcomes-based approach to teaching and learning. The outcomes-based approach was reflected in identifying the characteristics of successful science researchers as the starting point for its initial program conceptualization. In its design document created in April 2007, it was stated that “In the 21st century, the most successful researchers are very likely to be those who can connect and synthesize ideas from widely different disciplines as well as those who can think deeply within the traditional disciplines” (p. 2). Therefore, part of the goals of the program were

- To educate highly motivated students in a stimulating interdisciplinary research environment and to involve them in scientific research projects that use current research methodologies and approaches (Learning through Research).
- To produce potential graduate students with highly developed scientific research and communication skills and uniquely equipped to contribute to cutting-edge research and development. (Design Document, 2007, p. 3)

The outcomes-based approach was also reflected in the program design process—a backward design, as one of the interviewed teaching professors explained below.

That is the foundation of the entire design of the program. It's a four-year program, and the outcome is: how are we going to prepare, or what will the scientific leaders be in the future? To produce a scientific leader for the future, what skill sets do they need? What perspectives do they need? What level of communication are they going to need to have in their tool kits? We took that and designed a program backwards. From that shortlist, that model, that outcome that we want, what's our fourth year going to look like? What's our third year going to look like? What's our second year going to look like? Then, okay, to achieve that, what do we need to do in the first year? Then coupled that with, what are we mandated to cover for a fundamental curriculum? How can we align ourselves with the requirements for a student in first year to get on to second year, and again, second year to get on to third year, and then we pretty much let them loose. (U4_3, teaching professor, March 4, 2014)

The outcomes-based approach was further reflected in the learning specifications in each project pack that students used on a regular basis for their research projects. In each project pack, learning objectives and skill development, along with research objectives, were listed for
students. The outcomes-based approach worked well for the program as learning objectives served as a strong guide for student learning, as the program director explained below.

Because when we first started, I don't think we were quite as clear with our learning objectives and the students said, 'Well, we don't know what we're supposed to get out of this. What are we supposed to learn?' Now, we started and we clearly identified – 'these are your learning objectives' and it's made it so much easier but it also gives the students some freedom, some creativity so they can still take things in the way they want as long as they've got those basic learning objectives covered. … It [learning outcomes] makes them be more aware of how they're learning things and any omissions that they have in their learning. I think it's being much more upfront and explicit about how we want you to learn and what we want you to learn than in most traditional courses that just kind of say, ‘Well, this is the syllabus. We'll go through it.’ … We're using the learning objectives is a really strong guide. They're very strong at the beginning and slacken as we go forward. They're meant to guide the students more than anything. (U4_1, program director)

The outcomes-based approach also helped keep the students abreast with their peers in other science programs in terms of learning the fundamental knowledge in science.

We have to make sure that the students learn all of their fundamental science in first year so they have to be up to scratch with first year chemistry, first year biology, first year physics, mathematics and so forth. The learning objectives were identified by each of these projects we've established by sitting as a team with all of the instructors. … So we got the first year physics instructors, first year biology instructors and we said, ‘Okay. What are the essential components of your course? What knowledge did students gain? What skills did they gain? What experiences and what attitudes did they gain?’ We brought those altogether and we realized that we have a lot to cover in first year. So we have to say we can't cover everything. So, what are the top basically the 80 percent that was kind of realistic? So, we wrote all the points down, the learning objectives for each discipline and then we kind of mooshed them around into the project so these learning objectives fit best with this project, those fit best with that project. So our standards for first year courses are totally disaggregated and reformulated according to these projects and how the students best learn content in light of their project, the questions that they had. (U4_1, program director)

The program advisor emphasized that the students of the program learned the same content under a quite different delivery mode.

They are still learning the same kind of conceptual material as any other first year science student or at least 80 percent of it but they're learning it in a drastically different fashion. The vehicle with which they learn that material is significantly different. (U4_1, program advisor, February 5, 2014)

In the implementation of the outcomes-based approach, the interdisciplinary program attached equal importance to both content and skills, as one of the interviewed teaching professor explained.
We really try to equally prioritize skills and content, which is something that is novel and we now have evidence that we presented to demonstrate that it works. It is counter to some of the more traditional programs that you see and it's counter to some of the more traditional mindsets that we encounter. So, we do receive some push back from people that feel that the content has to come first. What we're demonstrating is that actually if you give the student the skills they're learning comes more quickly as a result of that. Students learn content by doing research and they learn how to research and critically think and problem solve early on. (U4_3, teaching professor)

It was acknowledged that some professors from other science programs did not buy into the delivery approach that the interdisciplinary program used. However, through conducting pedagogical research, the professors within the interdisciplinary program felt confident that emphasis on skills did help student learn well.

Some buy in and some say, either, it's too much work, or again, because we're teaching skills alongside content, some of the content has to go. We've had some instructors that have contributed to the program before and they left because they don't feel we're covering enough content. We do have, because we're doing this pedagogical study, we have evidence that the students are benefited more so than disadvantaged because of the skills. (U4_3, teaching professor)

**Generative Mechanisms**

The program was first initiated by the former dean of the Faculty of Science at the university. Hence, leadership played a significant role in making the program happen in the first place. It was well documented in the program design document that the former dean of the Faculty had identified two problems in contemporary science education at universities: one was that due to the dramatic increase in student enrolment for university education, the quality of science education deteriorated and large classes resulted in limited research experience and inadequate training in students’ communication skills; the other was that science education became highly specialized and “disciplinized” so that students often lacked the ability to apply the knowledge they had learned outside their area of specialization. So the idea of creating an interdisciplinary program came into birth and was supported by the community within the Faculty of Science. In 2005 a committee was formed to conceptualize the program and in September 2006, another committee was established to design the details of program implementation (Design Document, 2007).

The contributions of the former Faculty dean were recognized by the current faculty members of the interdisciplinary science program, as one of the teaching professors of the program commented below.
When the dean was having this idea of xxx [name of the program] he wanted something that would distinguish the Faculty of Science but also something that would be a hub for the Faculty of Science. … The dean of science is an important enough person that if he says ‘I think this should happen,’ he can gather a team, he can gather departmental buy in and yes it does happen. Xxx [name of the program] is a small model of that blank page. If you threw everything out of the window and said ‘Let’s start from scratch and produce a scientist, what would that degree program look like?’

(U4_2, teaching professor, March 4, 2014)

The institutional environment and support was also found instrumental to the development of the program, as the program director suggested.

There's huge institutional support. The kind of thing that we've done here with xxx [the name of the program] is held with a lot of respect. I think at the university and they really value it. It's the way they want to go. (U4_1, program director)

Three of the interviewees shared their views on how the pedagogically innovative institutional environment, as exhibited by the desire of linking research with pedagogy, visionary university leadership, and support from senior university administration, had fostered the creation and growth of the program.

Xxx [name of the university] has always been a research university but it’s also been a pedagogically innovative university. I think xxx [name of the program] represents an almost perfect blend of those two apparently contradictory points of view or positions for a university because what we’re doing in the program is combining pedagogical innovation directly with research. This is learning by research, it’s learning about research, it’s learning to research. It’s a place where we can bring our research into our teaching more than usual. … Xxx [name of the university]. I would say, has a more flexible approach to “let’s try something out.” Maybe it’s because of its size, maybe it’s because of its past history has gone in this direction … It’s not an unusual thing to say ‘Look, I have a really good pedagogical idea here.’ That’s within the vocabulary, if you like, of the institution. There was room to do this. (U4_2, teaching professor)

Our president, he's amazing. His whole vision for what a university should be, is where students come to learn critical thinking, and learn who they are as individuals and where they fit in. I think the learning outcome's in that. That's his big learning outcome for the university. … [Researcher: You feel the program is in line with his vision?] Yes! The crazy thing is he came in after we had started the program. It's serendipity, really. We're benefited by having a president that has that vision. We're supported because of it. (U4_3, teaching professor)

We say here is a program that we going to develop; it’s in harmony with other programs that are running on campus. … I’m sure that the provost office right now will also be in support of it; the Provost office at the time was very supportive on it. The program fit the general idea of a kind of innovative program that xxx [name of the university] likes to foster. That’s certainly true. That made it easier to get it going. (U4_4, a former design committee member and a faculty member, April 9, 2014)
Experiences

The individual perspectives and actions.

The director and one of the teaching professors of the program had interdisciplinary academic background themselves. The program director shared her prior experiences this way.

I was actually taught in a very progressive university. I was taught by people that were used to crossing discipline boundaries and I think that made me appreciate the importance of being able to do that. … I've never been really constrained by discipline boundaries. (U4_1, program director)

One of the interviewed teaching professors also had interdisciplinary academic and professional background.

I naturally have to be an interdisciplinary person in my research field so it’s very natural for me to teach in an interdisciplinary science degree program. (U4_2, teaching professor)

All the four interviewees who taught in the interdisciplinary science program indicated that they had used the outcomes-based approach in their teaching practice, albeit in different ways.

The program director drew students’ attention to the learning objectives in her teaching.

At the beginning of each session, I'm pulling up the learning objectives on the screen on my PowerPoint saying, "This is what you need to know. I can't go through everything but you need to know all of these things so if we don't cover it here, make sure your research covers it or you're reading” and we'll give them resources to make sure that they cover it. (U4_1, program director)

One of the teaching professors emphasized the importance of assessment to facilitating student learning.

Assessment is a big thing with me. I’ve already used the word “alignment”. I have a very strong opinion about the alignment of assessment with outcomes and our assessment scheme was one of the things that I first designed. … The assessment scheme was very important because I see this, I see assessment as being a conversation with a student, as a means of communicating with students. By making a clear assessment scheme for a particular task then you can communicate that it’s not just the equation that’s important, it’s the application; it’s not just the content of the writing, it’s the writing style or the speaking to audience that’s important. You can do that through the assessment scheme. The assessment scheme is very heavily bound in with outcomes. (U4_2, teaching professor)

The other teaching professor used the outcomes-based approach in his course design.

What I do in that is, I build a course that reflects back on prior concepts that we've covered, then I book-end it in evolution. Again, in my philosophy, evolution is an underlying set of concepts that drives biological systems. I start with evolution. I actually start with the question – What is life? How to think about a question, how to look at data critically for students to think for themselves. (U4_3, teaching professor)
When asked about the value of the outcomes-based approach to the program, he made the following comments.

You have a prescribed end goal. You know you're working toward something. It’s like good science, it’s ‘what's the question?’ and then you develop something to answer that question. We have a question. Those outcomes are basically the answers to the questions that we're trying to achieve. … As an instructor, I'm a guide, and the course of the programs is the journey I'm guiding the students on. There's where the outcomes are. I'm the guide that helps the students get to those outcomes. (U4_3, teaching professor)

The interviewed chemistry professor who was affiliated outside the interdisciplinary program felt confident that above 90% of the core contents of a regular first-year chemistry curriculum had been covered by the interdisciplinary program (U4_6). She also acknowledged that it was a significant challenge to do so. She tried various methods to achieve that goal, including using a flipped classroom approach, in which she asked students to read assigned materials before coming to class and work in teams during class on problem sets based on the core materials. She also gave a quiz at the end of each class and linked the mid-term and final exams with each learning objectives in the research project pack. Therefore, the outcomes-based approach helped overcome the challenge in course delivery in the interdisciplinary program.

Connectivity between the Global and the Local

The interdisciplinary science program can be connected with the global-level issues in a few ways. First, it demonstrates the use of an interdisciplinary approach to science education and how such a program was developed. As shown earlier in its design document, the program was designed while bearing in mind what the 21st century scientists should look like as the goals. Second, as one of the interviewed teaching professors pointed out, the program provided an answer to a deeper, global concern—What is a university for?

You might hear this a lot – xxx [name of the program] is used as a kind of experimental lab for pedagogies and if things are working in xxx [name of the program] let’s take them out to the other courses but also let’s talk, let’s have a place where people from all the different departments can meet one another, discuss not only teaching practice but also talk about their research. … It’s a meeting place for education and research in the university. I think one of the reasons that was envisaged to be a good thing is because that is what gives the university purpose, to be able to be both a research institute and an educational institute. There has to be a point where these things meet and they make sense to one another and they talk to one another. Maybe xxx [name of the program] is an answer to that need, not the answer, I wouldn’t say it’s THE answer but it’s AN answer to joining those two things. (U4_2, teaching professor)
Third, the outcomes-based approach that was embedded in the interdisciplinary science program exhibits a global trend that emphasizes learning outcomes of students in postsecondary education. The interdisciplinary science program was believed to be ahead of this global trend by the teaching professor with prior professional experiences in the United Kingdom.

At the moment Canada was talking about outcomes. But a lot of the things that went into [name of the program] actually came more from the European scene of what was being talked about there. Rather than feeling that we have seen everybody in Canada is doing this, let’s do that, it’s more for me personally – I think for others involved in the program when we turn up at a teaching and learning venue, more often than not we go on to a talk that sounds really interesting, what will come out is ‘Yes we do that,’ ‘Yeah we do that,’” ‘Yeah we take that into account.’ It’s great for validation but it’s usually that we feel that we’re a bit ahead of the curve. (U4_2, teaching professor)

**Perceived Impact of the System-wide Quality Assurance Mechanism**

When asked about whether the curriculum of the interdisciplinary science program was influenced by any external factors such as government priorities, market forces, accrediting agencies, and disciplinary associations, both the program director and advisor relied “none”. The program director added this comment.

I think we do it regardless of the government’s requirement. Even when the government shuts everything down, we’ll still be doing it. It’s nice to have government support, because it’s kind of going in this direction. (U4_1, program director)

Along the same line, the professor who had heavily been involved in the initial design of the program also stated firmly that no external influences had impacted the program design; rather, the motivation for the program stemmed from the “inside” and arose from the disciplinary perspective.

I know the title of your thesis if I can just make a… it was no, there was no external government policy or university initiative or whatever. This was, came from inside. Now of course can I really say that? Maybe I was been influenced unknowingly by the tone of time or something like that. My perception was that a group of us thought that this would be a good idea, not from the point of view of getting more funding or aligning ourselves with the government or anything like that. Just from a discipline point of view, finding a way to create a program that highlighted interdisciplinary research was, would be a good thing to try to pursue. (U4_4, a former design committee member and a faculty member)

One of the interviewed teaching professors also indicated that the interdisciplinary program was pedagogy-based, rather than being driven or informed by any outcome-based education policies
Similarly, the interviewed senior administrator emphasized that it was not the regime of accountability, but the student-centred pedagogy, that made the program succeed.

The people involved in [name of the program], I don’t know they conceptualize what they are doing in that language [outcomes-based education]. Outcomes based is very much an administrative language; it is very much about regimes of accountability, which are fine. We do need to have a sense of what the students are learning; it’s a reasonable question to ask. But I think what makes [name of the program] work is the fact that faculty and administrative were thinking as intellectuals, as scientists, as educators who wanted to maximize students’ experience, understood that traditional modalities were not capturing what students needed. They wanted to build a sense of cohort, they wanted to see more cooperative learning, they were looking at pedagogical literature and thinking about what is really meaningful for students. They were beginning in a different place, not thinking about measurement, not thinking about regimes of accountability, they are thinking about the students. That’s made the program work. (U4_5, a senior academic administrator of the university, May 6, 2014)

When asked about the possible impact of the future IQAP process on the program, interviewees were found to hold somehow varying views. The program director did not think it would be a worry for the program to go through the IQAP program review.

We go beyond the university requirements … I don't think it [the IQAP program review] will [affect the program] because we've got a lot of material already set out. We're already doing student surveys. We're documenting how we do things here … Actually, the review process doesn't worry us too much because I think we're using that as a kind of a guide to operating. It was there in the background but we're always collecting these data that we want anyway because it's in our own interest. … In some departments, it's really scary but it's not for us. (U4_1, program director)

The interviewed senior administrator also believed that the program would do well.

My point is that the tools in the current IQAP study will allow them [the interdisciplinary science program] to capture some more of that. It is a good mechanism if what it is really after is understanding what students are learning, and how they are thinking about their learning, I think this is a program that will do well by those measures. (U4_5, senior university administrator)

One of the interviewed teaching professors of the program expressed mixed feelings about the IQAP program review. On one hand, she felt that the interdisciplinary program was “ahead of the curve” as the program was already doing a lot of what the university advocated. On the other hand, she was not quite sure how the specific outcomes of the program would fit with the broad provincial-level learning outcomes.

From what I’ve heard from colleagues who have already gone through this [the IQAP program review], this could be an interesting process thinking about outcomes because the provincial outcomes are very differently expressed in some ways, a lot more basic than the program or that course outcomes the departments are used to speaking in those
terms. So there’s actually a language problem if you like between what’s needed for the, I think IQAP is the phrase that’s used here, looking at the provincial level outcomes and looking at the course and program and departmental outcomes. This is going to be interesting. (U4_2, teaching professor)

The interviewed chemistry professor who taught the first-year chemistry classes to the interdisciplinary program pointed out that there might be more challenges for the interdisciplinary program to go through the IQAP review simply because of its interdisciplinary nature.

I don’t think it will be easier because it incorporates many disciplines and they all must be represented. Because it has a hopefully rather significant set of non-discipline-based skills, certainly there will be many skills that will overlap, they’ll have a very different structure for providing evidence where those skills were developed. It will be very rich, I think, it could be a very exciting program for reviewers because of all the opportunities for that skill development. I don’t think it will be easier; it could be more challenging, or simply a larger task. They have to develop disciplinary based outcomes as well as interdisciplinary based outcomes. Writing those and showing how they are measured, I can see that’s very interesting and useful challenge. They will need some unique outcomes to generate. (U4_6, chemistry professor, August 26, 2014)

In December 2015, the program completed its self-study report—the first part for its IQAP program review. When asked whether the self-reflection process of the self-study report writing had made any difference to the program, the program director answered “No” as they had constantly discussed those components in their routine work. However, in August 2015, its program-level learning outcomes were drafted and aligned with the six areas in the DLEs. The program review process was considered smooth except being time-consuming (U4_1_part2).

**Reflection and Summary**

**Data quality.**

A total of seven individuals were interviewed about the interdisciplinary science program at University D. They represented voices from various perspectives: the program design perspective, the perspectives from the core faculty members teaching in the program and from those who taught in the program but were not affiliated with the program as well as the university’s perspective. What they shared was concerned with what had happened before the program started, what was going on and what would be expected in the future.

Constrained by the time frame of this dissertation, I had to complete the case study when the program finished the first stage of its IQAP review by the end of 2015. Therefore, the collected data were not able to tell how the IQAP review would impact the program in the end.
However, the case reflects a distinctive scenario about the status of a certain type of academic programs when the system-wide quality assurance framework is implemented in Ontario.

**Mapping of a logic model.**

The logic model for Case 4 at University D can be illustrated in Figure 19. The interdisciplinary science program was created with the initiation of the former dean of the Faculty of Science in a supportive institutional environment that emphasized pedagogical innovation. The program adopted interdisciplinary, research-based learning mode and the outcomes-based approach to teaching and learning.

Some of the faculty members had prior interdisciplinary academic and professional background and held beliefs in the benefits of the outcomes-based approach. Those individual perspectives and beliefs brought about actions, such as outcomes-informed teaching practice. The actions taken, in turn, contributed to the strong orientation of using the outcomes-based approach to the program curriculum.

The interdisciplinary science program was created out of disciplinary needs in science education and student-centred pedagogy, rather than the need to meet any requirements of external outcomes-based policies. As such, the system-wide QAF was not believed to have exerted any impact on the curriculum of the program. Faculty members had varying views on possible impact of the mandated IQAP program review on the program. When the program had completed its first part of the IQAP review—the self-study, nothing new from the process was identified to make a difference to the program.

**A logical chain of evidence.**

A logical chain of evidence can be induced from the findings and is presented in Figure 20. Each step of the chain was supported by the interview data.

Two factors were found to be important to the creation of the interdisciplinary science program. One was the pedagogically innovative institutional environment and the other was the leadership of the former Faculty dean, who initiated the idea of the interdisciplinary program. The core faculty members had interdisciplinary background themselves. Those who taught in the program made conscious efforts to use the outcomes-based approach in their teaching. These factors on the individual level also enabled the program to fulfill its initial design of implementing the interdisciplinary learning and using the outcomes-based approach.
The chain of evidence verifies that no impact of the system-wide quality assurance framework was felt yet on the creation and operation of the interdisciplinary science program.
**Generative Mechanisms**
- Leadership of the former dean
- Institutional environment & support

**The Event/The Program Perspectives**
- **Interdisciplinary science program**
  - Interdisciplinary, research-based learning;
  - Outcomes-based approach to teaching

**The Individual Perspectives**
- Key faculty had interdisciplinary background;
- Beliefs in the outcomes-based approach

**Individual Actions**
- Outcomes-informed teaching practice

*Figure 19. Process graph for Case 4 at University D*
Institutional context

Leadership at the Faculty level

Interdisciplinary science program
- Used the outcomes-based approach;
- Interdisciplinary learning

Key faculty members had interdisciplinary background;
Faculty members used outcomes-based approach in teaching

QAF

University D

Faculty of Science

The Program

Individuals

Figure 20. A logical chain of evidence for Case 4 at University D
Cross-case Analysis

For all four universities involved in this study, the four events served as a kind of nexus that connected the context of outcomes-based quality assurance implementation in the province of Ontario and the internal activities within universities. For the purposes of pattern matching and cross-case synthesis (Yin, 2014), a comparison among the four cases under study was made regarding the impact of the system-wide quality assurance policy and mechanism, the QAF, on curriculum development of academic programs as well as the key elements in the EQA impact process—the event, generative mechanisms, institutional perspectives, perspectives of academic units, and individual perspectives and actions. Table 6 shows the results of this comparison.

The table shows two features that made the four cases a distinctive package for studying EQA impact. One is that the four cases were OBE initiatives at different levels—two at the institutional level, one at the Faculty level and one at the program level. This combination was deliberate when the four cases were first selected in the research design. The four cases also represented interventions that affected the curriculum at different levels. The initiatives in Cases 1 and 2 each embodied an institutional mechanism that intervened with curriculum development at the program level by establishing a university-wide policy for quality management; in contrast, the Faculty policy in Case 3 was essentially an intervention into the curriculum development at the course level by reinforcing the learning outcomes on each course syllabus.

The other feature is that the four cases constituted contrasting situations in which the QAF had impacted curriculum development: ranging from being a direct impact of the QAF (Case 1) to being barely impacted by the QAF (Case 4). Put together, the four cases illustrate the dynamics that moves along a continuum between a more policy-driven use of the outcomes-based approach to curriculum development and a more pedagogy-driven use of the outcomes-based approach, as shown in Figure 21. The relative positions of the four cases are also shown in the figure; that is, Cases 1 and 3 leaned toward the policy-driven end while Cases 2 and 4 were more toward the pedagogy-driven end. The two forces were found to be interacting with each other within departments and programs at each research site.
Despite those variations among the cases, the following shared themes emerged from the comparison of the four cases, as detailed in Table 6.

- Both of the two institutional-level initiatives (Cases 1 and 2) attached importance to a balance between accountability and quality improvement in the generative mechanisms behind them. For three of the four cases (Cases 2, 3, and 4), leadership was recognized as significant to enabling the initiatives to happen, whether it was leadership at the institutional or Faculty level. For the same three cases (Cases 2, 3, and 4), the institutional environment emerged to be contributive to understanding how the initiatives took shape as institutional culture and factors were considered important to the initiatives.

- The influence of external accreditation requirements on departments or programs was felt strongly for two of the cases (Cases 1 and 2); the perceived impact varied for different individuals.

- The findings from the four case studies reflected diverse personal perspectives on the use of the outcomes-based approach to inform teaching and learning in Ontario postsecondary education, including a number of positive views along with views expressing challenges, confusion and frustration.

- At all four research sites, voices were heard from individuals saying that there was little impact of the initiative on actual educational practices (e.g., U1_3, U2_5, U2_7). This shows the complexity and variation within each case in terms of the influence of the event on individuals.
<table>
<thead>
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<th>Case U1</th>
<th>Case U2</th>
<th>Case U3</th>
<th>Case U4</th>
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<tbody>
<tr>
<td><strong>Impact of QAF on curriculum development</strong></td>
<td>Direct impact of QAF; Aligned program learning outcomes with DLEs after program learning outcomes were developed; Some departments attached greater importance to certain outcomes than they would have without QAF; Barriers to positive impact: faculty buy-in etc.</td>
<td>QAF served as a catalyst to ULO implementation but had no direct impact on program curriculum development; Association existed between the system-wide framework and the university initiative; ULOs superseded DLEs; The university initiative was inseparable from the external environment.</td>
<td>No tangible impact yet; Varying views on possible impact on program review.</td>
</tr>
<tr>
<td><strong>The event/case</strong></td>
<td><strong>Technology-supported curriculum mapping (institutional level)</strong></td>
<td><strong>Senate-approved university learning outcomes (ULOs) (institutional level)</strong></td>
<td><strong>Outcomes-based policy and practice (Faculty level)</strong></td>
</tr>
<tr>
<td>Generative mechanisms</td>
<td>Individual factor: project initiator; Institutional factor: a strategy of harmonizing accountability and improvement (i.e., faculty engagement); Provincial context of QAF implementation.</td>
<td>Pressure from accountability-oriented environment; Institutional factors: forward-thinking leadership, the tradition of using the outcomes-based approach, a pre-emptive strategy to handle external pressure, a strategy of balancing accountability and quality improvement, grassroot</td>
<td>A need to address student concerns; Belief in the benefits of outcomes-based approach to students; Leadership at the Faculty level; Institutional environment.</td>
</tr>
<tr>
<td>Institutional perspectives</td>
<td>Objectives of curriculum mapping: a tool to facilitate faculty engagement; a holistic way of looking at the curriculum; a venue for professional development; Embraced the outcomes-based approach as an institution.</td>
<td>Provided a new beginning to OBE; Informed educational practices.</td>
<td>Confirmed the importance of the Faculty leadership.</td>
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<tr>
<td>Department/program perspectives</td>
<td>Congruent with some of institutional perspectives; Additional positive views; Challenges identified.</td>
<td>Some programs had already been actively involved in learning outcomes development, with different motivations; Encountered varying degrees of resistance; Limited impact on academic programs so far; Some potential impact felt at student service departments.</td>
<td>Departmental/program heads were responsible for implementation; Challenge and uncertainty encountered in the implementation process; Frustration and confusion expressed about the value of the policy; Learning outcomes did not actually inform teaching and learning.</td>
</tr>
<tr>
<td>Programs subject to accreditation</td>
<td>Divided views on the impact of accreditation requirements.</td>
<td>Accreditation requirements were more important but the ULOs still had value.</td>
<td></td>
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<tr>
<td>Individual perspectives</td>
<td>Various views on use of the outcomes-based approach.</td>
<td>Some expressed strong support for the outcomes-based approach; Some positive views were related to faculty's own teaching experiences or prior professional experiences; Some individuals’ preference for the outcomes-based approach might be related to their professional positions.</td>
<td>The Faculty leadership: believed in the benefits of outcomes-based approach to students; Department/program heads did not necessarily see the benefits to students as much.</td>
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<tr>
<td>Individual actions</td>
<td>Some faculty members intuitively used the outcomes-based approach without recognizing it.</td>
<td>Supported the use of ULOs and the outcomes-based approach.</td>
<td>Learning outcomes guided some faculty members’ teaching practice but not others’.</td>
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</table>
The perceived impact of the QAF on the curriculum appeared to have been mediated by three factors: (1) personal beliefs in the outcomes-based approach to teaching and learning; (2) the strategy of applying the outcomes-based approach to educational practice at an institution or an academic unit; and (3) the accreditation status of a program.

In terms of individuals’ perspectives and beliefs about the outcomes-based approach, those who did not see or buy into the benefits of outcomes-based education seemed to be less likely to be affected by the institutional or Faculty policies associated with the QAF implementation. This is exactly what the relationship between individual perspectives and actions was about in the analytical framework. According to an interviewed department head at University A, when faculty members did not recognize the relevance of certain learning outcomes in the DLEs to their program, they tended to consider the impact of the curriculum mapping exercise as minor.

The impact of the exercise [curriculum mapping] on some of the goals is going to be very minor if there’s any impact at all. Some of the problem lies in our ability to measure how well we meet some of the goals. It’s very difficult to meet goals of autonomy and awareness in a program like [a science program]. It’s more facts driven. (U1_3, department head)

As another example, an interviewed department head at University C pointed out that since faculty members did not see the value of the outcomes-based approach to students, they did not deliberately implement those course learning outcomes when they were teaching even when they had included them in course syllabi—just in compliance with the Faculty policy.

But they [course learning outcomes] are not [valuable] to students themselves. We don’t know. We haven’t done any kind of study to ask them whether you have paid much attention to learning outcomes. But for faculty members, it is valuable. [Researcher: Faculty members may not draw students’ attention to the learning outcomes.] No, not necessarily. I don’t think so. They are on course outlines. Most of us make hard copies. We don’t usually point to them. (U3_7, department head)

In terms of the strategy of implementing the outcomes-based approach, those institutions and academic programs that had already taken their initiatives in adopting the outcomes-based approach in their educational practice were found to have felt less impact from the QAF. Case 2 and 4 were examples in support of this observation. For Case 2, no direct impact of the QAF on curriculum development within academic programs was found even though the QAF implementation became a catalyst to the university initiative of Senate-approved University Learning Outcomes. The impact of the QAF appeared to be mediated by both the university’s
pre-emptive strategy in response to it and departments’ own endeavours to use the outcomes-based approach.

In terms of accreditation status of an academic program, programs that had to meet certain accreditation standards were subject to both the accreditation review and the university program review under the IQAP. Thus, their outcomes-based accreditation requirements became a confounding factor when the impact from the QAF was examined. Although some interviewees found accreditation standards had exerted greater impact on the program than the IQAP review (e.g., U1_3; U2_11), others were trying to strike a balance between the two sets of external requirements in their thinking (U1_4; U2_15).

Summary

This chapter has presented findings from both the perspectives of the QAF (the EQA framework) and of the four case studies within four Ontario public universities.

From the policy perspectives, it was observed that the impact of the QAF, in its implementation process, could penetrate into the realm of curriculum development of programs and courses through the important QAF components—the DLEs and learning outcomes, and the use of the outcomes-based approach could be reinforced by QAF-prescribed new program development and program review processes.

On the side of policy implementation, four case studies of outcomes-based education initiatives at four public Ontario universities were conducted to examine the interactions between the QAF and curriculum development at local levels. These cases were

- Case 1 at University A: technology-supported curriculum mapping
- Case 2 at University B: Senate-approved University Learning Outcomes
- Case 3 at University C: Outcomes-oriented policy and practice at an arts and social science faculty
- Case 4 at University D: An interdisciplinary science program

Among the four cases under study, the impact of the DLEs trickled down to curriculum development of academic programs in Case 1 of University A alone. At the university, a curriculum mapping initiative was created to ensure the compliance with the QAF requirements in relation to the DLEs; as a result of the initiative, academic programs had to make their efforts to align their program learning outcomes with the DLEs in their program reviews.
Cases 2 and 3 represented two initiatives driven by an institutional policy and a Faculty policy respectively, both of which were oriented to the use of learning outcomes. Although the two cases did not reflect a direct impact of the DLEs on curriculum development at the two research sites, the learning outcomes-oriented policies were associated with the external broad environment of the QAF implementation within the province. Actually, the institutional commitment to the QAF functioned as a catalyst to the implementation of the university-level initiative at University B. For both cases, the provincial context of QAF implementation helped reinforce the use of the outcomes-based approach. Case 4 was entirely driven by pedagogical and disciplinary needs, and had not been tangibly affected by any of the EQA requirements.

In addition to these variations in terms of the QAF impact on the four initiatives, the key components of the impact process—the generative mechanisms, institutional, departmental and individual perspectives and experiences—have been presented in the first part of the case study reporting in Chapter 6; the single-case analysis is followed by a cross-case comparison and analysis in the second part of the section.

In the next chapter, a similar analytical approach and reporting structure will be followed to analyze the impact of EQA mechanisms on curriculum development of academic programs within the college sector.
Chapter 7. Findings from the Ontario College Sector

This chapter will start with reporting the findings on the associations of system-wide quality assurance policies and processes with the curriculum at Ontario colleges from the policy perspectives. Then the findings from the three case studies within the college sector will be presented.

Associations between System-wide Quality Assurance Policies/Processes and the Curriculum

Three policy stakeholders oversee system-wide policies and processes for quality assurance of public colleges in Ontario: the Ontario College Quality Assurance Service (OCQAS), the Postsecondary Education Quality Assessment Board (PEQAB) and the Ontario Ministry of Training, Colleges and Universities, known as the MTCU. Admittedly, many college programs are subject to program-related provincial regulations and standards; these program-specific EQA mechanisms are not the focus of the study although they are part of the context of quality assurance for Ontario colleges.

The PEQAB and the MTCU procedures remain the same; however, since fall 2015, major changes have taken place in the OCQAS framework. The study was situated in the context of quality assurance policies and processes for the Ontario college sector in 2013 and 2014. Thus, the policies and processes discussed in this dissertation were informed by the OCQAS procedures prior to its major move to an accreditation model in fall 2015.

A total of nine individuals were interviewed, including four regarding the OCQAS framework, two regarding the PEQAB framework and three regarding the requirements of MTCU. These interviews except one were conducted during the period of June 2013 to March 2014. The interview data and documents related to their EQA processes informed the findings in this section. Table 7 shows a comparison among the three policy stakeholders in terms of initiating policy or legislation, operational documents, EQA procedures and outcomes standards. The table suggests that the learning outcomes of certificate and diploma programs offered at Ontario public colleges are mandated to be consistent with both the Credentials Framework and the Ministry’s program standards where they apply; the learning outcomes of degree programs at those colleges must comply with the degree standard under the PEQAB framework.
<table>
<thead>
<tr>
<th>Initiating policy or legislation</th>
<th>OCQAS</th>
<th>MTCU</th>
<th>PEQAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational documents</td>
<td>CVS Application Instruction; PQAPA Orientation Manual</td>
<td>Program Standards for certificate and diploma programs</td>
<td>Handbook for Ontario Colleges; Submission Guidelines for Ontario Colleges</td>
</tr>
<tr>
<td>EQA mechanisms</td>
<td>Credentials Validation Service (CVS) (program-level); Program Quality Assurance Audit (PQAPA) (institutional-level)</td>
<td>Development, updating and implementation of the Program Standards (program-level)</td>
<td>Degree program quality assessment (program level)</td>
</tr>
<tr>
<td>Outcomes standards</td>
<td>Credentials Framework</td>
<td>Credentials Framework</td>
<td>Degree standard, as part of the Ontario Qualifications Framework</td>
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</tbody>
</table>

Curricula of college programs were affected by the components of EQA procedures administered by the three external stakeholders, as displayed in Figure 22. Non-degree or certificate / diploma programs were subject to the CVS and PQAPA processes under the OCQAS framework and the MTCU Program Standards whereas degree programs offered by colleges are subject to the PEQAB quality assessment procedures and the PQAPA process. In terms of outcomes standards, non-degree programs are required to comply with the Credentials Framework and degree programs at colleges are assessed to comply with the Degree Standards outlined in the Ontario Qualifications Framework.
In the following sections, the impact of each of these EQA procedures on college curricula is presented in the context of their broad impacts on the Ontario college sector as well as the purposes of these procedures.

**Impacts of OCQAS processes**

The creation of the OCQAS was significant in that it marked the beginning of external quality assurance for the Ontario college sector. As suggested by a previous OCQAS staff member, prior to the OCQAS, quality within colleges had been assumed but no formal mechanism had existed for EQA.

Before OCQAS was created, there was no articulated sense of quality or quality assurance; it was not part of the vocabulary. Government would say and continue to say these days that in response to quality in the colleges, because the colleges all are under our jurisdiction and our legislation, their quality is good. It was assumed quality because we give you the money and you are using public money, and we expect you would be good. But apart from that, there was never anything. (PM2, a previous OCQAS staff member, June 20, 2013)

As of the end of 2014, there were two components in the OCQAS processes—CVS and PQAPA. They each were found to have different impacts on Ontario colleges as they served different quality assurance purposes.
Impact of the OCQAS framework on the college sector.

The creation of the CVS was government-mandated. The purpose of it was to validate college credentials on the basis of the Credentials Framework to ensure consistency in their terminology being used across the province (PM2). As the OCQAS began to undertake the function of credentials validation that had been previously a responsibility of the government, the authority of credentials validation was transferred from the government to the colleges themselves. As one interviewee (PM7) commented on the effect of the CVS, “The implementation of CVS really switched the place that was doing the checking upfront from the Ministry to a college entity.”

Unlike the CVS, the PQAPA process was believed to be owned by Ontario colleges themselves, thus making the OCQAS approach to quality assurance truly self-regulatory.

PQAPA was an initiative of the college system itself. The government said you have to be self-regulating and we want something on the program level – they spell it out – the CVS. After the CVS became operational, the board was established, the board said that ‘in order to be a quality system and a self-regulating system, we would have to do more than the program-level quality assurance, we should also have the institutional level.’ … CVS said ‘through its board that we need to do more.’ So they took it onto themselves. So the institutional-level [PQAPA] was given to them by colleges themselves. [That was how] the mandate given to them became self-regulated. (PM2, a previous OCQAS staff member)

The establishment of a self-regulatory audit process through the PQAPA was based on the assumptions that Ontario colleges had in place a good process that ensured quality (PM2) and that the colleges had a common interest in having good quality assurance (PM7).

It appears that a major impact of the PQAPA process was that it provided a mechanism to ensure that an internal quality assurance process was in place at Ontario colleges and to demonstrate the evidence for that. This was suggested by two interviewees.

That [PQAPA] was to ensure that colleges have their own processes in place and functioning well, and that this external model would have an expert - your external panel come in to review those and validate that the expectations of the policy had been met and that day would table a public report summary that would be on the Colleges Ontario website. So those were the outcomes. (PM4, a previous OQCAS Management Board member, November 21, 2013)

The impact of PQAPA on colleges is more institutional level. The benefit is that colleges can now point to external verification that they are running quality institutions, and they have a fairly consistent way of talking about that. Before the auditing process happened, the only thing a college could say when someone asked about the quality is that ‘we are licensed by the government.’ Now they can say that ‘we have an external
panel come in and here is what they say about us.’ That is really good for the system.
(PM2, a previous OCQAS staff member)

**Impact of the OCQAS framework on the curriculum.**

The standards against which credentials are validated under the CVS is the Credentials
Framework. The Credentials Framework represents an outcomes-based minimum standard for
graduates of Ontario colleges and a benchmark for quality assurance practices, as one
interviewee explained below. Actually, all the three interviewees who commented on the
OCQAS framework agreed that the Credentials Framework was based on learning outcomes.

In the Credential Framework, there were a set of learning outcome-based standards for
each of those credentials: the one year certificate, two and three-year diplomas and the
graduate certificate. This gave us for the system which was an outcome as expected,
first of all, a consistent terminology for credentials. …
The first thing is there is a statement of what each credential is expected to accomplish,
what their graduates of each credential are expected to be able to do. That’s been a
minimum standard that has been established for the province. That has a huge advantage
to the colleges in its discussion with the universities about comparability of credentials.
It provides, what I guess we say as a stake in the sand, a clear benchmark against which
the CVS and the PQAPA audits will evaluate institutional practices. It becomes a
benchmark. It becomes a standard. It becomes, finally, a guarantee and a clear
communications and a guarantee to perspective students and current students as to what
they’re expected to get out of a college program. (PM4, a previous OQCAS
Management Board member)

The same interviewee also believed that the Credentials Framework provided a curriculum
structure for college programs.

The Minister’s Binding Policy in essence provided the curriculum structure for the
colleges: the Credential Framework for one-year certificates, two-year diplomas, three-
year diplomas and one-year graduate certificates particularly designed for university
graduates or degree graduates rather. The Minister’s binding policy gives us the policy
framework for this. (PM4, a previous OQCAS Management Board member)

The interviewed previous OCQAS staff member also observed that “The result of the Credentials
Framework was that the credentials offered by colleges became outcomes-based” (PM2).
Another interview (PM7) shared on one hand that “There was definitely in that period of time,
late 80s and early 90s, a real concern that quality was quite variable. … The intention [of the
Credentials Framework] was to create greater clarity so that there was consistency.” She also
pointed out that the outcomes-oriented thinking could actually be traced back to the 1990s when
the development of the Program Standards were first initiated; thus the Credentials Framework
was a continuation of the use of the outcomes-based approach that had begun earlier.
The establishment of vocational learning outcome – this was the real shift to using the language of learning outcomes. Prior to that, we didn't really talk about learning outcomes much in the college sector. It tied into things like prior learning assessment and recognition or credit transfer because you shouldn't necessarily have to spend three years. We shouldn't just be looking to the accomplishment of three years of study in order to give you this diploma. We should be more concerned with whether you had achieved the learning outcomes. It was really trying to do a major philosophical shift, at least for the Ministry. … And trying to get away from [time-based approach]. Again, this is consistent with the focus on outcomes that we developed back in the early 90s that the value of a program wasn't how long you spent studying. I don't know if the post-secondary sector has ever been successful in breaking that correlation. (PM7, a government policy staff who was heavily involved in the development of the 2003 Policy Directive, February 3, 2014)

PQAPA processes were implemented on the basis of six criteria for self-study and audit. As shown below, college programs were also expected to comply with the Credentials Framework and four out of the six criteria (that is, Criteria 1, 2, 4 and 5) were concerned with program learning outcomes.

Criterion 1. Program-level learning outcomes for all programs of instruction are set, are consistent with the college mission and the programs’ intended purpose, and are appropriate for the credential offered upon successful completion of the program;
Criterion 2. Admission, credit for prior learning, promotion, graduation, and other related academic policies support program development and student achievement of program learning outcomes;
Criterion 3. Programs conform to the Framework for Programs of Instruction and the Credentials Framework, are consistent with accepted college system nomenclature / program titling principles, and maintain relevance;
Criterion 4. Methods of program delivery and student evaluation are consistent with the program learning outcomes;
Criterion 5. Human, physical, financial, and support resources to support student achievement of program learning outcomes are available and accessible;
Criterion 6. Regular program quality assessment that involves faculty, students, industry representatives, and others as appropriate for the purpose of continual improvement is in place and happens.

(OCQAS, 2014, pp. 8-9).

As both of the CVS and PQAPA processes employed the Credentials Framework as their standards thus adopting the outcomes-based approach, implementation of the two components oriented college programs toward the outcomes-based approach as well, as the interviewed OCQAS staff commented below.

The greatest impact of CVS on colleges is on their program development – a shift from input-based or time-based to outcomes-based. … CVS has been working well. I say that because colleges have become much better and more effective and efficient at
developing program-level learning outcomes. It is a big shift; they are much better at it. That is a benefit to the system. …

By this point, I would assume that all colleges have learning outcomes for all programs. They should. And based on the last few audits we have done while we have a very specific standard that you should have outcomes, we know that the colleges are actually doing that. On the basis of auditing reports, I can say that colleges are able to provide evidence that says they are doing what they said they would be doing in those areas. (PM2, a previous OCQAS staff member)

The outcomes orientation can be traced backed in the Policy Directive of 2003—

*Framework for Programs of Instruction*, which included the Credentials Framework as part of its appendix and provided detailed information on two of the key components—essential employability skills and general education requirements. According to one interviewee who was heavily involved in the consultation and discussion when the policy directive was developed, the 2003 Policy Directive laid a foundation for three things: greater autonomy granted to colleges; internal quality assurance process set in place within colleges; and a self-regulating quality assurance process for the whole college sector; and the existence of the Credentials Framework helped fulfill those three purposes.

The Program Framework stated that the colleges are going to have greater freedom to manage their own programs. What is absolutely essential is, first of all, we clarify what programs the colleges are being given greater freedom for and that was to be defined. Those programs were to be defined in a credentials framework. The second question they said is if we want to give colleges greater freedom over their own programs, they want to know what internal college program approval processes ought to be in place and secondly, the self-regulating system that would be put together under Colleges Ontario for the oversight of all of the new programs. Thirdly, what provisions would be in place for ministry funding approval? That was the second when they have to do with processes. The third thing that they required was an ongoing quality assurance process not only for individual colleges but a self-regulating process for the entire college system. (PM4, a previous OQCAS Management Board member)

Another interviewee who was involved from the government’s side suggested that the policy directive enabled the approach to quality assurance for the college sector to shift from a government-directed one to a self-regulating one.

That's really saying the system itself should be responsible for the quality assurance that government isn't able to effectively do that. (PM7, a government policy staff who was heavily involved in the development of the 2003 Policy Directive)

It was also pointed out that granting greater autonomy to colleges was also a consideration behind the legislation—*the Ontario Colleges of Applied Arts and Technology Act*, under which the Policy Directive was developed (PM7).
It is also important to note that the Credentials Framework, as a significant piece in the 2003 Policy Directive, was created collaboratively by Vice-presidents Academic from Ontario colleges and policy-making people from the government although it was released by the government. A MTCU /CCVPA (Coordinating Committee of Vice-Presidents, Academic) working group on charter program issues worked actively from June to December of 2002 with a mandate to “explore issues in establishing an updated credentials framework for the college system that will include issues related to the categories of credentials, program titling, and standards” and “to explore issues related to pursuing the creation of a self-regulating system for colleges to assume greater levels of responsibility for ensuring quality and consistency of program offerings within the credential framework”, as stated in the terms of reference for the working group. It was recognized at the time that the Ministry had defined categories of credentials in terms of length of instruction; there existed an issue of “no credentialing recognition for any distinction in levels of learning or skill development”, according to the presentation slides used at a meeting of the working group in October 2002. Thus, the Credentials Framework was created to fill that gap.

Part of the considerations of the government for creating the Credentials Framework was related to governance as the Policy Directive granted the board of an Ontario college the authority to approve academic programs. As one interviewee explained, the government thought “if we are going to give the Board the authority to determine programming, what we want to do is know what programming we are giving the board the authority to determine. That’s what the Credentials Framework did – told the Board what they would determine” (PM4, a member on the working group and later an OCQAS board member). On the other hand, the creation of the Credentials Framework was also what the Ontario colleges would like to have, according to the observations of two interviewees.

My take is that the colleges were asked: What kind of credentials do you offer and what standards are you consistently meeting? That was the panel that I chaired and ultimately the vice-presidents unanimously agreed that what they were doing was meeting the requirements of those credentials as specified in the Credential Framework. They in fact approved the Credential Framework before the Ministry made it policy. What you have, I think, there is an expression of what colleges agreed were their programs and credentials. What the colleges agreed were the outcomes of their credentials and what they further agreed to is to have the process in place internally and across the system to ensure that the standards they professed are the standards they’re going to consistently
apply and update from time to time. My personal view is that the Ministry is not involved a lot in the details. (PM4, a previous OQCAS Management Board member)

When it came to the work that we were doing in this working group you're referring to, it was what the college system wanted. They already were pretty bought in to it and it was more that we were going to jointly try to establish the Credential Framework. We had an idea of what we thought made sense but we tabled something, they had feedback, we had discussion. I can't say for sure that what came out of that committee was exactly what the policy ended up being, but I suspect it was pretty close because it wasn't super contentious. It wasn't like the Ministry and the colleges were really far apart in our views. … I would also say that we had good working relationships. We had respect for one another anyway because of work we've been doing for many years. That's always an important building block and then it's made that much easier because this is something they really wanted. (PM7, a government policy staff who was heavily involved in the development of the 2003 Policy Directive)

Impacts of the Program Standards

Four interviewed individuals shared their views on the Program Standards in length, including two project officers and two government staff who were heavily involved in overseeing the development and review of the Program Standards. The interview data, along with website information posted in 2013 and 2015 and a set of presentation slides used by the government staff in 2013 to demonstrate the process related to the Program Standards, were used to inform the understandings of how the Program Standards were developed and implemented as well as how they impacted Ontario colleges and the curricula of their programs.

The Program Standards only apply to college diploma and certificate programs. They are provincial standards for programs of instruction in Ontario colleges. They were first developed by the College Standards and Accreditation Council (CSAC), which was established in 1993 with a mandate to develop program standards for the college system, as recommended by a government publication in 1990 on the future of the college system, entitled Vision 2000: Quality and Opportunity. After CSAC was closed down in 1996, as part of government restructuring efforts, the responsibility for the continuing development of program standards was transferred to the Ministry of Education and Training. As part of the requirements of the 2003 Policy Directive, all public colleges are committed to “ensuring that programs of instruction are developed and implemented consistent with provincial standards where they exist” (OMTCU, 2003, p. 7). From 1994 when the Standards were introduced to the college sector till June 2013, more than 250 program standard documents were developed and updated.
Currently, the Ontario government responsible for postsecondary education, the MTCU, oversees the development and review of the Program Standards. The Standards remain to be three components: (1) Vocational standard, or vocationally specific learning outcomes, applying to the programs of instruction in question; (2) Essential employability skills (formerly the Generic Skills Standard), applying to all programs of instruction; and (3) General education requirement (formerly the General Education Standard). The first two are expressed in terms of learning outcomes. These three components are consistent with the requirements of the Credentials Framework. As such, the outcomes-based approach has been used since the early development of these standards.

The Program Standards apply to all similar programs of instruction offered by colleges across the province. When a set of program standards are prepared, they are reviewed by the CVS under the OCQAS to confirm that vocational learning outcomes are at appropriate credential level in accordance with the Credentials Framework. However, not all college programs have a set of program standards in place. Those programs that do not have existing program standards rely on the CVS for validation of the credentials they offer (PM4).

A program standard is developed through a broad consultation process that involves all stakeholders who have a direct interest in the program area, including employers, professional associations, universities, secondary schools and alumni from the program, in addition to students, faculty and administrators at the colleges offering the program. Thus, it represents a consensus of participating stakeholders on a minimum level of learning that all program graduates should have achieved. Views from the industry were considered very important as “the Standards reflect the industry” (PM1, government staff, June 14, 2013) and “at the end of the day colleges serve industry; colleges have to put out grads that are employable by industry and so industry dictates what those grads should know and be able to do” (PM5, project officer, December 9, 2013). Thus, the Program Standards reflect the close connections between Ontario colleges and the industry.

The main purpose of creating the Program Standards was to ensure consistency in learning outcomes for similar programs across the college sector so that “the Ministry knows that if there is a graduate from a program a CAAT, they would have achieved the learning that the standards have articulated” (PM1, government staff).
The development of the Program Standards is usually led by one or two project officers, who are typically faculty members or curriculum consultants seconded from an Ontario college. They are only responsible for developing the vocational standard as the other two components remain the same for all college programs.

**Impact of the Program Standards on the curriculum.**

The impact of the Program Standards on the curriculum was obvious as college programs are expected to comply with existing Program Standards. This compliance was mandated by the Minister’s Binding Policy Directive *Framework for Programs of Instruction*, 2003, which stated that “When a college chooses to deliver a program of instruction for which a Ministry of Training, Colleges and Universities program standard exists, the program must meet all the requirements of the program standard” (OMTUC, 2003, p. 4).

The apparent impact of the Program Standards on the program-level curricula was also identified by interviewees. One of the interviewed project officers commented that the Program Standards supported the development and review of college programs by saying “Program standards for programs offering an Ontario College credential in Ontario colleges are an important means to support the development and review of programs of instruction using an outcome-based approach.” (PM6, project officer, December 9, 2013). The other interviewed project officer suggested that development of new programs and review of existing programs always referred to the Program Standards if they existed. Specifically, curriculum development for a new program would start with locating the existing Program Standards.

Let’s say a college just decides one day we would like to get into this field. We would like to offer a program in this area that we never offered before. The first thing they do is go get the program standard, if it exists. If a program standard does not exist and another institution is offering that program there should be at least program goals that are really equivalent to vocation learning outcomes, but they’re not called VLOs [vocational learning outcomes], it’s just nomenclature with the changes. (PM5, project officer, December 9, 2013)

The impact of this kind actually started when the Standards were first initiated as one government staff explained.

The initial work on generic skills learning outcomes and the program standards that were released in the early to mid 90s, I think, had quite a big impact because people would have to go back. When the standard was released, there was often kind of an assessment of the program against the standard. They have their own internal college process they would have to go through to say, ‘Okay, are we meeting the standard? Do
we have to make changes to the program?’ (PM7, government staff member who was heavily involved in developing program standards in the late 1990s).

When asked about the impact of the Program Standards on curricula of college programs, the interviewed government staff appeared to take a somewhat different perspective. They acknowledged that there was some impact on academic programming as colleges mapped their curricula or courses to the Standards; however, they made an explicit distinction between the Standards and the curriculum as below.

You have to differentiate the standards from the curriculum. The same standards do not mean that colleges have the exactly same kind of curricula or programs. … The Ministry doesn’t get into the curriculum as we already give them the authority to develop their own curriculum. The standards are only at the higher level. (PM1, two government staff members, June 14, 2013).

The intention of not having the Program Standards mandate the curriculum was also stated clearly in the website information as well as in the presentation made by the government staff to curriculum consultants at colleges in 2013.

Expressing standards in this way [use of learning outcomes] ensures consistency in the outcomes for program graduates while leaving to the discretion of the individual colleges such curriculum matters as specific program structure and delivery methods. (OMTCU, 2015).

Curriculum development ..
- Is responsibility of each college in alignment with program standard
- Can exceed vocational standards and essential employability skills standards (presentation June 14, 2013, Slide 7)

A gap was identified in the process of implementing the Program Standards from the government’s perspective as the interviewed government staff members commented below.

That is probably one gap from the Ministry’s standpoint. We don’t actually get reports as to whether colleges are meeting those standards or not because they have their own process. We don’t know. We assume they are (meeting the standards). They are requested to do that. (PM1, government staff members)

When asked about who was actually checking whether the requirements in the Program Standards had been met or not from the college perspective, one of the interviewed project officer (PM5) suggested that curriculum consultants working at the teaching and learning centre of a college worked with program teams to review program mapping, in which individual courses were examined as to whether they met learning outcomes in the Program Standards. The same project officer also commented that it was not enough from the quality assurance point of
view to simply expect colleges to ensure that they were meeting the standards and there was a missing piece to close the circle of policy implementation.

**Impact of the Program Standards on the college sector.**

The presence of the Program Standards was also found significant to college programs as a whole in a couple of ways.

The Program Standards were believed to contribute to maintenance and improvement of the quality of academic programs, thus becoming an important mechanism for quality assurance within the college sector. One of the interviewed government staff members believed that the standards help maintain and improve the quality of programs in colleges through program review (PM 1). One project officer also shared that “The Program Standards, if they are current, provide a helpful framework and do promote the quality of academic programs offered by Ontario colleges as they provide a set of standards and set the bar for new program development and program review” (PM6, project officer).

The Program Standards also helped hold programs offered at Ontario colleges accountable. One of the project officers shared an incident, where a student’s mother had contacted the dean of the department where her daughter was studying, and told him that she was not convinced that the program was meeting the provincial standards. The project officer commented on the incident this way.

> It's all about the accountability. Program standards are public domain. Once they're published, they're on the website, on the MTCU website and anybody can consult them and people do. Because I work with faculty from all walks of life in my home college, I know that there are several programs, people meaning faculty, chairs, deans whatever that think nobody reads program standards. [But that’s not true] … (sharing the incident) … That's valid because of the accountability and we should be accountable. (PM5, project officer)

**Impacts of the PEQAB Processes**

Two PEQAB Secretariat staff members were interviewed about the PEQAB procedures. The interview data, along with handbooks, guidelines and reports publicly available on the PEQAB website, informed the findings in this section.

The PEQAB is an advisory board to the Minister of the MTCU. A key component of the Board’s mandate is “to review applications for consent made pursuant to the act and to make recommendations to the Minister with respect to the academic rigour of the programs proposed and the organizational capacity of the applicant organizations” according to the Minister’s

The PEQAB processes apply to all those outside the scope of Ontario public universities, including public or private colleges within the province, and public or private postsecondary education providers from outside the province, which would like to offer degree programs. These organizations are required to obtain the “ministerial consent” in order to provide degree-granting programs in Ontario. In Ontario, there are two ways to obtain degree-granting authority: through the Act of Provincial Legislature and through the consent of the Minister. The PEQAB works with institutions that do not operate under an act and thus need to seek the ministerial consent\(^7\). The vast majority of applications are from Ontario public colleges; during the fiscal year of April 2013 to March 2014, 82%, that is, 32 out of 39 recommendations made by the Board to the Ministry were applications from Ontario public colleges (PEQAB, 2014). The Board assesses the quality of degree programs proposed by Ontario colleges in accordance with the Board standards and ministerial requirements as outlined in detail in the *Handbook for Ontario Colleges*.

The procedure starts with the applicant organization applying to the Ministry for the ministerial consent. Once the Minister signs off on the referral letter, the PEQAB receives an application for quality assessment from the institution and a policy advisor is assigned to help the applicant organization navigate through the process. When received, the application is made available on the PEQAB website for public comments. In the meantime, the policy advisor prepares a proposed review strategy and a list of candidate reviewers based on research on the subject matter in the application; the review strategy and candidate reviewers are subject to the approval of the Board. After the Board’s approval, the policy advisor recruits one or two reviewers to form a review panel and conducts an orientation session with the reviewer(s). After a contract is signed between the reviewers and the PEQAB secretariat, the reviewers begin the process of quality assessment.

The key part of the process is peer review (PM9). As part of the standard review, the reviewers examine the institutional policies and documentation, and go on a site visit before preparing a review report. The report indicates whether the application meets the benchmarks; and for those that do not, whether the weakness is major or minor and how it could be addressed.

\(^7\) In addition, if Algoma University and OCAD University wish to offer degree programs that are not under their acts, they need to apply for the ministerial consent as well.
The applicant institution will have an opportunity to provide comments on the review report. Then the policy advisor writes a four- or five-page report that summarizes the hundreds of pages of documentation, which will be attached as well. The Board determines whether to recommend the application to the Minister to grant consent, to grant consent with conditions, or not to grant consent. The Minister usually implements the recommendations by the Board (PM9). The granted consent is generally valid for five to seven years (PM8).

Handbooks are prepared and made available separately for three types of applicant organizations—public organizations, private organizations and Ontario public colleges or CAATs. The quality assessment procedures are generally the same and the assessment follows exactly the same standards and benchmarks.

Impact of the PEQAB framework on Ontario postsecondary education.

When asked about the intended impact of the PEQAB processes, one of the interviewed staff members made the following comments and suggested that the PEQAB processes played an important role in safeguarding the integrity of degree-granting programs.

The intended effects are to make sure that everything that's called a degree program in Ontario is at the standard of a degree program and that any program offers students security. … The goal is to make sure the programs are at the level of a degree, that the people teaching those programs have appropriate qualifications to teach them, and that the administrative structures are in place to keep students safe, and finally, that the financial condition of the institution is such that it can guarantee student security and that it's a viable organization, viable and reputable. (PM8, PEQAB Secretariat staff member, February 10, 2014)

Impact of the PEQAB framework on the curriculum.

The impact of the PEQAB processes on the curriculum of academic programs applying for ministerial consent can be found in the PEQAB criteria and benchmarks. It is clearly stated in the PEQAB Handbook for Ontario Colleges (PEQAB, 2014, pp. 14-15) that

The Board will assess the quality of proposed degree programs in accordance with the following Board standards.
1. Degree Level
2. Admission, Promotion and Graduation
3. Program Content
4. Program Delivery
5. Capacity to Deliver
6. Credential Recognition
7. Regulation and Accreditation
8. Nomenclature
9. Program Evaluation
10. Academic Freedom and Integrity
11. Student Protection
12. Economic Need
13. Non-Duplication

Of these standards, several are directly related to components of curriculum development of an academic program, such as degree level, program content, program delivery, and program evaluation. According to the Submission Guidelines, each application is required to prepare a submission consisting of sections that address all thirteen standards and related benchmarks. It can be assumed that by complying with these requirements, the applying programs will have to take on these features and deliberately demonstrate evidence for the presence of the features to the review panel and the Board.

It is important to note that using standards and benchmarks to drive the process of curriculum development of those applying programs is not the intent of the PEQAB processes as one staff member commented below.

When you think about the university and the history of the university, not just in Ontario maybe back to Europe, you hope that they are developing curriculum based on academic vigor and scholarly activity, that the quality assurance is just a way of helping to improve the program. But all of those things are in the board’s criteria. The ideal is that those are all inherent in the development of any quality degree program. They shouldn’t have to think, ‘Oh I have to look at PEQABs criteria when I’m developing my [program]’; they should have the capacity to develop a quality. They should have the academics in place, the people, the experts who know how to put their program together because they have the capacity to do that, then check back and look at this, say ‘Yeah we have to go through this process; we better make sure we haven’t forgotten anything.’ I’d hate to see that it’s driving the process so that’s not the intent. (PM9, PEQAB Secretariat staff member, March 3, 2014)

When asked about the strengths of the PEQAB model, three features were identified: specificity and clarity of the criteria, transparency of the assessment process, and use of the outcomes-based approach. The two interviewees’ comments on the first two features were quite consistent as shown in the quotes below. Arguably, clarity and transparency played a facilitative role in implementing the PEQAB procedures and ensuing the compliance of applicant programs with the standards and benchmarks.

The standards as you see them, which I think are, I think they're a model of specificity. In other words, experts looking at the program would never have any difficulty knowing exactly what standards the program is to be measured against. I think one of the virtues of these is they're clear and specific, and you can look through them yourself, but the standards are very clearly identified with subcategories and the benchmarks are crystal clear. (PM8, PEQAB Secretariat staff member)
The big strength is that it’s transparent, our criteria are there, the processes are transparent. The applicant has a site visit, they get to look at the people who are assessing him. Then they see their report; they get the chance to respond to that report. It’s transparent; the criteria are clear, they are out there when we judge our criteria against other jurisdictions. (PM9, PEQAB Secretariat staff member)

Regarding use of the outcomes-based approach, one interviewee commended it as a strength while the other placed some qualifiers around it by emphasizing the equal importance of other standards and the challenges in assessing the programs against learning outcomes.

I think the other strength is that much of it does turn around learning outcomes. In other words, they're focused on, are they achieving quality, not through looking at input measures, primarily, or by looking at oblique or proxy output measures, like retention or employability, but by attempting to look at the actual quality of the educative experience and as far as possible, looking at that against defined learning outcomes. I think those are, I'm very pleased to be involved with that. (PM8, PEQAB Secretariat staff member)

The degree standard is [the key] but one way of measuring the degree standard is to measure all the other standards. If you find weaknesses, then you’ll find that yeah they can never check off and meet degree level standard when there is piles and piles of issues in the other standards. (PM9, PEQAB Secretariat staff member)

Well it [assessment] depends on their [peer reviewers] criteria. So when they are input based, it is quite easy to look at their core schedule and see the faculty that are assigned. … When we get a renewal and we get to the degree level standard, we rely on the experience of the assessor, to look and say from their experience. Having looked at various programs, they are assessing whether the sample student work can be either minimal acceptable or exemplary levels of performance. There is no documented, articulated process there and that’s what I mean, that’s the new world, that’s where there is many, many conferences on how to do that. We rely on our advisors and I don’t know how they do it, it seems to be a bit of an art form. (PM9, PEQAB Secretariat staff member)

Summary

The findings above suggest that the EQA procedures for Ontario colleges have different purposes and intentions and that their impacts on curriculum development of college programs and on the whole college system also differ, as summarized below in Table 8.

It is also interesting to note that some of the outcomes of these procedures—impact on curriculum development particularly—diverge from what they were intended for. Some interviewees explicitly pointed out that the impact on curriculum development was not part of the intentions of the quality assurance framework they worked with.
Table 8. Comparison among three EQA mechanisms in terms of purposes and impacts

<table>
<thead>
<tr>
<th>OCQAS processes</th>
<th>MTCU Program Standards</th>
<th>PEQAB processes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purposes</strong></td>
<td>CVS: Validate college credentials on the basis of the Credentials Framework to ensure consistency in their terminology being used across the province; PQAPA: Ensure internal quality assurance in place within each college.</td>
<td>Ensure consistency in learning outcomes for similar programs across the college sector.</td>
</tr>
<tr>
<td><strong>Impacts on curriculum development</strong></td>
<td>Orient college programs toward the outcomes-based approach to curriculum development.</td>
<td>Exert obvious impact as college programs are expected to comply with existing Program Standards; Support the development and review of programs; Not intended to mandate curriculum development.</td>
</tr>
<tr>
<td><strong>Impacts on the college sector</strong></td>
<td>CVS: The authority to validate credentials was transferred from the government to Ontario colleges; PQAPA: A mechanism was established at the system level to ensure the existence of internal quality assurance within individual colleges.</td>
<td>Believed to contribute to maintenance and improvement of the quality of colleges’ academic programs; Hold college programs accountable.</td>
</tr>
</tbody>
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**Evidence from the Three Case Studies at Ontario Colleges**

This section presents the findings from three case studies of OBE initiatives at three public colleges of Ontario—a new program development process, a program review process, and a curriculum mapping process. A summary of the data sources for these case studies can be found
in Table 5 in Chapter 5. It should be noted that although Ontario colleges often have those practices in place, the cases included in this study all represent new development in those areas.

Single-case Analysis

Following the same analytical procedure used in Chapter 6, for each case study I will report the findings regarding the institutional context, the event, generative mechanisms, experiences from different perspectives (the institutional, the departmental and the individual), connectivity between the global and the local, and perceived impact of the system-wide EQA mechanism. In the Reflection and Summary section at the end of each case study report, I will analyze the quality of the data used for the case and provide a logic model to show the EQA impact process and a logical chain of evidence to support the key findings.

Case 1 at College A

Six individuals were interviewed for Case 1 at College A, including two administrators, two curriculum consultants and two faculty members from different academic units. All six interviews were conducted in May 2014. Documents reviewed for this case study were the templates used for developing new programs, including those for writing a concept paper, developing a degree program (phase 1 and phase 2), and developing a non-degree program (phase 1); a chart that described the new program approval process; and a narrative overview that portrayed the new program development process.

The Institutional Context

College A had a full-time student enrolment of approximately 22,900 in the 2013-2014 academic year. It is one of five institutes of technology and advanced learning (ITALs) in Ontario which are authorized to offer up to 15% of their programs at the baccalaureate degree level in applied studies (Panacci, 2014). Thus, it has greater need for developing degree-granting programs in addition to the certificate and diploma programs that Ontario colleges typically offer.

The Event: New Program Development Process

At College A, the new program development process was a recent development. Following the change of leadership of the teaching and learning centre, the previous four-stage process was streamlined into a two-phase process. The process “became clearer, more efficient,” as one interviewee commented (C1_5). The college-wide Program Quality Assurance Committee had been in operation for only two years by the time of the data collection. It provided peer review
support at Phase 1 of the new program development process and close to the end of Phase 2, it approved the new program proposal.

The process was quite procedural and the steps were as follows.

- An idea of a new program developed. The idea could germinate from different sources, such as individual faculty members or professional advisory committees.
- The individual who was championing the idea wrote a concept paper, with the assistance of the teaching and learning centre.
- The concept paper was presented to the Dean’s Council, which reviewed the idea and decided whether a full environmental scan would be necessary to further develop the idea.
- An extensive environment scan was conducted by a college researcher or an outsourced company about the proposed program, including the job market for the proposed program and the prospect of student recruitment.
- The environmental scan report in the form of a feasibility study went back to the Dean’s Council for review. Those proposals that were found workable were approved for program development.
- In Phase 1 of the new program development, the new program team and a curriculum consultant assigned by the teaching and learning centre worked closely together to create a vision of the program and develop those attributes that the new program would like its graduates to achieve.
- Consultations about the new program took place within the local academic council for feedback.
- Broad consultations were conducted with other stakeholders on campus, including the co-op office, the library, the international office, applied research office, and digital learning.
- An institutional-level committee called the Program Quality Assurance Committee (PQAC) met with the representatives from the program team and provided extensive feedback. This process was a peer review in function.
- At the end of Phase 1, a program proposal was drafted.
- The Dean’s Council reviewed the program proposal with a greater focus on resources, such as faculty, space and shared facilities. If the Council found the proposed program in
good shape, some funding would be allocated to support its further development in Phase 2.

- In Phase 2, the details of the whole program were developed, including all the courses. A full program development document was drafted.
- The full program proposal went back to the local academic council and the Dean’s Council for further review to ensure that both were satisfied and had no concerns.
- The proposed program was reviewed by the PQAC again to make sure that the program would meet the relevant requirements of the OCQAS/CVS or PEQAB processes. At this time, the PQAC served as an approval body.
- The approved new program proceeded to the college-level governance bodies (i.e., the educational council and the Board of Governors) for approval.
- The approved new program proceeded to the OCQAS for credential validation or to the PEQAB for quality assessment, depending on its non-degree or degree status.

**Generative Mechanisms**

The data analysis revealed that four factors played an important role in enabling the initiative: the institutional strategy to meet provincial and college expectations; continuous support from the teaching and learning centre; home-grown practice of developing a critical performance statement before developing learning outcomes; and collegiality of the institutional environment.

First of all, satisfying both the government’s expectations and the internal expectations of the college itself was the most important consideration for the new program development process, as one of the administrators pointed out at the very beginning of the interview.

> The major components [of the process] would be ensuring that each step we take in terms of proposing an idea, researching the idea and moving forward with development is keeping in mind the right parameters to abide both by provincial expectations but also college expectations. (C1_1, administrator at the teaching and learning centre, May 15, 2014)

The interviewed senior college administrator also made the following comments to emphasize the importance of meeting the external and internal expectations.

> At the end of the day when we do our submissions, we know that we've met the legislative requirements, [the college’s] internal practices or pieces that are important to us and we value in our mission and vision that we've engaged our entire community. … We make sure that we've got a solid framework and that whatever they're building meets ministry guidelines and standards because you can build a beautiful program that
doesn't meet all the standards and that's a problem. That's also not fair to your program — all of a sudden you've built this beautiful program and then you say to them, ‘Oh I'm sorry but you don't meet this quality standard.’ That's frustrating if that's not upfront. (C1_3, senior administrator, May 15, 2014)

To achieve that objective, the expectations from the CVS and the PEQAB as well as the college’s expectations, such as the strategic plan and the academic strategy, were deliberately embedded within the templates for the new program development process.

A second enabler for the process was that the staff from the teaching and learning centre helped the program team navigate the whole process from the beginning till the submission of the program proposal internally and externally. New program development and curriculum development were part of the portfolio of the teaching and learning centre of the college, along with program review and faculty development. As the interviewed administrator commented, “quality is built right into everything we do” and consultants at the centre always kept in mind the quality aspect; thus, part of the centre’s function was quality assurance (C1_1, administrator at the teaching and learning centre). The college contact persons for the CVS and the PEQAB were individuals who played a leadership role at the centre. At the beginning of a new academic year, the centre offered workshop series for associate deans of the academic units that were involved in degree program offerings and informed them of the expectations from the PEQAB (C1_1). Even though the proposed program was initiated by faculty members within an academic unit, the curriculum consultant assigned from the teaching and learning centre played a significant role in providing support throughout the whole process by providing feedback and advice on each component and every document along the way (C1_4). They saw themselves as “a process person” and “a catalyst” for new program development while recognizing that the locus of control lied within the academic unit (C1_2).

Thirdly, all the academic programs and all the courses offered by the college were required to include critical performance statements in their curriculum documents. Developing a critical performance statement for a program and a course before developing the program/course learning outcomes was a long-standing practice at the college—“That’s a [name of the college] thing at least ten years if not more” (C1_1). A critical performance statement for a program was usually expected to be one sentence starting with “By the end of this program, a student will demonstrate the ability to …” In the template for developing new degree programs (the 2013 version), the following guidelines for writing the critical performance statement were provided:
The Critical Performance statement describes what students need to be able to demonstrate/perform by the end of the program. By definition, it is the overall culminating performance that students demonstrate/perform by the end of the program. The critical performance should be broad in scope, summative and cumulative in nature and observable and measurable.

When writing a critical performance:

- think big picture
- consider what the student has to demonstrate to prove that he/she has attained an acceptable level of performance in the program
- begin with one verb (following the lead-in language)
- use verb level appropriate to the credential (e.g. for degrees verbs should be at the level of analyze or higher according to Blooms Taxonomy)
- ensure that the learning is measurable
- write clearly and succinctly

Right below the section of the critical performance statement in the template was a section on program learning outcomes: “The program learning outcomes should be observable, measurable and directly related to the course content being evaluated. Typically a program develops between 10 and 15 outcome statements.” (Template for developing new degree programs, Phase 1, 2013, p. 5)

The program team was encouraged to utilize curriculum consultants from the teaching and learning centre to help write the critical performance statement and program learning outcomes. According to one of the interviewed curriculum consultants, in Phase 1, the vision and graduate attributes for the program were first established; then the vision became the critical performance statement and the graduate attributes were further developed into program learning outcomes; the program learning outcomes should support the critical performance statement (C1_5). It was believed to be “very important right upfront to get the faculty thinking about that” and in the end all the courses would map back to the critical performance statement and the program learning outcomes (C1_1, administrator at the teaching and learning centre). The importance also lied in that “It's almost setting a global context right at the beginning but then you keep referring back to make sure that everything you're doing in the program is around that critical performance statement” (C1_3, senior administrator).

The other interviewed curriculum consultant described how for many years at his previous workplace he had felt something was missing in developing a set of learning outcomes and realized when he first began to work at College A that the missing piece was the critical
performance statement. He described the use of the statement as exercising “a self-imposing
discipline” to ensure constructive alignment among courses.

When you look at this package of outcomes, sometimes they didn’t seem entirely
congruent with one another. … When you build a critical performance statement and
you don’t write one in front of the other, you develop them at the same time. Having
that critical performance statement gives you that culminating achievement and it helps
discipline you when you’re writing the outcomes because you need to write the
outcomes so that they’re congruent with the critical performance. … It’s a self-imposing
discipline that having that critical performance helps you and induces you to write your
program outcomes and your course outcomes, depending what level we’re talking, in a
way that binds them together as part of an integrated whole, in terms of accumulating
performance that’s supported by all of these elements. … To me, it is a very, very
significant and important qualitative element to the program because it helps assure
constructive alignment and congruency within courses and among courses to create the
program. (C1_2, curriculum consultant, May 15, 2014)

The same interviewee also admitted that writing a good critical performance statement demanded
much time. But he believed that it was a worthwhile exercise and commented that being willing
to invest the time for the program ideation was a strength of the process at the college. He
recognized that his role as curriculum consultant was to facilitate the conversation among faculty
members about creating a vision and a critical performance statement before developing the
details of the program.

The first thing they [faculty members] wanted to do was put a program map on the table
and tell me what the courses were going to be. My job is to pull them back from all of
that and say let’s not even think about that for the moment, and let’s work through
developing a vision for what this program is, what it needs to be, what role this program
will play in providing graduates that will provide for the self-actualization of the
students and support to the Ontario labor force and economy. … I deliberately take
them further back in order to try to get them away from thinking about courses and
whatever. We go through a number of visioning exercises around—what is this
program, what does it look like, what does it need to achieve, what elements need to be
in play? We start trying to paint, I guess, the broad picture of the environment in which
we want to work in terms of developing this program. We bring that down and distill it
down to create a vision statement for the program. We then use that vision statement as
our guiding post through all the rest of the development of the program. (C1_2,
curriculum consultant)

Analogies such as an anchor, a compass and a litmus test were used to illustrate the
importance of the critical performance statement.

This is our anchor. This is the anchor. This is what holds everything together. It’s the
lens through which you develop. It’s your compass. It orients you, right? I couldn’t
imagine not having something to tilt against. It’s central for me when I can see even
curriculum changes at the course level. You look at those changes in relation to the
critical performance statement of the course and then always against the program. For me, it’s a good litmus test around does this change support the ultimate culminating performance? If it does, then this is sound. If it doesn’t, then we have to rethink whether or not the critical performance statement is still in line with current trends. (C1_5, curriculum consultant, May 23, 2014)

Last but not least, leadership and culture building were considered crucial to the process as well. As the interviewed senior administrator stated, building collegiality to engage the whole community in creating a quality program was intentional.

I think that ability to engage our community so that you get all those different perspectives is a really important piece to this model. … If you ask me what is intentional about the process, the first piece is engaging the academic community. The [college] academic community and building something that is very collegial, respectful, and supportive of each other. (C1_3, senior administrator)

The positive institutional environment was felt by both of the interviewed curriculum consultants. One of them thought highly of the trust imbued within his working environment.

There’s a high degree of trust in the environment. Just a very quick anecdote: there’s a tradition here within the Center for Teaching and Learning that when a document is at its penultimate stage, it gets read across the department. … Other organizations I’ve been in, people have been very defensive. It’s very collegial, very trusting, very strong supportive leadership in CTL [the Centre for Teaching and Learning]. … I work here because I love coming to work every day. It’s a very rich environment in which to work. (C1_6, curriculum consultant)

The other curriculum consultant also suggested that the institutional environment helped nurture a culture of peer review and capacity building for curriculum development among faculty members (C1_5).

Experiences

The institutional perspectives.

The comments made by the two administrators represent the institutional points of view. The quotes included in the sections of the Event and Generative Mechanisms above about the intentions of the process—meeting both external and internal expectations, and community engagement—also reflect the institutional perspectives.

In addition, when asked about the long-term impact of the new program development process, the senior administrator commented that the process, as part of the internal quality assurance processes, would lay a solid foundation for building quality academic programs at the college.
I think it could have nothing but positive impact because if we are paying attention during the development process to aligning our programs to the vision and mission of the organization, to aligning our programs to be responsive to industry, to aligning our programs to make sure that we are meeting ministry standards and guidelines, that can only support the delivery of the program at the program level when it actually gets implemented. … I think the impact is that it makes it a holistic cycle. It's not just a piece of quality assurance. You can't just, in my mind, cut part of it off and say, ‘Well, we just do this and that's it.’ It's the whole continuous loop of quality assurance and it's a piece of, but it's a building, it's a foundation piece to starting to build that for every program. They start out with a solid foundation. … I think because we are so thorough on how we do this. … A lot of those pieces are very done at upfront very thoughtfully. I think it sets the program up to launch successfully. (C1_3, senior administrator)

The departmental perspectives.

Two faculty members with expertise in business and computer science offered their insights from the departmental perspectives. One shared his experiences developing five business-related degree programs and two graduate certificate programs in 2011-2012 and the other discussed the experience developing a computer science-related program from 2010 to 2012.

The experiences developing the degree programs at the two academic units demonstrate somewhat different views on the two-phase approach associated with the college’s new program development process. One faculty member found that the two-phase approach worked well as it provided a scaffolding for new program development.

The separation of phases. It gives you a structure to work. It focuses on designing important things first. Everything in each phase guides you to refine and provide details in the subsequent phase. … The multi-phases work really well. Otherwise, I would find it extremely intimidating without this scaffolding. (C1_6, faculty member at the school of computer science, May 23, 2014)

The other faculty member felt that the two-phase approach required more work, thus prolonging the whole process; but he considered working in steps worthwhile.

I think internally developing the vision takes the longest and you spend two or three weeks on that and you finally get to a common vision. You got this one paragraph. How much do you achieve? Once you find it though and once you have that vision, everything else moves much more quickly because now you have a purpose, once you have the vision you have to work to. (C1_4, faculty member at the school of business, May 23, 2014)

The administrator at the teaching and learning centre also considered it critical to divide the process into two phases so that the vision, the research and all the consultations in Phase 1 laid a foundation for further program development in Phase 2. On the other hand, those who did
not see the value of investing in the time required for Phase 1 often became frustrated because the process was moving slower than they had expected (C1_1).

Both the interviewed faculty members shared that they had invited academics from universities to review their proposed programs when they were being developed. As a departmental strategy, the program team for proposed business programs deliberately sought ongoing feedback from the teaching and learning centre and other campus communities.

It’s an ongoing feedback. Actually I make sure that happens that way because I don’t want to go there [working in silo] unless I know we’re going to get through. It’s a waste of everybody’s time. If we don’t get enough feedback, we will ask for the feedback because sometimes these people are busy too and they may not have enough time. (C1_4, faculty member at the school of business)

The program team also made sure of addressing each of the recommendations from the external assessment panel while they were aware that they did not need to make every change as recommended.

Basically we wrote back saying these were the suggestions; these are the changes we made. Then we submitted it. … Personally I think you should address them all. It doesn’t mean you have to make all the changes but you should explain why you don’t make changes. I think that’d be the smart thing to do. I think we’ve always done that. They [PEQAB] don’t insist to make all the changes. I guess they could come back and say, ‘We really disagree with you with this.’ In which case, you’d probably make a change, but I’ve never really had that happen. It’s always been recommendations. You make your response. Then they go through with approval. (C1_4, faculty member at the school of business)

The two academic units were found to have different experiences developing degree programs when they tried to meet the PEQAB degree standards. For the proposed computer science program, addressing each component in the PEQAB degree-level standard was not considered difficult. For example, the computer science program team incorporated a capstone project for all students in their fourth year and an option of completing a thesis for graduation by taking the recommendations from university academics they had consulted so that they would fulfill the requirement of “research and scholarship” (C1_6). In comparison, the business program team felt some challenges in meeting the “research and scholarship” standard.

Actually we spent ages on those. What we would do is we have to demonstrate that our curriculum meets those standards. We spend a lot of time on that. They seem very rigorous. … That one, the research aspect, we have to really think about because the general college curriculum would not meet that standard. (C1_4, faculty member at the school of business)
Similarly, they found it challenging to address the requirement of “application of knowledge and professional capacity” in the degree standards but they managed to overcome the challenge in the end. Challenges in developing degree programs at a college were fully recognized as the program team felt they would need to spend more time and give more thought to the program design.

We had to [thinking more] because we’re moving in the new areas of education here. It’s one thing to think about the degree in business. The other thing is to think about in those terms. That’s really the whole point of diplomas versus degrees. That was our challenge. That’s why colleges have to go through this process because universities don’t. (C1_4, faculty member at the school of business)

Strong preference was expressed by one of the interviewed faculty members for combining the requirements from the college and those from the PEQAB to create one single set of documentation for developing a new degree program to save time and efforts. While noting the different emphases of the internal and external processes, he suggested giving priority to the PEQAB requirements in the report and complementing that with the additional information to meet the college’s needs.

PEQAB is more concerned about is it curriculum sound? Is it at degree level? It’s your capacity to deliver – is the faculty adequate? PEQAB worries more about the quality of the program and the faculty. [The college] also worries with that. [The college] also worries about economic viability and things like that’s filled in our budget. [The college] report maybe slants towards that part. I guess PEQAB is concerned not so much as economic revival. It’s just professionally sound I guess, academically sound. Why don’t just marry the two and make it complete? … PEQAB is a little bit, I would say, more rigorous, so why not do that in the first place? That’s what I’m getting at. … I’m suggesting that we do produce the PEQAB report. If there’s any additional internal information, it becomes like an add-on. The main document from PEQAB doesn’t have to be rewritten. There are some things that PEQAB does not require and we do require internally. … We could basically have two reports, PEQAB and internal, but no duplication. That’s what I’m getting at. We save some time and effort. (C1_4, faculty member at the school of business)

The individual perspectives and actions.

It was clear that the two interviewed faculty leaders understood the process in which their teams first took time to develop a cohesive critical performance statement and then translated that into a set of specific learning outcomes that were congruent with the statement. The value of first creating the critical performance statement to the new program was well recognized.

[If you don’t have the critical performance statement,] you’re not sure you’ve covered them all because you just have a brainstorming of learning outcomes. Then in the end, how do you know that you’ve met all the requirements. The critical performance statement allows you to test. Does this learning outcome contribute to the critical
performance? If it doesn’t, should we even have it there? Should we revise the critical performance statement? If we think it’s an important learning outcome, how come it’s not reflected in the critical performance statement? It makes you think. (C1_4, faculty member who led in developing business degree programs)

For one course, it [a critical performance statement] is a summary of the learning outcomes. It is one outcome that decides whether a student will pass or not. It guides us in evaluating students. It is an aggregation of all the learning outcomes and a distilled, precise and concise way to saying to the students what you must be able to do at the end of the course. The summative exam needs to be constructed in such a way to show that that is the case. For the program, you are trying to express in one sentence—what is the summary of the learning outcomes students have achieved. To me it is important. It is a traceability issue. The vision statement is a guideline. So is the critical performance statement. It speaks to tough decisions. It helps determine what to include and what not to include in the program. (C1_6, faculty member who led in developing a computer science degree program)

Both of the interviewed faculty members saw the value of the work of the PEQAB assessment panel and described their experiences with the external assessment as positive. At the same time, both expressed their wish to have the process shortened to improve the efficiency of the assessment.

They were extremely reasonable and extremely valid. Some seem to be personal preferences. There was nothing major. It was a guideline. … They were more of an advisory role. … It is a very useful process to have an external body to verify that a new degree has the quality. Their work is very valuable. But it needs efficiency. (C1_6, faculty member at the school of computer science)

I actually find the PEQAB assessment panels generally very constructive in their approach. They don’t come in with the attitude “We’re going to make this very difficult for you.” They come in with the attitude that their job is to help you improve it so that it becomes acceptable. That serves a very constructive approach I think. These suggestions come from the panel generally are suggestions that enhance the programs. … I think the PEQAB process is designed to help you get there. … I personally think it’s a good thing. It just takes too long but it’s a little bit outside of our control because we cannot really influence the PEQAB process. We can only influence what we do internally. You can move things along quickly internally and then you have to wait a whole year before the rest is done. That’s a little frustrating. … You lose probably a year because of the PEQAB assessment. If that could be shortened, that would be great. (C1_4, faculty member at the school of business)

One of the two interviewed curriculum consultants held a more critical view about the PEQAB quality assessment process as she believed that the working environment at a college was quite distinct from that at a university.

The one disconnect of course is that all of the PEQAB members are university faculty. It’s a different reality here. … The recommendation sometimes do not put the context
for which the curriculum is being delivered. Helpful but sometimes we’re not able to satisfy those recommendations because organizationally we’re different. The cultures of the institutions are different. … Absolutely of course comments are useful but they lack sometimes the specificity for the college environment. They don’t understand the workings of a college. … We don’t approach our work in the same way that faculty universities do. (C1_5, curriculum consultant)

Regarding the CVS process, different individuals were found to have different experiences and perceptions. The faculty member who led in the development of the business program felt little value in the CVS process whereas one of the curriculum consultants thought highly of the timely service provided by the OCQAS in credential validation. The different perspective of the curriculum consultant might be related to her professional role at the teaching and learning centre, which allowed her to work directly with the OCQAS staff members.

I don’t remember ever having any feedback that we had to make any changes. I think that’s more of a bureaucratic thing. PEQAB is a real assessment so that says a real assessment process with people appointed. If you write a program that already has learning outcomes, and it’s a non-university type program, it just goes straight to the Ministry. The few that I’ve been involved with, with business process management, project management, I think the approval goes internal. Once we finished that, it is just steps to go through but it seems just bureaucratic steps so there’s no real problem there. (C1_4, faculty member at the school of business)

Informally we will approach CVS and will say ‘We’re thinking of developing this new credential. What do you think about this?’ in the early stage. And it’s phenomenal. It works well because nobody wants to get to the end of a 2-year development cycle. … Their turnaround time is much quicker than PEQAB. (C1_5, curriculum consultant)

One of the interviewed curriculum consultants ascribed the challenges that faculty members had encountered in meeting part of the PEQAB degree standard to the fact that they were not familiar with the language used in the standard. Thus, she believed that curriculum consultants played an instrumental role in raising the awareness among faculty members about the system-wide EQA requirements.

It’s not easier or harder [to meet certain parts in the degree standards]. I think they [faculty members] lack the language. They’re not curriculum consultants. They don’t speak in these terms, right? That’s the difficulty for that, I think. It’s not that we can’t or we don’t know how. I never thought about the work that I was doing in this conceptual way. Again, that’s where the curriculum consultant comes in and provides the language and identifies the courses. I think this document is probably one of the more difficult ones to complete and is vetted by the folks at the center of teaching and learning. … I think what I brought to the team was the perspective of PEQAB. What I brought to the team was the perspective of the credential framework. The team was the subject matter experts but I was there to guide and provide an analysis of expectations and to ensure
that what was being created was aligned to the Ontario Qualifications Framework and PEQABs requirements. (C1_5, curriculum consultant)

Finally, the new program development process turned out to be a professional development opportunity for some faculty members. The faculty member who led in developing the computer science program commented that the new program development process had significantly impacted his own educational practice in a positive way.

Hugely. It made me have great appreciation for not only how the degrees are built but also how learning is structured and the importance of learning outcomes, and why they are there, how the evaluation plan needs to reflect the learning outcomes. It affects my teaching and instruction. Before, I looked at the course outline as a document. After this process, it gave me a lot of appreciation of what that document presents. It made me propose changes to existing courses. You understand how different courses are connected. (C1_4, faculty member at the school of computer science)

One of the interviewed curriculum consultants had been seconded from her own school to work at the teaching and learning for two years. She commented that the secondment model helped her appreciate the value of outcomes-based education to teaching and learning.

It [Outcomes-based education] was practiced here so course outlines were still written using outcomes-based language. … That’s where the secondment model is really useful because as a faculty member you step in and you’re exposed to something completely different and you’re better for it and your faculty position when you go back to your various school or faculty, right? You’re better for it because of positions you may hold within committees so different curriculum committees that you might sit on. (C1_5, curriculum consultant)

Connectivity between the Global and the Local

Faculty members’ tendency toward failing to see the whole picture of an academic program in their curriculum development process was pointed out by one of the interviewed curriculum consultants.

Throughout my whole career including 30 years in xxx [another province in Canada], your first meeting to talk about any new program, faculty members at the table start talking about courses. To the point some will even arrive at the meeting with courses prewritten because they just naturally, because they live in a world of courses. They’re teaching courses every day. They’re doing course outlines every day. They’re developing courses. They’re developing learning activities. Their world is courses. So when they come to the room, they want to talk courses. The big challenge you have as a curriculum consultant in any development process, not just in Ontario but I would suggest anywhere in the world or at least in North America, you have to find a way to draw faculty back from looking at courses to get them into an ideation mode, develop a vision as to what this program needs to be. (C1_2, curriculum consultant)
Perceived Impacts of the System-level Quality Assurance Mechanisms

The case of new program development process at College A illustrated the impacts of two system-wide EQA mechanisms—the CVS process administered by the OCQAS and the quality assessment process for proposed degree programs under the PEQAB framework.

The consultation with the CVS about program proposals began at an early stage of a new program development process. The feedback was provided to the college when the new program was in Phase 1 so that the feedback could be incorporated into the program proposal when it was further developed in Phase 2, as one of the curriculum consultants explained below about how a brand new program that did not have an existing provincial program standard had been developed when working with the CVS.

It’s not a formal submission. Xxx is the director of CVS. He’s very, very approachable. … We prefer to work closely with him on whether or not this is something that the Ministry will accept in advance of going ahead doing all this work. Of course we do our homework in advance. Probably the phase 1 stage we will send him the draft of the program learning outcomes using their template because they do have a template around, just ask for feedback and rationale as to why this is different than something else or why we’re making the case as to why we want to offer this. Then we definitely fold in his feedback or whoever else reviews in CVS. … We have more confidence in the process as well both internally and externally outside to say “You know what, this has been vetted, the case has been made.” It appears solid. … We have some confidence in putting it forward…. (C1_5, curriculum consultant)

When asked whether the PEQAB requirements had any impact on the development of new programs at the college, one of the interviewed faculty members commented affirmatively.

I am sure they did. The way that this whole process is laid out is impacted by PEQAB. It means to ensure you will have a successful outcome at the end of the process. The process influences the product. (C1_6, faculty member at the school of computer science)

The other interviewed faculty member commented that the transparency of the PEQAB standards and processes played a facilitative role in helping the PEQAB framework achieve its desired outcomes.

I think part of that is that we know the criteria. PEQAB tells you what your criteria are. PEQAB also shows you what the assessors will be looking for. Ultimately, it would be foolish to have something that would not make the assessors … You would make sure it does meet the standards. (C1_4, faculty member at the school of business)

The same faculty member suggested that both the program team and the assessment panel contributed to the quality of a proposed program; however, the contribution of the program team
was paramount while the assessment panel for the PEQAB quality assessment played a positive but secondary, complementary role.

They’re valid. They’re usually of a minor nature. They don’t necessarily affect the program in a big way but they do help make improvements. If you did your homework, there would never be anything major. No big surprises. There are always some issues. If these subject experts have been part of our team, they would have brought that to the table sooner. That’s why you do these things, these assessments. I wouldn’t say it changed the course of any program in a major way but it did help improve it in smaller areas. (C1_4, faculty member)

Developing degree programs at the college challenged the comfort zone of college faculty members as these programs were beyond the turf of academic programs a college typically offers and the proposed programs had to be raised to a level that could compete with similar programs offered by universities. To comply with the PEQAB degree standard, the program team was compelled to make greater efforts—“It goes further than we would normally go. Basically, it requires a revision of the way we teach the curriculum. No. It wasn’t a problem. It’s required a lot of thought” as one interviewee stated (C1_4). Specific changes were made to certain areas of the program curriculum to enhance students’ research skills.

Now we have built in research courses, but not just courses. We also have, within our curriculum, opportunities to do applied research so that students for example in first year degree, we spend a lot of time making sure students understand the concepts of research. We give them research assignments to move them away from [personal opinions]. First we try to teach them personal opinion doesn’t matter; everything you write has to be backed up with research. That’s very difficult concept. We start right in first year and we bring in the research librarian to do workshops. We start the process of APA citation etc. the whole process and methodology. We build it in our first year curriculum. Then we take it all the way through to scale it up, scaffold it up to bigger projects and bigger assignments. That was a challenge for us because that is really a change from the average college program. (C1_4, faculty member at the school of business)

The program team, along with the curriculum consultant, was diligent at developing programs that would be at the degree level. The quotes below reflected their considerations. Interestingly, these considerations did not seem to be driven by the PEQAB standards; rather, they reflected the independent thinking of the program team.

One of the big ongoing discussions throughout the process is, is this at degree level? As we develop each course, one of the fundamental questions we ask: is this at degree level? In our proposal document, there’s a whole section there on degree level that goes to PEQAB. When the assessors come in, that’s actually the biggest job the assessor has. They have to look at the program. They have to look at each course and determine: Are they written at degree level? Or do we just have a very long diploma course? Which we
failed desperately if it looks like just a longer diploma. … What are the objective measures we would use to determine that it is degree level versus diploma level? Unfortunately, we don’t have a black-and-white criteria that says yes or no. What we look at is, first of all, is this course addressing the appropriate foundational knowledge? Does it have the appropriate educational whole-person development content for this course? Are the outcomes written so that the outcome is not just skill-based, it’s not just learning how to do something but they are learning why they’re doing it and how they’re doing it within the context of the whole field of study and within the context of the society in which it’s going to operate? If we can answer yes to all those questions, that tells us we’ve got a degree level course. (C1_2, curriculum consultant)

It is also important to note that what was produced out of the new program development process was actually beyond what the PEQAB would require. The generated critical performance statement and in-depth learning assessment methods were not asked for by the PEQAB standards, as observed in the following quote.

PEQAB doesn’t care about critical performance. We don’t even submit that to them. In their form, they want the course topical outline before they want the course outcomes. Logically, I’d want to see the outcomes first and then see how the topics flow after the topics. They want to see what the evaluation plan is. The evaluation plan we present to PEQAB is pretty rudimentary. It basically talks about how many quizzes, tests, projects, presentations, exams there are going to be. … In the actual development process, before that can be written, the faculty members are thinking through and saying the learning has got to flow across this course. There needs to be an arc of learning within the course. What are the logical places? Just stop and take a snapshot as to how the learning is taking place. What kind of formative assessment do I need to be sure that the students are moving appropriately through the curriculum? What kind of summative assessments can we capture at what point in order that the whole evaluation course isn’t pass-fail in the exam at the end? What other things can we build into the course, into the evaluation and everything that helps support 21st century skills in terms of developing integration, context, teamwork and effective communication among the students as they grow and develop within the course? . (C1_2, curriculum consultant)

The evidence quoted above suggests that on one hand an important consideration for developing new degree programs was to satisfy PEQAB standards and the PEQAB assessment results guided some of the decisions in the program curriculum; on the other hand, the process itself was not driven by the PEQAB requirements. Rather, it was built upon the college’s strong self-motivation and autonomy in program development. While the PEQAB standards helped lift proposed degree programs to the degree level, they played a supportive but secondary role in the whole internal quality assurance process. Similarly, the CVS also supported proposed non-degree programs to be aligned with the credentials for which the programs intended to prepare their students.
Reflection and Summary

Data quality.

For this case study, although only six interviews were conducted, they represented a wide range of perspectives, including the institutional perspectives and the perspectives from academic units. The experiences developing new programs at the two academic units—one in business and the other in computer science—constituted contrasting cases. Their experiences, along with the observations made by two insightful curriculum consultants, illustrated how the OCQAS/CVS process and the PEQAB process affected the development of non-degree and degree programs at the college.

Mapping of a logic model.

The analysis for this case study has pointed to an EQA impact process that can be illustrated in Figure 23. The figure shows how the external EQA mechanisms—OCQAS/CVS and PEQAB—impacted the two-phase new program development process at College A. The process appeared to proceed as follows.

The degree-program quality assessment under the PEQAB framework and the CVS process under the OCQAS framework were external factors that affected the new program development process at College A.

The new program development process was a recent initiative that streamlined the previous four-stage one into a two-phase model. The intentions were to ensure that new programs would meet both the external requirements and the internal needs of the college, and to engage various college communities in developing new programs. The process was believed to lay a solid foundation for building quality academic programs for the college. These were the institutional perspectives.

The initiative was enabled by four factors: the institutional strategy to meet both provincial and college expectations; continuous support from the teaching and learning centre; home-grown practice of developing a critical performance statement before developing learning outcomes; and collegial institutional environment.

While working under the two-phase model, faculty members who led in developing new programs recognized the value of first creating the critical performance statement before developing the learning outcomes and building specific courses. They also saw the value of the PEQAB quality assessment but wondered whether the assessment process could be shortened
and became more efficient. Discrepancy was found regarding the perceptions about the CVS process between faculty members and curriculum consultants. Curriculum consultants played an instrumental role in bridging the knowledge gaps among faculty members about the EQA requirements. The new program development process turned out to be an opportunity for professional development for some faculty members.

Those individual perspectives and related actions somehow shaped some of the departmental perspectives. On one hand the scaffolding in the phase approach was recognized as a strength of the process; on the other hand, the phases prolonged the whole process, making some faculty members frustrated. Departmental strategies, such as consultation with university academics during the development stage and diligence in addressing the feedback from the PEQAB assessment panel, were established to ensure the success of the proposed programs. Departments also encountered challenges in meeting some of the PEQAB degree standards when striving hard to develop programs at the degree level. Suggestions were made to give priority to meeting the PEQAB reporting requirements while complementing with other components for the college needs.

The CVS and PEQAB processes impacted the new program development process in different ways. Consultations with the CVS for non-degree programs happened at the early stage of the process. While the PEQAB requirements guided some decision-making in the process of developing degree programs, the new program development at College A was based upon its own strong self-motivation and autonomy. Thus, the PEQAB and CVS processes both played a supportive role for the curriculum development of new academic programs within academic units.

A logical chain of evidence.

Drawing upon the interview data, a logical chain of evidence can be built and presented in Figure 24.

The figure begins by showing that both the external requirements from the PEQAB and the OCQAS/CVS and the factors from inside College A—institutional intentions and strategies, the home-grown practice of using critical performance statements in developing new programs, and the continuous support from the College’s teaching and learning centre—enabled the two-phase new program development process.
In response to the initiative, individual faculty members affirmed the value of the critical performance statements, but they had mixed comments on the PEQAB assessment and their perceptions about the CVS varied. These individual perspectives affected how their departments experienced and responded to the institutional initiative. They developed certain departmental strategies to cope with the external and internal needs. They also encountered some challenges in meeting some of the PEQAB degree standards.

In this whole process, the institutional strategies and faculty autonomy were found to be the primary factor to determine the curriculum development of academic programs at the college whereas the PEQA and the OCQAS/CVS processes played a supportive role in enhancing the quality of proposed programs.
Generative Mechanisms
- Institutional strategy;
- Continuous support from teaching and learning centre;
- Home-grown practice of developing critical performance (CP) statement;
- Collegial institutional environment

The Event/The Institutional Perspectives
New program development process
- Intentions of the process;
- Perceived long-term impact

The Individual Perspectives
- Affirmed the value of CP statements;
- Mixed comments on PEQAB assessment;
- Varying perceptions about CVS;
- Instrumental role of curriculum consultants;
- New program development process as a professional development opportunity

Figure 23. EQA impact process for Case 1 at College A
Institutional intentions & strategies;
Home-grown practice of using CP statements;
Support from the teaching and learning centre

New program development process

Experiences with the two-phase approach;
Departmental strategies;
Challenges encountered in meeting some of PEQAB degree standards

Affirmed the value of CP statements;
Mixed comments on PEQAB assessment;
Varying perceptions about CVS

College A

Departments

Individuals

Figure 24. A logical chain of evidence for Case 1 at College A
Case 2 at College B

Nine individual interviews, along with six institutional documents, were collected and analyzed to inform the findings about this case study. Among the nine interview participants, three were faculty members and six were administrators, including three working at the teaching and learning centre of the college. All the interviews were conducted in October to November 2013. The reviewed institutional documents include the program review process handbook and institutional policy documents.

The Institutional Context

College B is one of Ontario’s largest colleges and enrolled 17,000 full-time students and 26,000 part-time students in the 2012-2013 academic year. In the 2013-14 fiscal year, 23 program reviews were completed at the college according to its annual report 2013-14.

The Event: The Program Review Process

The program review process was one of the major internal quality assurance mechanisms at College B. The process had eight events on a five-year cycle. It was a major revamp after the first PQAPA review in 2008. The eight-event model was introduced in 2010, with some minor adjustments made in each year after that.

The eight events of the process were as follows.

1. Program identified for formal review
2. Process orientation meeting
3. Program mapping
4. Review of program data and internal assessment report
5. External focus group meeting
6. Final report creation
7. Presentation of report to the governing body
8. Action and follow-up

Basically, around February 1, all the leaders of local academic units—school chairs and faculty deans that would be involved in program reviews for the upcoming academic year were notified. In September, a curriculum consultant was assigned to each of the reviews and met the program team for the process orientation. The curriculum consultation showed the relevant program standards to the program team, including those that were not published by the MTCU. In Step 3, all faculty members teaching in the program were invited to attend a curriculum
mapping meeting where conversations took place to ensure that their course learning outcomes were connected to the program learning outcomes. A course information sheet was used to facilitate the mapping process, asking faculty members to identify whether their courses were at the introductory, intermediate or advanced level that would support the program’s vocational outcomes and essential employability skills. A newly added piece was evaluation mapping. In Event 4, all the completed program maps, along with program standards and program review data such as applications and key performance indicators, were assembled for an internal assessment report. A template which embedded the PQAPA requirements was made available for use. At the end of the report, the program stakeholders were asked to identify key areas of the program for improvement within the next five years. If it was not completely clear about what to expect in the next five years, the program could also work on Event 5—consultation with external community partners, including employers and alumni. When Events 4 and 5 were completed, the identified issues and recommendations from the internal and external consultations were then brought together into one final report in Event 6. The final report included a list of priorities drawn from the internal and external recommendations. The report was then signed by the program chair and the school dean before proceeding to the college’s board of governors. Event 7 was to present the report to the governing body. The first seven events would typically take approximately ten months to complete. A year after that, the program would be followed up and asked for an update about the actions taken in the past year. A more detailed description of the program review process was included in my report to HEQCO (Liu, 2015a).

Compared with the program review process used before at the college, the eight-event model deliberately provided clearer instructions, made some questions easier to answer by changing the format from asking for narrative responses to yes/no questions, and gave greater attention to the voices of faculty members. Interviewees found that the process became more streamlined and the events were further articulated (C2_9), and that it was more in-depth and more data-based (C2_3), therefore demanding more time commitment (C2_4). Previously, program review was housed in each school and very much decentralized; after the overhaul, program reviews were centrally administered by the teaching and learning centre of the college (C2_2). As a result of the revamped model, College B met all six PQAPA criteria in the 2013 review.
Generative Mechanisms

The support of institutional policies for program reviews, a central office overseeing and supporting the review process, and the system-wide PQAPA process and requirements were found to enable the development and implementation of the program review process at College B.

A strength of the process was that it was well-supported by institutional policies—academic and board policies, according to the interviewed senior college administrator (C2_1). Three academic policies supporting the program reviews were mentioned: content of college programs, formal review of college programs, and program review process and benchmarks. A board policy entitled “College Programming” stated that the President of the college “shall not fail to ensure that all programming is consistent with the Ministry of Training, Colleges and Universities requirements and the Minister’s Binding Policy Directive, Framework for Program of Instruction,” indicating a strong commitment of college programs to the Ministry’s requirements. In another board policy “Commitment to Quality”, continuous improvement was phrased as a goal for the quality work of the college.

The whole program review process was overseen by the college’s teaching and learning centre. An important mandate of the centre was being “responsible for providing coordination and support for each formal program review,” according to the academic policy “Formal Review of College Programs.” Due to this mandate, the nature of the teaching and learning centre was distinctive, as the interviewed senior administrator pointed out below. It was also mentioned that the faculty development function resided in another office at the college.

Policies are one thing; a college needs right people to operationalize it. Xxx [the director of the teaching and learning centre] is very good at putting details into the big picture. It is important to set up a right team with a singular focus on quality assurance. Most colleges don’t have a centralized quality assurance office like the xxx [the name of the centre]. It’s different from teaching and learning centres that exist in many colleges. (C2_1, senior administrator, October 17, 2013)

The importance of the teaching and learning centre to program reviews was also echoed by a program coordinator and a school chair.

You are linked up with a curriculum consultant in xxx [the teaching and learning centre] who helps you along the way. But I felt with the other process [the previous review

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8 The actual title of the office is not used to protect its identity; instead, the office is generally referred to as a teaching and learning centre.
process] I was sort of “here’s the document, good luck.” (C2_3, program coordinator, November 4, 2013)

Without the superb assistance of the xxx [teaching and learning centre] people, it might be a little more difficult. … They [academic programs] get a lot of support if they’re confused. I’ve not heard any complaints or concerns at all about the difficulty of that process [curriculum mapping]. They’ve all completed it and they’re all done fine. (C2_5, school chair, November 13, 2013)

In addition to helping with curriculum mapping, the curriculum consultant also provided advice on what quality assurance requirements an academic program would have to meet, as a staff member at the teaching and learning centre shared.

That's [to specify published or unpublished learning outcomes] kind of our job as a curriculum consultant. We do that homework before we meet with the coordinator in Event Two so that everybody is on the same page. Coordinators don't know the difference often times between a published or unpublished. So again, that's the education piece that we have to share with them. (C2_2, teaching and learning centre staff member, October 17, 2013)

Last but not the least, the PQAPA process was an extrinsic motivator. The five-year program review cycle was required by the PQAPA under the OCQAS framework. When asked about what factors had shaped the process, one staff member at the teaching and learning centre explained that PQAPA requirements were an important consideration.

Obviously the PQAPA did [shape the review process]. I carry this [PQAPA manual] with me all the time. There is a balance between or amongst Ministry requirements, college requirements and stakeholders. I think that those three elements had to be embraced within the program review process and I think that our current model has done a very good job of that. (C2_2, teaching and learning centre staff member)

Experiences

The institutional perspectives.

The comments made by the interviewed senior administrator, as well as two staff members and a curriculum consultant at the teaching and learning centre, informed the institutional perspectives on the program review process.

No procedural difference was deliberately made between accredited and unaccredited programs except that the accredited programs ideally would start the program review process two years before the accreditation review so that the institutional program review could serve as preparatory work for the accreditation review.

The process is the same. The complication comes in is that there’s more work for accredited programs outside the program review process because they still have to do all the work to prepare for the accreditation. However, if they go through the program
review before the accreditation that completes part of their accreditation requirements so it does make it easier but they still have that additional work. We would maybe do some look around the competencies but the program review process is ministry-driven so we still focus on the ministry learning outcomes as part of the program standard for what they’re going to need. (C2_6, staff member at the teaching and learning centre, November 13, 2013)

The program reviews were also found to have brought benefits to students as the recommendations, when implemented, helped enhance student learning experiences and such quality indicators as enrolment, student satisfaction and facilities (C2_6, C2_8). One of the interviewed staff members at the teaching and learning centre provided a couple of examples.

There’s been extreme benefits not only to the students, but even things like in the first year of our program review, an experiential learning opportunity was given to the fresh merchandizing students. They opened their own store on campus. That came from a program review. … It benefited the students and the college in a way. Sometimes external partners when we’re meeting with them, they will bring to our attention that perhaps, an example would be – there was a program using drafting tables. They don’t use drafting tables in the real world. So it wasn’t productive for our students to be using drafting tables in the classroom. So that changed. It also has given a very positive experience in that I think our graduates are getting more jobs because we’re making a better connection with the community than we did before as well. … It’s really wonderful when not hearing each other’s conversations, if the external panel comes up with similar recommendations to the internal panel, it reinforces that this is something that should happen. (C2_6, staff member at the teaching and learning centre)

The interviewed curriculum consultant believed that the program review process would contribute to enhancing quality of academic programs as the gaps such as the teaching hours, equipment needs and student enrolment and satisfaction were filled as a result (C2_8).

The major identified challenges were to obtain faculty buy-in in terms of the value of the reviews and to meet the deadlines in some cases (C2_6, C2_8).

It’s challenging to sometimes the buy-in. When you’re working with a program, that team may not think it’s a worthwhile process so they may fight it the entire time, that’s really hard. Or if they aren’t very organized and they don’t get things to us on time, it interferes with other program reviews because they didn’t finish what they needed to do. It’s stressful that way. (C2_6, staff member at the teaching and learning centre)

It was also shared that the initial resistance against the process had gradually receded over time.

Because we're into our fifth year of doing it in this model, there is less resistance to do it. I think that people initially thought that it was a lot of work and it is still a lot of work. But I believe that when they finish, they're very satisfied with the process and the value that's been added to their program and the support that we give them in that process. (C2_2, staff member at the teaching and learning centre)
The departmental perspectives.

Five individuals from the healthcare-related faculty of the college contributed to the understandings of the perspectives of local academic units. Three were faculty members / program coordinators from two different programs—Programs A and B. The other two each played a leadership role at the school and faculty level. Both of the two programs were subject to certain accreditation requirements in addition to the province-wide EQA requirements. At the time of the data collection, Program A was right in the middle of its college-mandated program review process whereas Program B had completed the program review the year before. Three themes emerged from the comments made by these interviewees: difference in perceived importance of college-mandated program reviews to accredited versus unaccredited programs, benefits of the programs reviews, and challenges encountered in the review process.

Ideally, for accredited programs, a college program review would be scheduled two years before the accreditation review to allow one year for the review and one year to implement recommendations and action plans from the review (C2_9).

At Program A, on one hand it was recognized that both review processes were important and both ensured that the program would continually analyze itself so that the program would keep up with current practices; on the other hand, it was also admitted that the review for the accreditation purpose was more critical to the program and the program had to take recommendations from the accreditation body more seriously (C2_4). The program used the college review as evidence for accreditation. For the accreditation review, the program was required to conduct program mapping, and collect and analyze program data on an annual basis. Thus the program team was more accustomed to these tasks than programs not subject to accreditation requirements. For unaccredited programs, as the interviewee kept saying, these tasks might be new and thus would benefit more from the college’s program review process.

At Program B, the college-mandated program review and the accreditation review took place concurrently. The two interviewed faculty members both suggested that if the college program review had been conducted one year before the accreditation review, it would be more beneficial for the accreditation review as a lot of program information could have been made available and some changes could have been implemented in time (C2_3). As the college program review had a focus on the curriculum, the review results could feed into the curriculum-related component in the accreditation review (C2_3). Due to accreditation, the program had to
map its courses to two accreditation-related competency requirements in addition to mapping to the provincial program standards. Compared with the mapping for accreditation purposes, the mapping exercise for the college program review was found much easier (C2_3), with an assumption that once the accreditation standards had been met, there would be no problem with meeting the requirements of the program standards (C2_7). Faculty members also taught their courses based on the learning outcomes specified in accreditation standards, which were considered more important than the provincial program standards (C2_7). Accreditation review was believed to exert greater impact on the program than the college program review; however, the college review provided groundwork support for the accreditation review.

Definitely this [the accreditation requirements have a greater impact on the program] because if I don’t meet all of these standards, I don’t have my accreditation. If I don’t meet everything here [the program review process], I can continue to work on it. But the two are tied. The work that I do here is definitely the basis upon I built the self-study and the basis upon which I continue to ensure that the program accredited. (C2_3, program coordinator and faculty member of Program B, November 4, 2013)

Interviewees from both Programs A and B concurred that the college program review process was probably more valuable for programs that did not have accreditation requirements to meet (C2_7, C2_4). Despite this, the college program review process remained valuable to accredited programs as it helped the programs prepare for accreditation.

For the programs that are accredited, the faculty feedback is that they find that having undertaken the program review prior to an accreditation makes them much more prepared. They are finding it very, very useful so that they go into their accreditation reviews with a lot of the work already done and they feel much more confident going into it. They aren’t seeing it as a duplication; they’re seeing it actually as a very valuable addition that helps prepare them. (C2_5, school chair)

In the eyes of the interviewed faculty dean, the college program reviews were of “utmost importance” and added “extra level of value” to unaccredited programs as those reviews represented “the only calibration point” (C2_9). He also pointed out that accredited bodies greatly appreciated the existence of the college-mandated program review process, which provided them with a higher level of trust and assurance in accredited programs.

The other piece of this that I should state is in both of the previous visits from the accrediting bodies when they were here, they took a great comfort in the fact that we have this process in place. [They] look at from multiple lenses, from the curriculum standpoint and the program meeting industry needs, I think an accredited program has those frameworks in place, but this process [college program review] is of immense value in being seen as having the quality mechanisms to give the accrediting body’s assurance that the program is not going to go down this direction and then over here,
because we built that into our processes within the college. From that perspective, it’s immense value to have that. (C2_9, faculty dean, November 20, 2013)

The program review process was believed to have garnered several benefits—“There are very practical, really positive, practical benefits from the process” as the school chair (C2_5) commended. A major one was that changes occurred as a result of the review. A few incidents were mentioned as examples, including strengthening the mathematics component in the program and updating equipment (C2_3, C2_5). The review process also provided a venue for faculty members to engage in conversations. As the interviewed school chair observed, “some may have had some disagreements with other faculty about what the curriculum should look like and they see this as a way for the issues to be open and to reach resolution and consensus about what to change in the curriculum” (C2_5). As another benefit, the review provided opportunities for the program to liaison with and learn from external communities. One of the interviewed program coordinators explained how changes had happened as below.

I think because what it does is it formalizes it. It puts it in writing what is actually happening … When it’s formalized, there’s the action plan. All of a sudden you are saying, “This is a recommendation that we are making, now we must be accountable to that.” And just placing it on paper like you would do with any goal setting for instance, it makes it real. (C2_3, faculty member and program coordinator)

Major common challenges identified included workload, time management, and, in some cases, getting enough participants in an external focus group. One faculty member shared the following about how she had felt about the time pressure.

It's quite a schedule. It was wonderfully laid out. There was no problem with the understanding of what the process was. That was beautifully laid out with the steps and the timing. I understand it completely. It's just the deadlines just creep up very quickly when you're busy teaching and all of other stuff. (C2_7, faculty member)

The individual perspectives and actions.

Perspectives of individual faculty members and administrators regarding the program review process emerged from the interviews.

A common theme in the comments made by the three interviewed administrators—one at the college level, one at the faculty level, and another at the school level—was their strong support for the program review process. For the administrator at the college level, the outcomes-based approach embedded in the program review process worked very well for colleges in general as he stated that “The outcomes approach works incredibly well for colleges. It sets up specific objectives for a college to reach. It is a strength of the college system” (C2_1, senior
administrator). His support for the outcomes-based approach did not come from his academic background but was drawn upon his practical experiences in industry. The interviewed faculty dean ascribed multiple benefits to the program review process.

There’s many prongs to it. Probably at the highest level, it ensures that our programs are being reviewed, that there’s internal and external lenses on our programs, and we’re having a very collaborative, consultative process to get feedback on our programs. That absolutely is for the right reasons. It ensures that there is a quality aspect to it. I think as you drill down, there’s other benefits that ripple from that, especially for the program team and the program itself. … It’s actually an opportunity for the program team to validate and get affirmations on what they’re teaching and what they’re doing in the program. … It also allows the recommendations for continuous improvement in the program. (C2_9, faculty dean)

The interviewed school chair expressed her heartfelt support for the college’s program review process.

I can say, without any doubt, it’s an absolutely wonderful and splendid program. I see improvements, every single thing. It’s actually been better than my expectations. They’ve been wonderful. They’ve been a wonderful opportunity to raise issues and to get really good dialogue within the faculty about what we should be teaching, what we need to do better. It’s also been excellent feedback from the community to faculty that we’ve been able to incorporate into recommendations and we’re working on now. I have nothing but praise for the process. I’m involved in a lot of different quality assurance activities … This process I heartily support. The way it is structured, it’s excellent. (C2_5, school chair)

Another shared theme was the desire for continuous quality improvement, which was voiced by faculty members and administrators. The program coordinator of Program B made a recommendation that an annual report mechanism be in place to improve the existing program review process.

It’s a nice stepped process. … There is a one year report that has to be done and hopefully we can continue to do yearly reports. My recommendation is that we do that yearly report on the program review. That way you don’t get too complacent. You are constantly reviewing your program, thinking about your program. You are thinking big picture, instead always what you are teaching that day. It just puts you in a different mindset. That was my one recommendation. The whole process helps but that hopefully you are not just reviewing one year and then not doing anything for four more years before you are up for program review again. (C2_3, program coordinator and faculty member)

The interviewed faculty member at Program B emphasized that the key to the program review process was getting the recommendations implemented in time.
The process is great. It really elicits the information that's important. I really think the only benefit to our program is if we see at the end of the day that those recommendations are implemented. That's the key for me. (C2_7, faculty member)

In the opinion of the interviewed faculty dean, leadership at the school and faculty levels played an instrumental role to translating the accountability-driven process into one supporting continuous quality improvement.

It [PQAPA] certainly is there and it did drive this. But it’s up to really the dean and the chair to bring this into a localized environment and look at quality improvement as opposed to a big quality process that is really around accountability and a series of process steps. (C2_9, faculty dean)

In addition, challenges to individuals were mainly concerned with organization and time management.

I just couldn't make certain deadlines for certain activities. I didn't feel like I was being overly pressured to make the deadline. It was just the sure amount of work that had to be done at the end of the day was quite overwhelming. (C2_7, faculty member)

Our team, sometimes there’s challenges because we have one process but we have eight curriculum consultants and they may not do it the same way as somebody else, sometimes I find that stressful. They still get it done properly and it’s still done, but sometimes the way that they go about it is just maybe not – I’m very organized and not everybody is that organized. (C2_6, staff member at the teaching and learning centre)

Finally, regarding the outcomes-based approach, even though the senior college administrator commented that it “is a strength of the college system” (C2_1), not all the individuals were familiar with the outcomes standards or actively using the outcomes-based approach in their teaching practice. Individual variations were observed by staff members and curriculum consultants working at the teaching and learning centre.

Some have never seen the outcomes before, which happens, so it’s educational for them, so they – it’s sometimes hard for them to think that way. They think that they know the subject, the course that they’re teaching. And it doesn’t need to be part of the bigger, they aren’t considering their course in conjunction with how it works with all of the other courses taught in the program. (C2_6, staff member at the teaching and learning centre)

Many of them are aware of the existence of the learning outcomes in the provincial Program Standards and the competencies required by accreditation criteria. However, in their teaching practice, there is a disconnect between those learning outcomes or competencies, and teaching /assessment methods. They often pay more attention to what they need to cover in the course and forget about those learning goals. (C2_8, curriculum consultant)
Perceived Impacts of the System-level Quality Assurance Mechanisms

The program review process involved two system-level external quality assurance mechanisms: the PQAPA process under the OCQAS framework and the provincial program standards. Both were found to have exerted significant impacts on program reviews at College B.

The eight-event program review process was a result from the first PQAPA review in 2008, when the necessity to modify the college’s review process was identified. After the administration of a pilot process, the eight-event process took shape in 2010 (C2_2). As such, the PQAPA requirements were an important consideration for designing the program review process. This connection was well recognized by staff members of the teaching and learning centre (C2_2, C2_6) as well as the interviewed school chair (C2_5). The interviewed faculty dean also agreed that the program review process was a direct response to the PQAPA requirements in order to be held accountable to the system; this is the accountability aspect of the program review process (C2_9).

Indeed, the review process was intentionally aligned with the PQAPA requirements. One staff member at the teaching and learning centre made the following comments on the alignment.

When I look at PQAPA requirements, even before the 2008 requirements, it was almost like we were following them, I could see the alignment and I could see why they did this, why they chose this process. I was a part of creating this process, but I could totally understand the alignment. (C2_6, staff member at the teaching and learning centre)

As part of the alignment efforts, a template was created to embed the requirements into the internal assessment report

What I wanted to do is to create a tool that embedded the PQAPA requirements in it and I wanted to do that for the whole review process, predominantly because I didn't want to go to all of these programs and Chairs and Deans in the fourth year leading up to our next audit and say ‘Tell me everything that you've been doing that meets all of this criteria for the last four years.’ I didn't think that was really fair. We modified the internal assessment report to look like this. … They're a little bit less narrative than the previous version, some yes/no's and then the opportunity to explain. We have taken prompts from the PQAPA criteria and their sub-requirements and embedded it into these checklists. (C2_2, staff member at the teaching and learning centre)

On the other hand, it is important to note is that PQAPA requirements were not the only factor that had shaped the program review process, as the interviewed senior administrator explained.

The program review process is informed by various stakeholders—PQAPA, accreditation criteria, program standards, and recommendations from the Advisory Committee. However, the program review process is aligned with PQAPA and PQAPA

provides a guideline that connects what the college is doing. When PQAPA is in place, the college does not have to rely on what particular faculty members have said. The PQAPA helps the college ask right questions in the review. (C2_1, senior administrator)

Further, the whole review process was concerned about not only accountability but continuous improvement, as the interviewed faculty dean explained.

When we talk about this whole process is that it’s less about PQAPA, ministry requirements, policy. Those are all there. I understand it. But that’s more for deans and directors to worry about. When we’re looking at a program and engaging our faculty and our community of partners, the focus really has to be on continuous improvement. (C2_9, faculty dean)

Regarding provincial program standards, several points can be drawn from the interview data. First, at College B, there was a clear distinction of published versus unpublished program standards in the program review process. Part of the curriculum consultant’s task was to make those published and unpublished program standards available to programs under review.

A published standard is reviewed provincially, driven by the Ministry. The document has the program vocational learning outcomes with the associated elements of performance for each of the outcomes, the GenEd [general education] description and the essential employability skills. The unpublished typically will have one- to two-page description of what the program is, a list of program outcomes. There will be no elements of performance and there might be admission details included as well, but it's not on the MTCU website, it's on the CAAT website and so not visible to the general public. As a curriculum consultant we have access to that and we can pull those. … There are programs though that have been unpublished for years and years, but sometimes they're called one-offs if you want to refer to them in that way, where they’re the only program in the province that runs that program so there is less impetus to make them a published standard. (C2_2, staff member at the teaching and learning centre)

Second, college programs were committed to the alignment with the provincial program standards; therefore their program mapping was believed to be “entirely based on the requirement from the Ministry” (C2_6) and “the standards are governing” the formal review processes (C2_9). However, the impact of the provincial program standards was found to differ for accredited and unaccredited programs as the accreditation requirements were considered more specific to accredited programs, as one of the interviewed program coordinators commented. Thus, the impact of the program standards on accredited programs seemed to be mediated by their accreditation requirements.

The provincial ones [program standards] are easy to meet because they are very, very broad. It’s not typically an issue for us because for us. It’s much more defined and broken down in terms of a national competency profile. When we, If we meet the
national competency profile, we’ve easily met the provincial standards. (C2_4, program coordinator)

Third, it was critical to keep program standards current and updated as outdated standards would have less impact on college programs, as emphasized by the interviewed faculty dean.

Some programs have a very good set of program standards of learning outcomes that have been published and have been recently reviewed. If that’s the situation—that you’ve got up-to-date, recently reviewed program standards, that still meet the needs of the industry and the outcomes of the program, then I think when that’s in place, the mapping is a highly critical component to the process. … I think it’s really important with that in terms of transferability, in terms of recognition by the industry. I think it actually raises the profile of credentials in the college system. … It’s like the North Star. It gives you a direction for the program, and it’s a recalibration tool. … In other cases, we have standards that are highly outdated, so standards and industries that have undergone significant change. The vocational learning outcomes just don’t hit the mark anymore. I find those then the mapping exercises are much less value. However, it still drives the conversation. … We have those conversations. I think it’s all still healthy and good dialogue, but the process itself is flawed if the standards are outdated. (C2_9, faculty dean)

Fourth, the impact of provincial program standards on faculty members’ teaching practice was reinforced by the program review process, which provided an educational opportunity for individual instructors to learn about the program standards and the outcomes-based approach behind them. This was observed by an interviewed staff member and a curriculum consultant at the teaching and learning centre.

At the program coordinator level they do know what their outcomes are or they’re aware that there are outcomes. I’d say there’s a very small portion of people that aren’t using them properly. But now that we’re doing program reviews, that’s being corrected. But before they weren’t mapping their programs, they weren’t acknowledging the outcomes. (C2_6, staff member at the teaching and learning centre)

The program review process helps faculty members understand the link between learning outcomes and their teaching practices. So it may provide a mechanism to build the link between the learning outcomes and faculty’s teaching practice. The process itself is educational. (C2_8, curriculum consultant)

Finally, the Ministry’s program standards were important but constituted one of the factors that had shaped college programming. Like the PQAPA requirements, the college was trying to balance the program standards and the needs of the community and industry to fulfill its mandate.

If we become so focused on the standards and not considering all the other elements around it, I think we might miss some of the changes that are needed to support the
community, the sectors, the industry. At the same time, we can’t do all that and lose the standards. It’s trying to find that balance. (C2_9, faculty dean)

In summary, it can be argued that both PQAPA requirements and provincial program standards were highly important considerations for program reviews at College B. However, they were not the sole factors that had shaped the program review process; rather, they interacted with other needs of the college programs. In addition, for programs subject to accreditation requirements, the college’s internal program reviews were generally considered to be less critical than accreditation reviews. This suggests that the impacts of PQAPA requirements and provincial program standards on accredited programs appeared to be mediated by accreditation standards.

Reflection and Summary

Data quality.

A total of nine individuals were interviewed for this case study: one senior administrator, three working at the college’s teaching and learning centre, and five from the healthcare-related faculty, including three faculty members/program coordinators from two programs at different stages of program reviews. Triangulation was applied to these data to identify themes for this case study.

The healthcare-related faculty was one of the academic divisions of the college. It consisted of multiple schools, with which various programs were affiliated. Focusing on one faculty allowed the study to probe into the perspectives of faculty members as well as those of the administrators at both the school and faculty levels. However, it missed the opportunity to learn about how other divisions were doing in terms of program reviews.

The interview data reflected the perspectives of two programs subject to external accreditation in addition to the college’s internal program reviews. This was appropriate due to the emphasis placed by the college on coordinating the college-mandated program review and accreditation-required review processes. Nevertheless, the study failed to obtain the first-hand information about how programs not being subject to accreditation standards coped with the program review process and how they understood the importance of the external requirements from the PQAPA and provincial program standards to their programs. This information was only obtained indirectly from the observations shared by the coordinators and faculty members of the two accredited programs under the healthcare-related faculty.
Mapping of a logic model.

The main findings from the study of the program review process at College B, when put together, support a relational diagram as illustrated in Figure 24. The logic model demonstrates the following EQA process at the college.

The curricula of certificate and diploma programs offered at College B were subject to two system-wide EQA requirements—the PQAPA criteria and the Ministry’s provincial program standards. The PQAPA process constituted one of the factors that enabled the college’s eight-event program review process, the one revamped after its 2008 PQAPA review.

In addition, internal enablers for the program review process included the support of institutional policies for program reviews and the presence of a central office overseeing and supporting the program review process. These factors were identified as the generative mechanisms for the college initiative.

On the institutional level, the benefits of the program review process to students and academic programs were seen, and major challenges such as obtaining faculty buy-in and meeting deadlines were been identified. No deliberate distinction was made in the eight-event program review process for programs whether they were subject to external accreditation or not.

In response to the college initiative, on the individual level, the program review process received strong support from administrators at different levels, as suggested by the interviews with a senior college administrator, a school chair and a faculty dean. Individual faculty members and administrators expressed their desire for continuous quality improvement as a result of the program reviews. The review process also posed challenges in terms of organization and time management for some individuals. Variations were found among individuals regarding the use of the outcomes-based approach. These individual perspectives and actions were likely to affect some of the departmental perspectives.

In response to the college initiative, departments and programs recognized some benefits of program reviews, which included changes brought about by the review process and engaging faculty members in conversations. They also encountered challenges that were mainly concerned with workload and time management. In addition, they found that the college-mandated reviews, although valuable for all programs, were at different levels of importance to accredited versus unaccredited programs.
Overall, the two system-level EQA mechanisms—the PQAPA process under the OCQAS framework and the provincial program standards—were highly important considerations for creating and implementing the program review process at College B. However, it was also recognized that the whole review process was not only concerned about accountability but about continuous improvement. In addition, the impacts of those system-wide mechanisms on accredited programs appeared to be mediated by their accreditation standards.

A logical chain of evidence.

The analysis of the interview data supported a logical chain of evidence, shown in Figure 26. The figure demonstrates that the external requirements from the OCQAS/PQAPA criteria and provincial program standards as well as the internal quality assurance mechanisms, including the support of institutional policies and the presence of a central office overseeing and supporting program reviews, enabled the eight-event program review process at College B.

In response to the initiative, administrators at various levels expressed strong support. Desire for continuous improvement was heard from both faculty members and administrators. In the meantime, the program review process posed challenges for some individuals in terms of organization and time management.

These individual perspectives and actions also affected how departments and programs responded to the college initiative. On one hand, they recognized benefits of the initiative to academic programs; and on other hand, they also encountered challenges mainly related to increased workload for faculty members as a result of the program reviews.

This logical chain shows that the PQAPA criteria and provincial program standards were highly important considerations for the program review process at College B. It is also important to note that for some of the college programs that were subject to external accreditation standards in addition to the college’s internal review, the relevant accreditation standards appeared to mediate the impact of the system-wide requirements on those programs in the program review process.
**OCQAS/PQAPA & Program Standards**

**Generative Mechanisms**
- PQAPA process and requirements;
- Support of institutional policies;
- A central office for program reviews.

**The Event/The Institutional Perspectives**

**Program review process**
- No deliberate distinction made between accredited and unaccredited programs;
- Recognized benefits to students and programs;
- Identified challenges.

**The Departmental Perspectives**
- Benefits to programs;
- Challenges encountered;
- Difference in perceived importance to accredited and unaccredited programs.

**The Individual Perspectives**
- Strong support from administrators at various levels;
- Desire for continuous improvement;
- Challenges for individuals;
- Individual variations in using the outcomes-based approach.

**Individual Actions**

*Figure 25. EQA impact process for Case 2 at College B*
Figure 26. A logical chain of evidence for Case 2 at College B
Case 3 at College C

For the study of Case 3 at College C, eleven individuals were interviewed, including five administrators and six faculty members from different programs at three schools. The interviews were conducted during the period of March 7 to May 5, 2014. Four institutional documents, along with information publically available on the institutional website, were reviewed to supplement the interview data.

The Institutional Context

College C is located in rural areas in Ontario and had an enrolment of 10,000 full-time students in the academic year 2013-14 according to its 2013-14 annual report.

The Event and the Institutional Perspective: Curriculum Mapping Process

At College C, curriculum mapping was part of the six-year program review cycle. As shown in Figure 27, the formal program review occurred in Year 6, when the reviewed program prepared a self-study report and was evaluated by external reviewers, and developed a list of action items for program improvement. The program was expected to implement those action items within two years after the formal program review, and prepare a “program report” to ensure that the program stayed on track in Year 3. Curriculum mapping took place in Year 4. It was actually a re-mapping process to refine the curriculum as the initial mapping was done when the program first started. Year 5 allowed for curriculum modifications identified from the mapping to be implemented before the cycle began again in Year 6. Each year of the cycle was intended to provide an opportunity for continuous improvement of the program. Continuous improvement was considered to be the main purpose of the program review cycle even though accountability was embedded in the process, according to the staff member responsible for quality assurance issues (C3_1).
The curriculum mapping component was a relatively new to the whole cycle. It was not included in an institutional document, which was created in 2004 but revised in 2011, regarding the college practices on program reviews. In addition to program reviews, curriculum mapping was also used in new program development.

The first step in the curriculum mapping process was that faculty members mapped the outcomes of each course they had taught to the vocational learning outcomes in the Ministry’s program standard as well as to a level of performance based on the six learning objectives in the cognitive domain in Bloom’s (1956) taxonomy—knowledge, comprehension, application, analysis, synthesis and evaluation, using a Course Outcome Chart template. An expanded list of verbs for Bloom’s taxonomy was made available to facilitate the identification of the level of performance and to ensure consistency across programs. A curriculum consultant provided support to, and engaged in, conversations with, faculty members to complete this step. Then the curriculum consultant analyzed the Course Outcome Chart to identify concerns and areas for improvement, such as too low a level of performance and unmeasurable outcomes. She finally transferred the highest level of performance for each course outcome from the Course Outcome Chart to a curriculum map, which was color-coded to facilitate reading and pattern identification.

*Figure 27. Program review process at College C (Source: This study)*
The curriculum consultant then took the curriculum map to faculty members and discussed the map with them before the map could be finalized. For identified issues such as improper sequencing, gaps or duplications, actions would be taken to adjust the level of performance or course outcomes so that each course could fit well with the whole program curriculum.

Similar steps were followed to map each course to outcomes in affective and psychomotor domains as well as to the essential employability skills specified by the provincial standard specific to the program. For accredited programs, mapping was also applied to competencies required by accreditation bodies. The program could also create an evaluation mapping chart, in which evaluation methods in each course were mapped to program outcomes. A more detailed description of the curriculum mapping process was included in my report to HEQCO (Liu, 2015a).

The curriculum mapping process was procedural. However, it was not just concerned with the process and the mapping document; it was also about the conversation the process triggered among faculty members, as the interviewed curriculum consultant explained well below.

The most important thing that happens in curriculum mapping, it's not just a document that is there to validate the authenticity of the credentials that we render students, but it's the conversation that takes place around the table because the participants in program mapping are the chair, and all the faculty teaching into the program. (C3_2, curriculum consultant, March 7, 2014)

A school chair who used to be a curriculum consultant also warned against misusing curriculum mapping as a desk review and emphasized the importance of conversation and faculty engagement to the mapping process.

The mapping to me is a sharing exercise and it's very important that everybody is involved in it. It's not one coach and the coordinator. It's one coach and a team of faculty who are working together on this. That's where it could become a weaknesses if it was misused and it becomes just a desk tool. It's a conversation tool or for facilitating meetings. (C3_4, school chair for hospitality-related programs, March 7, 2014)

**Generative Mechanisms**

Two factors were found important to enabling the curriculum mapping process: the college’s accountability to the Ministry’s program standards and institutional support from the teaching and learning centre.

The curriculum mapping initiative first of all represented the institutional efforts to fulfill the college’s mandate of meeting the Ministry’s program standards. One of the interviewed
school chairs emphasized the importance of the compliance with the Ministry’s requirements this way.

It was very important to us that we meet all the Ministry standard because if there is any gap in that and we don't meet the Ministry standard then we flag this one to our VP academic. He reviews all our programs, program by program, and if there is any program that we don’t meet the Ministry standard in any one of the ministry points then we have to go to our curriculum and we need to add this component in the curriculum. (C3_8, school chair for technology-related programs, April 25, 2014)

The curriculum consultant from the teaching and learning centre who was responsible for curriculum mapping was found to play a key, instrumental role in facilitating and guiding faculty members through the mapping process. Faculty members and program coordinators expressed their appreciation for the institutional support (C3_6; C3_11). A school chair articulated her appreciation this way.

I don't think an organization can rely on the individual chair or faculty members to bring it to this level. I very much appreciate a college-wide approach that's well supported and I certainly have a lot of respect for it and appreciation for the amount of guidance that they've been able to provide, not only to me, but to the faculty. (C3_3, school chair for healthcare-related programs, March 7, 2014)

According to the school chair, the role of the curriculum consultant lied in several aspects, including consultation about quality curriculum design and development, guidance for curriculum mapping, assistance in incorporating curricular changes into teaching activities.

**Experiences**

**The departmental perspectives.**

Three school chairs—each leading schools offering programs related to healthcare, engineering technology and hospitality, and six faculty members, also coordinators, from different programs in those three schools were interviewed. Of the six programs, two were subject to certain accreditation standards. At these programs, curriculum mapping was conducted for the purposes of program review, accreditation, or new program development; one of the programs was redesigned using curriculum mapping. The comments made by these individuals regarding their programs contributed to understanding the departmental perspectives of the curriculum mapping process.

Without exception, all interviewees believed that the curriculum mapping process had brought a number of benefits to their programs. First of all, the mapping process was found helpful to ensure that external quality assurance requirements were satisfied. It helped the
program fully meet the Ministry’s program standards—without gaps so that graduates would have a full skill set for employment; in that sense, curriculum mapping helped enhance the quality of the program (C3_8). A program coordinator shared that “with our most recent curriculum mapping, we made huge changes to our program of instruction and one of those reasons is because we weren’t considered compliant [with the program standard]” (C3_11). A school chair made the following comments to explain the role of curriculum mapping in a process of new program or course development.

We would start in that situation by developing the outcomes, all of the time thinking how does this link back to this the program standard. The map is what translates the course outcome back to the program standard, but that's kind of in the back of our minds, as we're starting to go through developing a full program or a course within the new program. (C3_4, school chair for hospitality-related programs)

The mapping was also found to ensure that the program would meet the accreditation requirements. As a school chair commented, “Each one of the accrediting bodies has been completely impressed with what we have submitted to them. … If I didn't have this done, I wouldn't have the information. It would be a disaster” (C3_3). A faculty member from a healthcare-related program commented that “when we sent that [curriculum map] to our accrediting body, they were very impressed by it and they asked if they could use it as best practice.” (C3_6)

Seen as a collaborative process, curriculum mapping brought faculty members together “so it doesn’t become one person’s responsibility to fix everything” (C3_11) and stimulated conversations within the team about the curriculum as a school chair explained below.

When we first started working through mapping, we used this as an opportunity to identify – I call it the pulse check. Where are we at today? How much duplication is there? Is there any? Is there too much? Where is the duplication? Then you have the faculty start talking about ‘Oh, I didn't know you taught that in that course’ and ‘I didn't know you taught that in this course. Let's make sure that we divide and conquer. I can focus more on this and you can focus more on this.’ The mapping tool helps us with all of those conversations. It prompts the conversation; it guides the conversation. (C3_3, school chair)

In addition, the mapping process solidified the areas in which the program had been doing well (C3_6) as well as identified gaps and verified what had been known about the deficiencies in the curriculum (C3_11). “It provides me with a much better picture of the health of my program as a whole” (C3_9) as a program coordinator commented. The mapping was also considered to be a curriculum recalibration process in the sense that the actual practice was first
mapped and then adjusted to a desirable curriculum after concerns were addressed (C3_5; C3_7). As a result, the course outlines were improved and course offerings were modified. Curriculum mapping became a tool to identify curricular changes as a faculty member suggested below.

The next step is that you look at that course outcome and you change either the wording of it, you change the intent of it, yeah, so you’ll need to. If it’s not clear in terms of that course outcome, what you’re actually evaluating or what you’re trying to instill or teach the students, then it needs to be reworded and reworked. (C3_6, faculty member and coordinator of a healthcare-related program, April 1, 2014)

For another faculty member, the curriculum map provided “a good foundation” for ensuring the quality of the program.

To me, this [curriculum map] is the skeleton. This does give me the bones, even some of the muscle, for my curriculum and I can see where things were going. I can really get a sense of the health of my program from that… From that, I’ve got a really good foundation and now I can really grow good curriculum out of that. … It gives us a good foundation. (C3_9, faculty member and coordinator of a technology-related program, April 25, 2014)

Further, the mapping process was also found supportive to both ongoing curriculum development and new program development. For a school chair, the process was “an ongoing quality control initiative” and “a living exercise” and the curriculum maps were used as “a visual aid in faculty curriculum development” and a “a self-monitoring tool to make sure that we’re teaching at the appropriate level (C3_3).

The curriculum coach helps us to achieve the information and achieve a higher level of understanding. It's far beyond an administrative process. It's much more about investing in curriculum understanding, best practices. It's not a paper exercise at all. It's a living exercise and activity that we see the faculty bring to life in the classroom every day. (C3_3, school chair)

For a program coordinator, the curriculum mapping done for a new program before its offering was critical to ensure the quality of the program.

I think it was critical in making sure that we were thorough, in making sure that we hadn’t missed out on anything. It was the first time that my colleague and I had done this and so we learned a lot about putting together curriculum and objectives and relating all of our evaluations to those. It was a really good, thorough process. I think it made our program much more robust and ensured that we weren’t missing anything and had to backtrack after the first year. There are very few changes that we needed to make after our first year into the program. … We’ve been very pleased with how the program has run and how successful our students have been coming out of the program. If anything it’s just a little bit of tweaking that has to happen and I think a lot of that has to do with all the work we did upfront with mapping and all the thought processes coming in. We didn’t have to do any big changes to our program with instruction.
When asked about how the results from curriculum mapping had been used, interviewees responded by saying that it was used as “a living document” to help the program achieve and demonstrate its level of excellence (C3_3), and help hire new faculty members (C3_3; C3_6); and it was also used to justify diversification of evaluation methods (C3_5). It placed a hurdle to possible curriculum drifts by keeping the program focusing on its original goals (C3_4; C3_5; C3_9; C3_11), as two faculty members explained below.

It’s [curriculum map] a goal that the program is trying to achieve in terms of a curriculum. It keeps you focused. I guess consistency. It ensures a consistency that whoever delivers a course or whoever revises a course outline, they always need to come back to this. To make sure, to some degree, that we don’t reintroduce gaps or forget to deliver something. (C3_5, faculty member and coordinator of a healthcare-related program, April 1, 2014)

It’ll really help us avoid some of the drifts that we’ve had in the past where we drifted away from our core curriculum and sort of keeping hold of making sure we cover those vocational outcomes. It really educates the entire faculty on the process as well, so as I said it’s not one person’s responsibility. If they’re aware it’s more likely that we’re going to keep a good hold of the curriculum that we need to cover and not letting it drift off to becoming completely different courses as they make tiny changes from year to year to year. I think long-term, provided we keep the same faculty members of course, it can really help keep us compliant and make sure that we have a robust curriculum moving forward. (C3_11, faculty member and coordinator of a healthcare-related program)

Regarding challenges, a common response was the amount of time associated with the process. It was admitted that the process “can be very tedious and time consuming” (C3_5) and “It felt a little bit rushed” (C3_11). Some schools, for example the school offering technology-related programs, chose to do the mapping in May or June when the teaching load was not heavy in order to cope with the time-related challenge (C3_8). Despite the challenge, it was also acknowledged that the benefits from the curriculum mapping outweighed the costs. One faculty member commented that “it does take a significant amount of time initially for sure but the outcome far surpasses that” (C3_6). Another faculty member shared a similar view.

Initially, it was a massive amount of work, but the beauty of it is once you’ve established this [curriculum map] for a course then you can keep going back to that and then the process is not that bad at all. Whereas if you don’t have this, then you feel like you’re reinventing the wheel every single time that you go back and revisit your program and your program review. (C3_9, faculty member and coordinator of a technology-related program)
Accredited programs were expected to meet two sets of standards: the Ministry’s program standards and the accreditation standards, and therefore had to do two sets of mapping. Although different, the two sets of standards were considered to be consistent with each other (C3_6; C3_10). However, the perceptions about the importance of the two standards varied for different interviewees. As the interviewed coordinator of an accredited technology-program explained, the program was mandated by the Ministry and had to meet the Ministry’s programs standards whereas the accreditation standards, although optional, were more important from students’ point of view (C3_10). The school chair for technology-related programs held a somewhat different view; to him, it was more important to meet the program standards than to meet the accreditation standards.

There are some similarities but the accredited board they use different system, different symbols. They are looking for something more general. The Ministry [‘s standards] looks very specific to the program but for the accreditation board they would look for something more general in order for those who leave Ontario they can work in Alberta or they can work in BC. We found that most of the time if we meet the Ministry standards we should have no problem to meet the board of accreditation standard as well. … To us I think the most important thing to meet the ministry standard. The programs are funded by the Ministry and the fund comes to the programs for the Ministry. If we meet the accreditation standard and we don't meet the Ministry standard it doesn't work for us. (C3_8, school chair for technology-related programs)

**The individual perspectives and actions.**

The comments made by the three school chairs and the six faculty members / program coordinators about their own educational practices provided insights for the individual perspectives and actions regarding the curriculum mapping process.

First, individual learning and professional development occurred in the process of curriculum mapping. One faculty member saw the mapping process as a great opportunity to learn and receive feedback.

I look at it from my perspective as a great opportunity for constructive feedback. You can look at something yourself for a long period of time and nothing’s going to change with it because your perspective is not going to change because you developed it. But if you have somebody else who looks at it with a clear lens and an objective lens and they can provide you with constructive feedback on how to augment it, that’s pretty much what you would like to do then I think it’s a great learning opportunity. (C3_6, faculty member and coordinator for a healthcare-related program)

The mapping process changed faculty members’ “thinking process of how to engage curriculum” (C3_3) as a school chair observed. A couple of interviewed faculty members recognized that the
mapping enabled them to see the relevance and connections of one course to the program as a whole (C3_5; C3_10; C3_11).

The curriculum mapping exercise also impacted the teaching practice of individual faculty members. For a faculty member in a healthcare-related program, the mapping process made her examine her own course outlines and design learning assessment methods more carefully.

For me it made me look a little more carefully at my course outlines and the course outcomes and objectives and to make sure that I actually was covering everything. Where it really impacted me, especially when we developed the program is really thinking of new ways to evaluate my students in more effective ways. Looking for unique practices, especially because the program is so condensed and it’s so fast and really making sure that it lined up with the skills that we want our students to be able to demonstrate when they leave here instead of just multiple choice and the regular stuff. We really need to evaluate them in a way we want them to practice, so it really made me think more about unique ways to evaluate to make sure that I’m evaluating the objectives. (C3_11, faculty member and coordinator of a healthcare-related program)

For a faculty member in a technology-related programs, the curriculum mapping process affected his teaching in terms of content, delivery methods and assessment methods.

This literally changed my life in terms of my perspective on education, like my main courses are like I teach electronics and electrical principles for photonics as well as some optic stuff. I’ve really had to take a really hard look at my curriculum and how it links into this process. … It’s not affecting just what I’m putting into my curriculum but how I’m delivering it. I’m looking at it and saying the students need to be able to meet these particular objectives of my course, so do I need to deliver it the way I’m delivering it to meet those objectives and the answer is not necessarily, so I’ve been looking a lot of other newer techniques. … It’s affected how my grading system - like how am I actually determining if they’re meeting those objectives. (C3_9, faculty member and coordinator of a technology-related program)

Second, all three interviewed school chairs were very appreciative and supportive of the curriculum mapping initiative. For example, the chair of the technology-related school believed that the mapping exercise was very important to the quality of his programs, as cited below. He himself tried to attend one of the meetings for curriculum mapping conducted at the programs of his school and provided his input.

It’s [curriculum mapping] very important actually because supposed that I am in mechanical engineer [program], and then when I graduate from this program I’m supposed to know this 1, 2, 3, 4, 5 but when in the mapping if I see that my program there is lack here or there is a gap I don't cover, then how do I expect the grad when they leave the college to be able to satisfy these outcomes. Therefore, this is very important for the program, for the quality of the program. To make your program different from somebody else you need to make sure that you meet all these the standard. … Because it’s creating this mapping process and linking competency and
objectives to my curriculum, it really allows me to create a structure or a skeleton for my courses. (C3_8, chair of a technology-related school)

Third, two faculty members admitted that their own academic or professional training or part of it was outcomes-based (C3_5; C3_6). This congruence seemed to have made them amenable to the outcomes-based approach embedded in the curriculum mapping process. For example, a faculty member with a nursing background made the following comments.

I like it [outcomes-based approach]. It matches how I think as a nurse because in nursing we have our nursing processes. You do your assessments, you determine objectives for that client based on that assessment, determine interventions for how you’re going to make that happen and then how you’re going to evaluate it. Really this reflects very closely that way I’ve always been trained in thinking. There’s an assessment of what learning needs are. You articulate those as objectives or outcomes, determine how to meet those outcomes and assess it. The thinking or the format matches the nursing training, that same train of thoughts. (C3_5, faculty member and coordinator for a healthcare-related program)

Connectivity between the Global and the Local

One of the interviewed school chairs discussed the purpose of outcomes-based education that were behind the college’s curriculum mapping initiative.

I think it gets faculty talking together. It encourages faculty to be cognizant or aware of what level they're teaching at and that we really want it to drive home a couple of factors. One is that it's outcome-based education. It's not content-based education. All the time that a faculty member is spending with a student, it should be working towards some outcome, not working towards trying to get through the chapter of the textbook or trying to get through 50 power point slides. It's really working towards creating a deepened understanding or skill set or building on that for a student. It starts to reflect on a learner-centered approach and an outcome-based approach. (C3_4, school chair for hospitality-related programs)

Perceived Impacts of External Quality Assurance Mechanisms

Two EQA mechanisms exerted impacts on the curriculum mapping process at College C: provincially mandated program standards and competencies in accreditation standards.

The departmental experiences as demonstrated by some of the quotes cited earlier suggest that compliance with program standards and accreditation standards was a major driver to applying mapping to the program curriculum in the first place. Some interviewees made this quite explicit. They stated that “CTAB (an accreditation body) was the driver for curriculum mapping” (C3_10, faculty member); “We work very hard to make sure that we meet all the Ministry standard and this is why we do the mapping” (C3_8, school chair); “It (curriculum mapping) ensures that we’re meeting the standards” (C3_11, faculty member); and “It's a
compliance tool. We want to make sure that we are doing what we say we're doing; we're meeting the standard. And it's how we're evaluating the students on the standard” (C3_4, school chair). Curricular changes were made to the program if it was “not considered compliant” (C3_11).

Two faculty members associated the standards compliance with the notion of accountability. For the faculty member in a hospitality-related program, the long-term impact of curriculum mapping would be accountability as it held all faculty members accountable for what they should teach (C3_7). For another faculty member in a technology-related program, curriculum maps were directly linked to the language used in the program standards.

The thing is we need to know that if we’re pulling it [curriculum map] out there then it’s going to be pulled on the standard because it’s directly cross linked to the standard, so if you see the language and outcomes required in the standard, they’re reflected directly in those courses. You need to be aware of that and again it allows, I think, more accountability. (C3_9, faculty member and coordinator of a technology-related program)

Important to note is that accountability was part of the rationale for doing curriculum mapping although it was not considered of utmost importance. In addition to ensuring that the EQA requirements were met, curriculum mapping contributed to curriculum development within academic units, as the evidence related to the departmental perspectives also suggests, thus ensuring that a sound curriculum was in place for the program. Two school chairs articulated the other side of the coin—continuous improvement. One stated that curriculum mapping was not just for meeting or complying with the requirements for the review, it was also “for the benefit of our programs and to make sure that we meet the industry expectation as well” (C3_8). While another school chair acknowledged curriculum mapping as a compliance tool, he also emphasized its importance for program improvement.

The year before we do the major program review, we go through a mapping exercise in preparation for that program review. Not necessarily just for compliance, but also to see where we have potential for gaps in the curriculum, where we have redundancies in the curriculum or where we have things that we're over-teaching in the curriculum and then to see what level we're using that at. Mapping becomes an opportunity for us to reflect and then to make effective changes with. (C3_4, school chair for hospitality-related programs)

The experiences at College C show that provincial program standards were implemented at the institutional level via curriculum mapping; in other words, the program standards exerted direct impact on curriculum development of academic programs through the college-wide
curriculum mapping initiative, which was considered to be a compliance tool and to enhance curriculum improvement.

Reflection and Summary

Data quality.

A total of 11 interviews were conducted for this case study. The interview data provided rich data for the perspectives from various stakeholders of the curriculum mapping initiative at College C: the perspectives of the curriculum consultant who supported the mapping process, the perspectives of school chairs and of faculty members in three different disciplines—healthcare, hospitality and engineering technology. The data also included perspectives from both accredited and unaccredited programs. Data triangulation was employed to generate common themes as well as divergent viewpoints.

Mapping of a logic model.

The curriculum mapping initiative at College C reflects how the system-wide EQA mechanism of provincial program standards was implemented at a college and its academic units. The impact process can be illustrated in Figure 28.

As a recently added component in the college’s six-year program review cycle, curriculum mapping was a collaborative process, in which faculty members, with the assistance of a curriculum consultant from the teaching and learning centre, worked together to develop a curriculum map that would reflect proper course sequencing and alignment between course outcomes and program standards. The process emphasized the importance of triggering conversation among faculty members about curriculum development in the mapping process.

Accountability to the Ministry’s program standards and institutional support from the teaching and learning centre were found important to enabling the curriculum mapping process at the college.

On the individual level, the college-wide initiative became a professional development opportunity for some faculty members and impacted some teaching practices. It also received strong support from school chairs. The educational backgrounds of some faculty members made them amenable to the outcomes-based approach used in the curriculum mapping process.

On the departmental level, the mapping process helped academic programs satisfy EQA requirements—provincial program standards and competencies in accreditation requirements (for accredited programs). The process garnered a number of benefits to the programs, including its
support to both ongoing curriculum development and new program development. These benefits were found to outweigh the existing time-related challenges. Also, accredited programs were expected to meet two sets of standards but their perceived importance was different.

In this whole process, provincially mandated program standards directly impacted curriculum development of academic programs at College C through the curriculum mapping initiative. However, the mapping process was considered to be not only concerned about accountability but also about continuous program improvement.

A logical chain of evidence.

The interview data provided empirical support for a logical chain of evidence for the impact of EQA mechanisms on curriculum development of academic programs at College C, as shown in Figure 29.

The college’s accountability to the provincial program standards and the institutional support from its teaching and learning centre gave rise to the curriculum mapping initiative, which was added to the program review cycle only recently. In response, academic units found the mapping process helpful to ensure that they would meet the EQA requirements, including the accreditation standards (for accredited programs). They also identified a number of benefits that the mapping process had brought to their programs, which outweighed the time-related challenges they had encountered. On the individual level, some faculty members found that curriculum mapping had a positive impact on their professional development and teaching practices. These positive experiences probably affected how their programs perceived the mapping process.

Overall, the curriculum mapping initiative served as a compliance tool for academic programs to meet the requirements from the provincial program standards and the accreditation standards (for accredited programs); and it also helped enhance curriculum improvement of academic programs. Thus, the program standards exerted direct impact on curriculum development through the curriculum mapping process.
Program Standards

Generative Mechanisms
- Accountability to program standards;
- Institutional support from teaching and learning centre

The Event/The Institutional Perspectives
Curriculum mapping process
- Emphasized the importance of triggering conversation about curriculum development

The Departmental Perspectives
- Mapping was helpful to ensure meeting EQA requirements;
- Multiple benefits brought to the programs, outweighing time-related challenges;
- Accredited programs: different perceptions about the importance of program standards and accreditation standards.

The Individual Perspectives
- Professional development for faculty members;
- Supportive school chairs;
- Educational backgrounds made some faculty amenable to the outcomes-based approach.

Individual Actions

Direct impact through curriculum mapping

Figure 28. The EQA impact process for Case 3 at College C
Program Standards
- Accountability to program standards;
- Institutional support from the teaching and learning centre.

Accreditation standards

Curriculum mapping process

Departments
- Mapping ensured that programs would meet the EQA requirements;
- Multiple benefits to the programs, outweighing time-related challenges.

Individuals
- Professional development for some faculty members;
- Positive impact on teaching practices.

Figure 29. A logical chain of evidence for Case 3 at College C
Cross-case Analysis

The three case studies reported in this chapter, although representing certain routine activities at Ontario colleges—new program development, program review and curriculum mapping processes, all reflect initiatives recently undertaken by the three colleges under investigation. Each case study focussed on how the college responded to one or two EQA mechanisms in one internal quality assurance process typically used by Ontario colleges. Altogether, these case studies complemented each other and constituted a package that was useful to demonstrate the impacts of all the components of the three EQA frameworks for Ontario colleges (see Table 7) on academic programs.

To dissect the process of EQA impact, the key elements of an EQA impact process, that is, the event, generative mechanisms, experiences from the institutional, departmental and individual perspectives, as well as the perceived impacts of EQA mechanisms on curriculum development of academic programs, were examined for each case study in the previous sections. For the purpose of the cross-case analysis, Yin’s (2014) methods of pattern matching and cross-case synthesis were followed. The findings for the elements above were juxtaposed and compared in Table 9.

The table suggests that the three system-wide EQA frameworks, including their related requirements and processes, impacted the colleges’ academic programs in different ways. PEQAB standards and the CVS process played a supportive role in the curriculum development of new degree and non-degree programs at College A. Required by the PQAPA process, college B established its own program review process by incorporating the PQAPA criteria and provincially mandated program standards; nevertheless, the program reviews were considered less important than accreditation reviews by accredited programs. At College C, provincial program standards directly impacted curriculum development in its curriculum mapping process, which was used to ensure that academic programs had complied with program standards.

Arguably, the ways in which the system-wide EQA mechanisms impacted academic programs in other Ontario colleges were probably quite similar to what happened to the three cases under study. This is because the three case studies examined the quality assurance processes typical of Ontario colleges although they may represent the “best practice” in terms of implementing outcomes-based education and EQA policies in Ontario; the degree of transferability to other college contexts is likely to be high.
Regarding the uses of the outcomes-based approach to curriculum development, the three cases demonstrated varying scenarios. At College A, the use of critical performance statements in the ideation of new programs was a home-grown, pedagogy-related outcomes-based approach; however, the curriculum development process was oriented toward meeting the external outcomes-based standards under the CVS and PEQAB processes. College B established a well-articulated program review process, in which the outcomes-based PQAPA criteria and program standards were embedded. At College C, the curriculum mapping initiative was directly related to curriculum development, and was quite policy-driven in design as it aimed to ensure compliance of academic programs with provincial program standards. As such, the curriculum development practices at the three colleges were heavily outcomes-based and were strongly influenced by outcomes-based EQA mechanisms. On the other hand, the three cases were also products of their own institutional initiatives to meet internal, pedagogy-based needs. Using critical performance statements to develop learning outcomes at College A was an example for this. As such, it appears that for Ontario colleges the use of outcomes-based approach to curriculum development was overwhelmingly policy-driven. As shown in Figure 27, the policy-driven use of the outcomes-based approach was so powerful and dominant that it heavily influenced the pedagogy-driven use of the outcomes-based approach to curriculum development.

![Figure 30. Uses of the outcomes-based approach to curriculum development at Ontario colleges](image)

A confounding factor for the impact of the PQAPA process and provincial program standards on academic programs was found to be accreditation standards and requirements at both Colleges B and C. Accredited programs, more often than not, considered accreditation reviews and requirements more important than those involved in college-mandated program
reviews and curriculum mapping. During the program review process at College B, the impact of the Ontario-based PQAPA criteria and program standards on accredited programs were mediated by accreditation standards. However, during the curriculum mapping process at College C, the impact of program standards remained intact for accredited programs but these programs had to develop two sets of curriculum maps to demonstrate their compliance with both provincial program standards and accreditation standards. In contrast, at College A although requirements from accrediting agencies and professional associations, if applicable, were part of the environmental scan conducted when a new program was developed, they did not appear to constitute a major EQA concern for the new program development process.

In addition, the following themes and patterns emerged from the cross-case comparisons.

- At all three colleges, institutional strategies and policies, which stressed the importance of meeting both external and internal expectations for purposes of accountability and continuous improvement, were behind the three college-wide initiatives.

- The teaching and learning centres at all three colleges played an instrumental role in facilitating the implementation of the three initiatives. Their institutional support was found indispensable. In this sense, the teaching and learning centre undertook an important function of coordinating internal and external quality assurance activities.

- At the departmental level, academic units at College A developed their strategies to ensure that they would meet the PEQAB and CVS requirements. At Colleges B and C, departmental responses, including identified benefits and challenges, were mainly targeted at the institutional initiatives themselves, rather than at the EQA requirements, i.e., the PQAPA criteria and provincial program standards. This suggests that the EQA requirements were seamlessly incorporated into the internal quality assurance processes of these colleges and that the compliance with those EQA requirements became fully acceptable practice at the Ontario college sector.

- At the individual level, at all three colleges, all interviewed administrators expressed their support for the institutional initiatives. Reactions from individual faculty members to the initiatives varied. The challenges they had encountered in the processes were mainly related to workload and time management.
A and C, some faculty members recognized new program development and curriculum mapping initiatives as opportunities for their professional development.
Table 9. 
*Comparisons among the three cases at Ontario colleges*

<table>
<thead>
<tr>
<th>Impact of EQA mechanisms</th>
<th>Case C1</th>
<th>Case C2</th>
<th>Case C3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEQAB standards and CVS requirements, along with their processes, played a supportive role in the curriculum development of new academic programs.</td>
<td>The PQAPA criteria and provincial program standards were highly important considerations for program reviews. Their impacts on accredited programs were mediated by accreditation standards.</td>
<td>Provincial program standards exerted direct impact on curriculum development of academic programs through curriculum mapping.</td>
<td></td>
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<table>
<thead>
<tr>
<th>The event/case</th>
<th>New program development process</th>
<th>Program review process</th>
<th>Curriculum mapping process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generative mechanisms</td>
<td>Institutional strategy; Continuous support from teaching and learning centre; Home-grown practice of developing critical performance (CP) statement; Collegial institutional environment.</td>
<td>PQAPA process and requirements; Support of institutional policies; A central office for program reviews.</td>
<td>Accountability to program standards; Institutional support from teaching and learning centre.</td>
</tr>
<tr>
<td>Institutional perspectives</td>
<td>Intentions of the process; Perceived long-term impact on building quality programs.</td>
<td>No deliberate distinction made between accredited and unaccredited programs; Recognized benefits to students and programs; Identified challenges.</td>
<td>Emphasized the importance of triggering conversation about curriculum development.</td>
</tr>
<tr>
<td>Department/program perspectives</td>
<td>Views on the two-phase approach; Departmental strategies used for new program development; Challenges encountered in meeting part of the PEQAB degree standard; Suggestions on combining the internal and PEQAB reports.</td>
<td>Benefits to programs; Challenges encountered.</td>
<td>Mapping was helpful to ensure meeting EQA requirements; Multiple benefits brought to the programs, outweighing time-related challenges.</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>Programs subject to accreditation</td>
<td>-</td>
<td>Difference in perceived importance of the program review process to accredited and unaccredited programs.</td>
<td>Different perceptions about the importance of provincial program standards and accreditation standards to accredited programs.</td>
</tr>
<tr>
<td>Individual perspectives and actions</td>
<td>Affirmed the value of CP statements; Mixed comments on the PEQAB assessment; Varying perceptions about CVS; The instrumental role of curriculum consultants; New program development process became a professional development opportunity.</td>
<td>Strong support from administrators at various levels; Desire for continuous improvement; Challenges for individuals; Individual variations in using the outcomes-based approach.</td>
<td>Curriculum mapping became professional development for some faculty members; Positive impact on teaching practices; Supportive school chairs; Educational backgrounds made some faculty members amenable to the outcomes-based approach.</td>
</tr>
</tbody>
</table>
Summary

As of the end of 2014, the procedures and requirements administered by three policy stakeholders—the OCQAS, the PEQAB and the MTCU—constituted three EQA frameworks that could impact academic programs, including degree and non-degree programs, offered by Ontario colleges. The first part of this chapter has presented the impacts of the three frameworks on college curricula and on the college sector from the policy perspectives. The latter part has reported three case studies of outcomes-based education initiatives at three Ontario colleges. These cases were

- Case 1 at College A: new program development process;
- Case 2 at College B: program review process;
- Case 3 at College C: curriculum mapping process.

From the policy perspectives, the OCQAS framework adopted a self-regulatory approach to EQA, and the implementation of the CVS and PQAPA processes oriented college programs toward the outcomes-based approach to curriculum development as the two processes used the Credentials Framework as outcome standards. The outcomes-based MTCU program standards were not intended to direct curriculum development; however, college certificate and diploma programs are mandated to comply with the provincial program standards in their new program development and program review processes. The PEQAB process could impact curriculum development of new programs via enforcing compliance with the outcomes-based PEQAB criteria and benchmarks; however, it was not the PEQAB’s intent to use those criteria to drive a curriculum development process.

From the institutional perspectives, the findings from the three institutional-level cases demonstrate the impacts from three EQA frameworks during the period of 2013-14. Case 1 reflected the impacts of the CVS and PEQAB processes; Case 2 illustrated the impacts of the PQAPA criteria and the provincial program standards; and Case 3 focused on the impacts of the program standards. Altogether, these EQA mechanisms impacted academic programs of Ontario colleges in different ways. On the other hand, it was also found that the curriculum development practices at the colleges were heavily outcomes-based and policy-driven as a result of the EQA impacts; and the home-grown, pedagogy-driven efforts appeared to be diminished by the policy-driven practices.
In addition to presenting the impacts of EQA mechanisms on curriculum development, this chapter has reported the findings from the three case studies on the key components of the impact process—the generative mechanisms, institutional, departmental and individual perspectives and experiences; the single-case analysis is followed by a cross-case comparison and analysis in the second part of the section.
Chapter 8. Discussion

Prior to 2000, in terms of external quality assurance or EQA, academic programs offered by Ontario public colleges had been expected to meet the requirements of the Ministry’s program standards where applicable and quality assurance of university graduate and undergraduate programs had been subject to the OCGS and the UPRAC processes respectively. In the new century, the Ministry’s program standards continue to apply to college programs. In addition, three EQA frameworks for Ontario postsecondary education emerged successively, starting with the PEQAB framework for degree programs offered outside publicly assisted universities in 2000, then the CVS and PQAPA processes under the OCQAS framework for the college sector in 2003 and 2007, and finally the Quality Assurance Framework (QAF) for the university sector in 2010, which replaced the previous OCGS and UPRAC processes. As of 2013, a comprehensive and relatively mature quality assurance system with diverse but rigorous mechanisms for Ontario postsecondary education (Liu, 2015b) had been well in place. A change to the system took place in fall 2015, when an institutional accreditation model was launched under a newly revamped OCQAS framework for the college sector.

While the EQA mechanisms may have impacted Ontario postsecondary institutions in various ways, this dissertation chose to focus on their impacts on curriculum development. The study was mostly conducted in the period of summer 2013 to summer 2015 to examine the impacts of the existing EQA frameworks on curriculum development of academic programs in Ontario postsecondary education through case studies of seven outcomes-based education initiatives at four public universities and three public colleges in Ontario. The research question that the project aimed to answer was: How did the external quality assurance policies and processes that emerged from 2000 to 2014 impact curriculum development in Ontario postsecondary education?

In this chapter, I will discuss the findings reported in Chapters 6 and 7 from the following five perspectives: (1) the impacts of EQA mechanisms on curriculum development in Ontario postsecondary education; (2) the impact processes of EQA mechanisms; (3) EQA policy development and implementation; (4) the connectivity between the global and the local; and (5) the implications for quality assurance and curriculum development. The discussion will unfold in reference to the contexts, the literature review, and the conceptual and analytical frameworks as well as the research methodology presented in Chapters 2-5 of this dissertation.
The Impacts of EQA Mechanisms on Curriculum Development

This study examined all formal EQA frameworks for public universities and colleges in Ontario. As shown in the summary of these frameworks in Table 10, three EQA agencies are involved in addition to the government responsible for Ontario postsecondary education, the MTCU; the related EQA mechanisms involve processes on the program or institutional level, including new program appraisal of university programs, institutional quality auditing for both universities and colleges, validation of non-degree credentials for academic programs, direct quality assessment of degree-granting programs outside public Ontario universities, and government policy regarding program standards for college programs. Although assessment and auditing are typical of EQA mechanisms (Harvey, 2008; Kis, 2005), certain government-mandated mechanisms, such as the credentials validation for new college programs and seeking ministerial consent for degree-granting programs offered outside Ontario public universities, are unique to the Ontario system. Diverse as these mechanisms are, a common feature is that they have all adopted the learning outcomes-based approach as the accountability schemes; that is, they all resort to certain learning outcomes-based standards to evaluate academic programs. It should be noted that there are other accountability schemes used within the province, including key performance indicators and program-based accreditation mechanisms. The scope of this study was to focus on the system-wide EQA frameworks that involved quality assurance agencies; professional accreditation was included only as part of the EQA context for the study.

This section consists of discussions in three areas. First, I will draw upon the key findings from the seven case studies to provide an initial answer to the research question. Then, I will go deeper to discuss the related but extended question “Does EQA lead to improvement?”. Finally, I will generate a model of EQA impacts on curriculum development to provide an overall answer to the research question.

Table 10 only includes those features that are most relevant to the discussion of the findings as comparisons of those frameworks have been made in greater detail in previous chapters (see Table 1 in Chapter 2 and Table 7 in Chapter 7).
Table 10.
EQA frameworks for Ontario postsecondary education

<table>
<thead>
<tr>
<th>Quality assurance agencies</th>
<th>OCQAS Framework</th>
<th>MTCU's Program Standards</th>
<th>PEQAB Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario Universities Council on Quality Assurance, or the Quality Council</td>
<td>OCQAS</td>
<td>n/a</td>
<td>PEQAB</td>
</tr>
<tr>
<td>EQA mechanisms</td>
<td>New program appraisal (program-level); Institutional quality assurance process audit (institutional-level)</td>
<td>Credential validation service (CVS) (program-level); Program quality assurance process audit (PQAPA) (institutional-level)</td>
<td>Government policy (program-level)</td>
</tr>
<tr>
<td>Learning outcomes standards</td>
<td>Degree-Level Expectations (for undergraduate and graduate programs)</td>
<td>Credentials Framework; Learning outcomes in pre-defined Program Standards</td>
<td>Vocational learning outcomes and essential employability skills.</td>
</tr>
</tbody>
</table>

The impacts of EQA mechanisms on curriculum development: An initial answer.

The key findings from the seven case studies regarding EQA impacts on curriculum development can be summarized in Table 11. The four university cases demonstrate different scenarios in which the QAF impacted the curriculum development of university programs. The findings show that the QAF impacts on program curricula ranged from having “no tangible” impact or “no direct” impact to being “associated with” the QAF implementation context and having “direct impact,” reflecting a complex reality in the relationship between the QAF and the curriculum within the university sector. In comparison, the three college cases demonstrate how Ontario colleges interacted with the various mechanisms under three EQA frameworks. However, the findings on the EQA impacts on college programs were less diverse than those
from the university cases as the impacts were tangible in all cases. In addition to “direct impact” (C3), the impacts were found to be “playing a supportive role” (C1) and “highly important considerations” (C2) for college programs.

Table 11. 
_A summary of findings regarding the EQA impacts on curriculum development_

<table>
<thead>
<tr>
<th>Cases</th>
<th>EQA impacts on curriculum development</th>
</tr>
</thead>
<tbody>
<tr>
<td>U1</td>
<td>The QAF had <em>direct impact</em> on curriculum development of academic programs.</td>
</tr>
<tr>
<td>U2</td>
<td>The QAF served as <em>a catalyst</em> to the implementation of the Senate-approved University Learning Outcomes but had <em>no direct impact</em> on curriculum development of academic programs.</td>
</tr>
<tr>
<td>U3</td>
<td>The Faculty policy on course learning outcomes was <em>associated</em> with the university mandate for quality assurance and the provincial context of implementing the QAF.</td>
</tr>
<tr>
<td>U4</td>
<td>The interdisciplinary science program <em>felt no tangible impact</em> of the QAF on its curriculum.</td>
</tr>
<tr>
<td>C1</td>
<td>The PEQAB standards and CVS requirements played <em>a supportive role</em> in the curriculum development of new academic programs.</td>
</tr>
<tr>
<td>C2</td>
<td>The PQAPA criteria and provincial program standards were <em>highly important considerations</em> for program reviews.</td>
</tr>
<tr>
<td>C3</td>
<td>Provincial program standards exerted <em>direct impact</em> on curriculum development of academic programs through curriculum mapping.</td>
</tr>
</tbody>
</table>

Within Ontario colleges, the impacts were determined by their mandates pre-defined by legislations and government policies, as shown in Table 8 in Chapter 7. Even though those legislations and policies did not intend to dictate curriculum development of college programming, their impacts on the curriculum were tangible and by no means negligible. The three college cases in this dissertation demonstrate that the Ministry’s program standards influenced major aspects of internal quality assurance mechanisms, including new program development and program reviews, and that curriculum mapping, in particular, ensured the alignment of academic programs with existing program standards. Ontario colleges established their own internal quality assurance processes and kept refining them in order to satisfy outcomes-based PQAPA criteria. The degree standard used in the PEQAB process and the Credentials Framework for the CVS process played a supportive role in the curriculum development of new academic programs.
Within Ontario universities, the impacts of the DLEs and the use of learning outcomes as prescribed by the QAF on academic programs were not government-mandated but were expected by the university sector collectively. This was suggested by those documents created by the consortium or interest groups (the COU and the OCAV) representing the interests of Ontario universities, as found in the first part of Chapter 6. Thus, how strongly university programs are impacted by the EQA mechanism (i.e., the QAF) needs to be understood in the context of institutional autonomy of Canadian universities in general and the institutional environment of specific universities. At University B, for example, the proactive and pre-emptive strategy to cope with the pressure of accountability in implementing the DLEs was built upon the university’s autonomy and established institutional culture. On the program level, university programs can opt to embrace or reject the use of the outcomes-based approach, as illustrated by the programs studied at the four Ontario universities. On the individual level, university faculty members have more leeway in their responses to the outcomes-based requirements for the curriculum than their college counterparts. Given these variations, the findings from the four university cases suggest that those individuals, programs and universities that were more amenable to, or took an active action in, using the outcomes-based approach appeared to be less impacted by the outcomes-based requirements in the QAF.

In all the cases that tangibly felt the EQA impacts, it appears that the EQA mechanisms penetrated into the realm of the curriculum through their outcomes standards: the DLEs for university programs, the Credentials Framework and the Ministry’s program standards for certificate and diploma programs at colleges, and the Degree Standard under the PEQAB framework for degree programs at colleges. It can be argued that these EQA mechanisms exerted their impacts on curriculum development at Ontario universities and colleges via their learning outcomes-based standards or criteria. This is because the outcomes-based approach to EQA can be linked with the outcomes-based approach to curriculum development in that in both realms learning outcomes are given top priority and are expected to determine the other components of the program curriculum. This flow from EQA mechanisms to curriculum development is in line with Mansfield and Mitchell (1996)’s CSALQ model (shown in Figure 2, Chapter 2) in that standards serve as the nexus between EQA and the curriculum.
Did EQA lead to improvement?

Without doubt, the outcome standards are what Ontario postsecondary institutions are held accountable for, thus reflecting the accountability aspect of the EQA mechanisms. Did the accountability schemes lead to improvement? In most of the seven OBE initiatives, positive experiences and benefits to local academic units were heard. The two curriculum mapping initiatives both aimed to achieve the goal of aligning the program curriculum with the outcomes standards—the DLEs at University A and the program standards at College C. The alignment exercises represented the endeavours to meet external quality assurance requirements. In the meantime, the curriculum mapping process of University A helped at least some departments and individuals approach the curriculum in a holistic way and became an instrumental tool for engaging faculty members in conversations about the curriculum. Similarly, the curriculum mapping initiative at Case 3 at College C was also helpful to foster the refinement of the program curricula and drive curricular changes. Echoing with the findings of a case study at a pharmacy department in a U.S. institution (Britton, Letassy, Medina, & Er, 2008), curriculum mapping and review turned out to be a continuous quality improvement initiative. Further, for Case 1 at College A, a long-term benefit of the new program development process was believed to lie in the solid foundation built for quality programs; and some faculty members considered the phase approach as an opportunity for their professional development. For Case 2 at College B, the program review process was found to have garnered positive practical benefits, including strengthening certain components in the curriculum and enhancing student experiences.

All these examples show that OBE initiatives brought improvement in various aspects of curriculum development, including faculty members’ understandings of the curriculum, the process to develop a more coherent curriculum and actual curricular changes. The improvement is important to the enhanced quality of curriculum development, which is a collective effort within an academic unit. The OBE initiatives also suggest that the improvement itself was a self-learning process in which individual faculty members, academic units and the institution learned how to do better to fit their own purposes while they were satisfying external requirements. In this sense, the external accountability schemes provided a context for improvement. The cases in this study also illustrate that there is no straightforward relationship between accountability schemes and improved processes; rather, the improvement is nurtured by certain institutional
initiatives (i.e., the OBE initiatives in this study), which serve as a bridge to connect accountability and improvement.

It should also be noted that the improvement found in this study was not concerned with transformation of student learning *per se* as the scope of the study did not include any information about student learning. However, the study did shed light on improvement in teaching-related educational practice, that is, curriculum development. For some individuals, the engagement with the OBE initiative brought transformative experiences. This means that quality as transformation occurred to some extent. Case 1 at College A and Case 2 at College B also involved improvement in quality assurance as new program development and program review were a major part of those colleges’ internal quality assurance processes. The outputs of the curriculum mapping initiatives at University A and College C were part of the documentation for the internal quality assurance processes of those institutions. The University Learning Outcomes at University B and the faculty policy for course outlines at University C were also related to internal quality assurance. Thus, this study illustrates scenarios for both improvement in quality and improvement in quality assurance. As the findings demonstrated, improvement in quality and improvement in quality assurance are not necessarily in conflict as Middlehurst and Woodhouse (1995) pointed out, but can happen at the same time.

All of the OBE initiatives also entailed negative experiences for departments and individual faculty members. Regarding three of the university cases, incidents that reflected confusion and lack of faculty buy-in were heard. At University A, the purposes of DLEs were unclear to some faculty members, thus causing confusion about their value; at University B, resistance was voiced at some programs about using the outcomes-based approach; and at the arts and social science faculty of University C, frustration was expressed about the faculty outcomes-oriented policy and challenges were encountered in the process of policy implementation. When these incidents happened, faculty members were more likely to feel that accountability schemes were imposed upon them, and less likely to willingly implement the schemes in actual practice. For example, at University C, even though faculty members complied with the Faculty policy by including course learning outcomes on their course syllabi, they were less likely to capitalize on those outcomes for teaching and learning purposes. Thus, tension between accountability and quality improvement emerged. This tension was not unique to Ontario and has been reported in studies in the U.K. (Cartwright 2007; Newton, 2000) as well.
At three colleges, challenges were found to be different from those at universities. Common challenges for programs and individual faculty members mainly lied in operational areas such as workload and time management, rather than in conceptual areas, for example, why to use the outcomes-based approach. This suggests that compliance with the outcomes-based standards, such as the Credentials Framework and provincial program standards, was ready and the outcomes-based approach to quality assurance and curriculum development was generally acceptable to the academic communities of Ontario colleges. As such, the relationship between accountability and quality improvement seems to be less contentious for the college sector.

It is also clear that all the institutions involved in the five institution-level initiatives (Cases 1 and 2 at two universities and all three college cases) endeavoured to execute an institutional strategy with a view to harmonizing accountability and continuous improvement. This means that the dual purposes of quality assurance—accountability and improvement (Kis, 2005; Vroeijenstijn, 1995a)—can be compatible and well integrated into one initiative, at least from the design perspective. From the implementation perspective, the dynamics of the accountability and improvement dimensions varied from case to case. For the three college cases, it appears that the accountability dimension was given priority over improvement as the colleges were mandated to ensure that EQA requirements would be satisfied in the first place in their institutional initiatives. However, the accountability dimension did not overweigh the institutional needs for improvement; actually, the accountability dimension would have to be incorporated into an institutional strategy in order for the strategy to be smoothly implemented. For Case 2 at University B there is no doubt that the improvement dimension was far stronger than the accountability dimension as the university proactively designed its own institutional learning outcomes that aligned with, actually superseded, the DLEs in practice.

All five institution-level initiatives involved self-evaluation, which is important to quality improvement. The three college cases embodied major internal quality assurance processes, that is, new program development, program reviews and curriculum mapping, all of which were self-evaluating in nature. This was also true for the curriculum mapping initiative at University A. At University B, the design of its University Learning Outcomes was essentially a product of checks and balances inside the institution, and the implementation of the institutional learning outcomes was also facilitated by a set of home-grown internal guidelines. These self-evaluation mechanisms established inside postsecondary institutions were owned by these institutions and
were run under the full responsibility of the academic communities, thus offering the best guarantee for quality improvement (Brennan, Frederiks, & Shah, 1997; Weusthof, 1995). Further, the desire for continuous quality improvement was expressed most strongly by interviewees at College B, where both faculty members and administrators suggested the importance of timely follow-up after cyclical program reviews. The follow-up would be another component of self-evaluation. Hence, it seems to be true that external accountability schemes can be turned into quality improvement inside an institution when the self-evaluation process that had an external origin turns out to be beneficial for the institution (Stensaker, 2003). Harvey and Newton (2011) have also argued that the self-improvement agenda is premised on self-regulation and self-evaluation. Self-assessment is a strategy for achieving continuous quality improvement (Dew & Nearing, 2004). The intrinsic drive for quality improvement rely on postsecondary institutions’ own autonomy to make changes. The OBE initiatives reported in this dissertation exhibit examples of various endeavours for self-regulation and self-evaluation.

A model of EQA impacts on curriculum development.

Regarding the connections between EQA and curriculum development, the case studies in this dissertation have provided empirical support for a model that can be illustrated in Figure 28. The policy arguments oriented toward learning outcomes (such as accountability, transparency and consistency) informed the formulation of outcomes-based standards in EQA policies, such as a spectrum of learning outcome standards for Ontario postsecondary education (i.e., the DLEs in the QAF, the Credentials Framework under the OCQAS framework and the Ministry's program standards, and the Degree Standard under the PEQAB framework). The outcomes-based standards in EQA policies influence the outcomes-based curriculum development in postsecondary institutions as academic programs are expected to align their learning outcomes with those standards. Through a self-evaluation mechanism, the use of the outcomes-based standards is assessed by the institutions themselves to ensure that curriculum development of academic programs complies with those standards in actual practice. As such, EQA and curriculum development are not polarized as Proitz (2010) has argued; rather, they are positioned as two activities that connect with each other via the outcomes-based approach.

For an effective transition from the realm of EQA to the realm of curriculum development, initiatives or processes that involve self-evaluation inside postsecondary institutions appear to be the key. Well-established self-evaluation mechanisms help institutionalize the connectivity
between EQA requirements and curriculum development practice. Those initiatives can be policy-driven or pedagogy-driven, depending on whether the outcomes-based standard or the outcomes-based pedagogy dominates the design. To illustrate this interaction, the cases in this study suggest differences between the university sector and the college sector in terms of the orientation in using the outcomes-based approach. For academic programs in the college sector, the policy-driven dimension appears to dominate the scene and diminish the pedagogy-driven dimension, as shown in Figure 21 in Chapter 6. Thus, the interactions between the policy-driven and the pedagogy-driven dimensions are stronger and more cohesive. By comparison, the outcomes-based approach at the university sector can be driven separately by policy or pedagogy needs, as shown in Figure 27 in Chapter 7. The findings from the case studies also suggest that the impact of the EQA standards seemed to be more tangible when the self-evaluation mechanism was more policy-driven (in the cases of U1, U3, C1, C2, and C3) than that when the self-evaluation mechanism is more pedagogy-driven (in the cases of U2 and U4). Thus, the self-evaluation mechanism plays a mediating role in the EQA impact on curriculum development.

The model presented above was derived from the findings of the case studies. From the perspective of case study methodology, the model represents a kind of analytical generalization (Yin, 2014). From the critical realist viewpoints, the model reveals a structure-agency linkage between the normative structure embodied by system-level EQA mechanisms and the curriculum development practice at the local level. The linkage is enabled by situations in which the conjunction of two features gives rise to a new phenomenon, called the “emergence” (Sayer,
The emergence in this model is the self-evaluation mechanism; and the policy-driven or pedagogy-driven feature represents one of its emergent properties.

The Impact Processes of EQA Mechanisms

The data analysis in this study relied heavily on an impact analysis framework, which was drawn upon realist approach to impact analysis (Maxwell, 2004a, 2004b, 2012a, 2012b; Mohr, 1982, 1995, 1996) and Scheuthle and Leiber’s (2015) conceptual model of EQA impact. Thus, the study was concerned with EQA impact processes as well as the perceived impacts of EQA mechanisms on curriculum development. In this section, I will discuss the findings from the perspectives of the analytical framework used in this study, as shown in Figure 8 in Chapter 4. The purpose is to address the research question from the perspective of an EQA process.

In light of the qualitative approach to impact analysis and Scheuthle and Leiber’s (2015) conceptual model of EQA impact, the analyses of the seven case studies followed the analytical framework. Seven EQA impact process maps for the seven cases emerged from these analyses, as presented in the second sections of Chapters 6 and 7.

These maps represent a variety of scenarios about the impacts of system-wide EQA mechanisms on curriculum development in Ontario postsecondary education. When assembled together and triangulated with each other, they portray a better picture of the actual reality. This reality appears to be this: The outcomes-based approach which characterizes all the EQA mechanisms for Ontario postsecondary education enables and fosters the use of the outcomes-based approach to curriculum development of academic programs in Ontario postsecondary institutions. This is what Coleman (1990) called “a macro-level system behaviour,” which is a result of interactions between a set of interdependent organizational and individual actions. The organizational and individual actions, along with their interactions, are embodied in the seven OBE initiatives studied in this dissertation.

The seven case studies have contributed to understanding the “reality” of the EQA impact process in several ways. In addition to representing various situations in which the system-wide EQA mechanisms could impact the curriculum in Ontario postsecondary education, they have captured the “multiple realities,” that is, different perspectives and experiences—those of the institution, the academic units and individuals, including both faculty members and administrators. Further, they reflect the complexity of an EQA impact process, which often
involves transitions from the macro-level to the meso- and the micro-levels and a good understanding of the context in which the EQA impact occurs. This multi-level analysis recognizes that the knowledge about the EQA impact process is circumstantial and contextual on one hand and that individual perspectives, particularly those of frontline faculty members, are critical and indispensable on the other. Finally, the case studies have helped probe into EQA impact processes by examining the components of the “reality” respectively, i.e., the event, the generative mechanisms that have enabled the event, and the experiences in relation to the event. All these justify the employment of case studies and a multi-level analysis to investigate the impact process of EQA mechanisms.

In terms of the event, as discussed earlier, the seven OBE initiatives are the enablers and connectors between the system-wide intended learning outcomes in the outcomes-based standards in the EQA frameworks on one hand and the learning outcomes designed by the curriculum—those ones to be possibly achieved by students at Ontario postsecondary institutions on the other hand. Those OBE initiatives are schemes to help materialize and achieve the external outcomes-based standards inside postsecondary institutions; they are equivalent to the component of “processes that enable outcomes to be achieved” in Jackson’s (2000) conceptual framework for outcomes-based learning.

In addition, it appears that all the OBE initiatives except Case 4 at University D, in themselves, illustrate impact through policies and structures, one of the impact mechanisms according to Brennan and Shah’s (2000a, 2000b) EQA impact model. Within the university group, the curriculum mapping process at University A represented an institutional procedure resulting from the direct impact of the QAF; the University Learning Outcomes initiative at University B essentially was an institutional policy on using learning outcomes; and an initial attempt to address student concerns at the arts and social sciences faculty of University C later became a faculty policy that was aligned with the institutional strategy of implementing an outcomes-based internal quality assurance process. The three college cases all represent responses to system-wide EQA requirements as well as recent endeavours to refine internal quality assurance processes that had existed for a while. For instance, the eight-event program review process at College B was a revamp of the previous process in response to the recommendations of its first PQAPA review.
In terms of the generative mechanisms for the OBE initiatives, three common factors emerged from the findings: an institutional environment contributive to use of the outcomes-based approach; leadership; and teaching and learning centres. All the four universities and three colleges where the seven OBE initiatives were located embraced the outcomes-based approach at least at the institutional level. The three colleges, by mandate, are subject to outcomes-based standards, including the Credentials Framework and the Ministry’s program standards. Among the four universities, University B was probably the most proactive in implementing the outcomes-based approach by self-initiating a set of university learning outcomes. University C also had a relatively long history of adopting the outcomes-based approach to education and its continued support for OBE helped justify the outcomes-oriented policy at its arts and social science faculty. At University D, the interdisciplinary science program benefited from being housed in a pedagogically innovative institutional context, in which OBE and other types of innovation are nurtured.

Strong leadership for the outcomes-based education was probably associated with an institutional environment that was friendly to using the outcomes-based approach to inform institutional practices. This is particularly obvious at universities. At University A, although the technology-supported curriculum mapping tool was initiated by an educational developer, it obtained immediate support from a senior university administrator so that it could be used university wide. The forward-thinking leadership played a critical role in enabling University B to respond to external accountability requirements in a pre-emptive fashion. For the faculty- and program-level initiatives at Universities C and D, faculty and departmental leaders themselves were initiators. The importance of leadership found in this study resonates with the conditions identified in favour of implementing quality management proposition: top management commitment, stakeholder involvement, and efforts in creating a culture of continuous improvement (O’Mahony & Garavan, 2012).

Support from educational developers or curriculum consultants at the teaching and learning centres of Universities A and B and all three colleges played an instrumental role in enabling the institutional-level initiatives. For those individuals, knowledge and skill sets regarding the outcomes-based standards for quality assurance purposes as well as the curriculum and pedagogy became indispensable for their professional practice. The functions of the teaching and learning centres expanded from support for course design and delivery to support for implementation of
quality assurance related policies and processes. A typical example for this was the teaching and learning centre at College B, which essentially became a central office of quality assurance that incorporated external EQA requirements into the internal program development and review processes. As another example, for Case 1 at University A, one of the initiators for the technology-supported curriculum mapping process was an educational developer. Similarly, Frake-Mistak’s (2013) case study at another Ontario university also showed that the teaching and learning centre offered initiatives and programs to help implement the UUDLEs.

The pivotal role of teaching and learning centres and the educational developers in the implementation of EQA policies is not surprising when one considers the provincial context. As Frake-Mistak (2013) documented, an OCAV Joint Working Group on Teaching and Learning was put in place in 2004 to operate as a liaison between the OCAV and educational developers and to offer “support” to educational developers in meeting those “regulatory requirements” such as DLEs (p. 120). Within the college sector, a curriculum development affinity group exists and holds its annual conference to support educational developers in curriculum-related issues, including the implementation of EQA requirements for Ontario colleges. The involvement of educational developers in quality assurance issues seem to reflect the quality development model proposed by Gosling and D’Andrea (2001), in which functions of quality assurance and educational development in postsecondary institutions are combined into one office so that accountability and improvement could be balanced. In their book Coming in from the Margins, Schroeder and associates (2011) also discuss the emerging role of educational developers in institutional change in postsecondary institutions.

Regarding the experiences with the OBE initiatives, differences were found in experiences and perspectives at the institutional, departmental and individual levels. For the five institutional-level initiatives, the focus at the institutional level was mainly on the intentions of the initiatives, and views and experiences were generally positive. At both the departmental and individual levels, comments were mixed, with both benefits and challenges being heard. This means that the institutional initiatives did generate diverse responses—preference or resistance—for local academic units and individuals. Some of the individual perspectives and actions helped explain the departmental perspectives. For instance, at University B, some interviewees expressed strong support for using the outcomes-based approach; as some of these individuals played a leadership role in their academic units, their programs turned out to be actively involved in learning...
outcomes development. At the arts and social science faculty of University C, although the faculty administrator believed in the value of the outcomes-based approach, some leaders of academic units may not have been on the same page; this may have resulted in the challenge and uncertainty encountered in the implementation process at the program level. However, this association was not always supported by the data on one-on-one basis—probably because of the sampling of interviewees and the variations in the information shared by the interviewees. For each case study, data analysis using a logical chain of evidence was conducted to further verify the relationship among different components. Overall, the data from the case studies generally supported the linkage of experiences from the event to the micro, individual level, and from the micro-level to the higher departmental level, as shown in the analytical framework in Figure 8.

As such, the data about the OBE initiatives, generative mechanism and experiences at different levels provided empirical support for the analytical framework used in this study. The framework proved to be effective for the purpose of the study as it not only guided the analysis to derive a “macro-level system behaviour” regarding the interactions between EQA and curriculum development but also helped unpack and deconstruct an EQA impact process into various components and dig into the relationships between them. This “dissection” process made the factors contributing to the translation from accountability in EQA mechanisms to improvement within postsecondary institutions more salient.

**EQA Policy Development and Implementation**

This dissertation is also a study of policy analysis. In order to better understand the contexts of the EQA impacts on Ontario postsecondary institutions, the study investigated how the system-wide EQA mechanisms and related policies were developed. On the policy implementation side, the seven case studies did not demonstrate the implementation of all aspects of the system-wide EQA policies; rather, they focussed on the implementation of the outcomes-standards of those policies—the DLEs, the Credentials Framework, the Ministry’s program standards, and the Degree Standard under the PEQAB framework. It is important to note that the DLEs are consistent with the PEQAB’s Degree Standard, which is part of the Ontario Qualifications Framework.

In this section, I will discuss the findings from three perspectives: (1) Did EQA policy development affect implementation? (2) Examining the policy implementation process from the
backward mapping perspective; (3) Was there an implementation gap? What factors may help narrow the implementation gap? The intention is to examine the findings from the policy analysis perspective.

**Relationship between EQA policy development and implementation.**

Regarding EQA policy development, the four EQA frameworks for Ontario postsecondary education—the QAF, the OCQAS framework, the Ministry’s program standards and the PEQAB framework—were not developed with one design at the same time. The program standards were originated in the mid-1990s as a government action whereas the other three were developed in the new century for different purposes under uncoordinated arrangements (Liu, 2015b). However, there is a clear distinction among the four frameworks in terms of the tripartite relationship among the postsecondary institutions, the government and EQA agencies. The provincial program standards have been developed relying on the expertise and coordination of project officers who are typically faculty members from Ontario colleges but they are regulated by the government. Among the three EQA agencies, the PEQAB is the only government agency and operates under government regulation although it manages its EQA process independently and maintains an arms-length relationship with the government. In contrast, the OUCQA operates under the Council of Ontario Universities and continues to be a “university consortium agency” in Baker and Miosi’s (2010) terms. The QAF was created and unanimously approved by the Ontario Council of Academic Vice-presidents; therefore it is owned by Ontario universities. The governance structure and the ownership of the QAF suggest that the QAF is a self-regulatory framework. Similarly, the OCQAS framework shared a similar governance structure by housing the agency, the OCQAS, under the consortium of public colleges known as Colleges Ontario. Although the CVS component was mandated by the government, the PQAPA process was created through a joint government-college sector working group and was approved by college presidents. Thus, the QAF and the OCQAS framework have adopted a self-regulation approach whereas the Ministry’s program standards and the PEQAB framework are government-regulated.

Due to the self-regulatory nature of the QAF and the OCQAS frameworks, one could reasonably argue that the mechanisms under them should not be treated as “external quality assurance” in the strictest sense. Given this dissertation has defined EQA as quality assurance mechanisms initiated outside postsecondary institutions, the QAF and the OCQAS frameworks
are considered as EQA mechanisms as they are overseen by independent agencies outside Ontario postsecondary institutions although operating inside the governance structure of Ontario university and college sectors.

One might expect that the implementation of self-regulatory mechanisms is likely to encounter less resistance than government-regulatory mechanisms due to differences in the ownership of the EQA mechanisms and the governance structure between the mechanisms and postsecondary institutions. This did not seem to be the case in the actual policy implementation. Colleges were found to be amenable to the EQA requirements in the OCQAS framework and the Ministry’s program standards. All the interviewed administrators expressed their support for the implementation of the EQA mechanisms. Challenges articulated by participants were more likely to be operational issues such as time management and organization. This smoother implementation did not appear to be related to the self-regulatory EQA framework that governed the college sector; rather, the mandate of Ontario colleges played a more important role. In comparison, the requirements under the QAF were not fully acceptable to the communities within the university sector. Three case studies show that failure to obtain faculty buy-in regarding the DLEs and the outcomes-based approach was a major obstacle to their implementation; and the reactions of academic administrators were also mixed. The resistance can be partly ascribed to the fact that many faculty members and administrators did not recognize the ownership of the QAF but felt that it was imposed by the government. This suggests that even when the EQA frameworks were designed collectively by postsecondary institutions themselves and operate under self-regulatory mechanisms, lack of this awareness and lack of communication in this regard may become a barrier to EQA policy implementation.

However, a difference noted in the actual implementation process can be related to whether the EQA mechanisms are self-regulatory or government-regulatory in nature. The staff members working at the OCQAS and the Quality Council played a consultant and supportive role in the process of implementing their EQA mechanisms whereas the PEQAB staff members would not see themselves play such a role. This might be due to a more collegial relationship between the postsecondary institutions and the two agencies—the Quality Council and the OCQAS—operating under the self-regulatory frameworks.

The implementation process of the Ministry’s program standards was found somehow different from the other three frameworks with EQA agencies. Although colleges are mandated
to comply with existing program standards where applicable, no formal mechanisms is in place to oversee the implementation. However, two case studies in this dissertation show that colleges have taken the requirement seriously and established their own internal mechanisms to ensure their compliance with the Ministry’s program standards; curriculum mapping is a key mechanism for this purpose. This is another example to demonstrate that the nature of being government-regulatory in EQA mechanisms did not necessarily impede the EQA policy implementation. Instead, governance structure and institutional autonomy can be more important to pre-determining the implementation process.

When comparing the intentions of the QAF with the policy implementation experiences, one can find that although Ontario universities were expected to use the DLEs to guide their educational practices in curriculum development and learning assessment, the DLEs were used by university faculty and academic units to ensure that their program learning outcomes complied with the DLEs, thus mainly serving the accountability purpose rather than the quality improvement purpose. On the side of Ontario colleges, while the intentions of the EQA mechanisms did not claim to drive the curriculum development process, their impacts on the actual work of curriculum development were tangible via the compliance mechanisms. All this suggests that policy goals and outcomes are not always aligned.

The backward mapping perspective of policy implementation.

When examined through the lens of backward mapping (Datnow & Park, 2009; McDonnell & Elmore, 1987), Cases 1 and 2 at Universities A and B illustrate different scenarios in which the DLEs were implemented at the institutional level. University A adopted the DLEs as they are and used them as the criteria with which to align program learning outcomes via an online curriculum mapping tool in program reviews. While this was a relatively smooth process for some departments, it posed a severe challenge for others, where a huge discrepancy existed between program learning outcomes and DLEs. In contrast, the community of University B developed its own institutional-level learning outcomes, which aligned well with the DLEs, and used the home-grown learning outcomes as the criteria in its internal quality assurance processes. It was believed by the university community that those learning outcomes fit the institutional culture better than the DLEs. The development of the institutional learning outcomes drew heavily upon a U.S.-based learning outcomes tool, instead of using the DLEs as a starting point as expected by the COU Guide (COU, n.d.), although they were part of the considerations. As
such, there existed variations in ways in which universities responded to the system-wide implementation of the DLEs.

Within both Universities A and B, varying individual responses to the outcomes-based approach were also found. Particularly, personal beliefs about the outcomes-based approach played a mediating role in how successfully an outcomes-based EQA policy was implemented. As the quotes used in the second section of Chapter 7 suggest, those who held a positive view of, or had positive experiences with, the outcomes-based approach were found to be more active in policy implementation than those who did not buy in. Thus, some level of sensemaking or social construction at the local level were taking place. Further, local factors such as institutional culture and tradition were significant in determining what strategy an institution would use to cope with the policy requirements. For this, University B was a case in point. This means that local contexts determine policy outcomes and that there is a mutual adaptation process in policy implementation (Datnow & Park, 2009).

The three colleges under study independently developed their own institutional initiatives—new program development, program review and curriculum mapping processes. In each of these processes, the formal authorities from the EQA mechanisms—the OCQAS framework, the Ministry’s program standards and the PEQAB framework—exerted impact on academic programs within those colleges. These top-down formal authorities interacted with the bottom-up informal authorities, which resided in the expertise of curriculum consultants or the discretion of the teaching and learning centre, which were often involved in designing and coordinating colleges’ internal quality assurance processes.

The role of curriculum consultants and the teaching and learning centres represented institutional support for EQA policy implementation, or the meso-level of a policy process. At the micro-level, for both university and college cases, individual perspectives and experiences intervened and affected the policy implementation within courses and programs. A good example can be found in Case 3 at University C. As long as faculty members did not truly understand the value of the course learning outcomes to their teaching practices, their compliance with the Faculty policy remained superficial and failed to bring real benefits to students.

All these examples demonstrate that the formal authorities that flow from the EQA requirements are heavily dependent upon the capacity and capabilities of those policy
implementers down inside the institutions. As Jackson (2000) has rightly argued, although the policy comes down from the top, the implementation is actually executed bottom up by those most affected by it.

**Implementation gaps.**

The most cited studies using the term “implementation gap” are found in Newton’s (2000, 2003) case study at a U.K. college. In Newton’s study, an implementation gap was expressed in terms of an underlying tension between quality at the level of management objectives on one hand and quality as perceived by frontline faculty members at the operational level; it indicated that accountability and improvement had not been reconciled (Newton, 2000). It can be seen that in general terms, an implementation gap emerges when there exists difference between what is designed and what actually happens in reality.

Did any implementation gap exist? A noteworthy commonality among the three agency-overseen EQA frameworks is that they all strive for realizing continuous quality improvement. In the Quality Assurance Framework and Guide (2014) for the university sector, it is emphasized that the framework is to cultivate “quality assurance that produces quality enhancement” (p. 1). In the PQAPA Orientation Manual for Ontario colleges (2014), it is clearly stated that “the Management Board remains committed to continuous improvement” and the changes made after the second review of the PQAPA process in 2010 “represent and support the continuing leadership in the area of quality assurance and continuous improvement for the Ontario Colleges” (p. 4) and that the purpose of the PQAPA “is developmental and its intent is to ensure continual improvement” (p. 6). As the PEQAB framework mainly deals with new degree programs and does not have a formal mechanism that monitors the approved ongoing programs, its authority over program continuous improvement might be weaker than the other two frameworks. Continuous improvement is included in the PEQAB benchmarks for program evaluation standard, which states that “The implementation of the policy and procedures for the periodic review of programs … achieves its intended aim of continuous improvement of the program” according to the PEQAB Handbook for Ontario Colleges (PEQAB, 2014, p. 30). Thus, it can be argued that all the three frameworks embrace the idea of quality improvement at least by design and in the rhetoric of their documentation.

On the side of Ontario postsecondary institutions, it was found that the outcomes-based standards as required by the EQA frameworks were not necessarily considered as beneficial to
institutional improvement nor did they necessarily bring about improvement in terms of curriculum development. At University A, some programs found a huge gap between the DLEs and the learning outcomes developed by faculty members themselves; the perceived gap caused confusion among faculty members and administrators and resulted in considerable tension in the process of implementing the DLEs. At University B, the DLEs were not viewed as fitting with its institutional culture; and a home-grown set of University Learning Outcomes were deliberately developed instead to guide the educational practices within the university. At the arts and social sciences faculty of University C, although the policy about course outlines had been designed with good intentions, the objectives of the policy were not clear to some faculty members and department heads; as a result, they were cooperative in complying with the policy but the policy did not lead to the benefits it had intended for. In a study on a similar policy at an Australian university (Harvey & Kamvounias, 2008), minimal effect was found on teaching and learning practice as well. At the three colleges in this study, as discussed earlier, faculty members and administrators were more ready to comply with the EQA requirements than their university counterparts. However, competing tasks and operational issues in their work environment posed challenge to implementing institutional initiatives related to EQA requirements.

What may help narrow the implementation gap? In this study, no clear association was found between lofty goals in the EQA mechanisms and the actual outcomes. When good intentions work together with EQA mechanisms that are suitable for them, the outcomes of EQA policies are more likely to be positive. The case studies being investigated demonstrate that there is no single answer to satisfying EQA requirements and Ontario postsecondary institutions have been granted autonomy and flexibility in establishing their own internal quality assurance processes that fit for their own purposes as long as they ensure that certain standards, including outcomes-based standards, are achieved. This may reflect an advantage in the mechanism of quality auditing, which appears to be a promising mechanism to enable quality enhancement (Filippakou & Tapper, 2008).

The case studies did not show any connection between the self-regulatory approach to quality assurance policies and policy implementation. Raising awareness among the university communities about the self-regulation nature in the QAF may help with a smoother implementation. For this to happen, better communication from the Quality Council to Ontario universities will be needed and certain educational opportunities will be helpful.
The model of EQA impact on curriculum development posits that self-evaluation mechanisms designed by postsecondary institutions will serve as a bridge between external outcomes-based standards and outcomes-based curriculum development. As discussed earlier, institutional environment, strong leadership and the instrumental role of teaching and learning centres were found to be enabling factors for creating effective self-evaluation mechanisms in the Ontario context.

The Connectivity between the Global and the Local

The purpose of this section is to (re-)position the findings in the local and global contexts of quality assurance. The discussion will be made from four perspectives: the implications of the local EQA context; the global forces that have shaped the local; the global trends reflected through the local lens; and methodological contributions of the multi-level analysis.

Implications of the local EQA context.

Closely related to the EQA impacts as well as the EQA policy development and implementation discussed in the previous sections is the local EQA context. The contextual knowledge is also important to understanding how the findings obtained from the local could be possibly extended to other contexts in the world.

Several aspects of the local context of this study are worthwhile to revisit. First, quality auditing is a major system-wide EQA mechanism that is applied to both Ontario universities and colleges at the institutional level: the audit process under the QAF framework for universities, and the PQAPA process under the OCQAS framework for colleges. The other mechanisms—the new program appraisal protocol under the QAF, the CVS under the OCQAS framework, the PEQAB framework and the Ministry’s program standards—are all program-level mechanisms and therefore affect some programs than others. Along with these system-wide mechanisms, specialized accreditation applies to certain professional or vocational programs. It can be argued that that institutional quality audits constitute the major EQA mechanisms used system-wide for Ontario postsecondary education and other mechanisms that are at the program level play a complementary role.

Quality audits represent a process-oriented approach as the evaluation focuses on processes and procedures implemented by postsecondary institutions, rather than the outcomes of those processes (Dill, 2000; Harvey, 2007). Quality audits operate on the assumption that quality exists
within postsecondary institutions but evidence for that needs to be evaluated. This assumption about Ontario public colleges is made clear by some of the interviewees in this study who provided insights on the development of the OCQAS framework and also by the distinction the framework made between “quality assurance” and “quality assessment” (OCQAS, 2014). Similar assumption is held about the quality within Ontario public universities (Baker & Miosi, 2010; Weinrib & Jones, 2014) although it was not deliberately articulated by interviewees in this study. Both the QAF and OCQAS frameworks aim for continuous improvement—at least from the policy design perspective, and the intention to strike a balance between accountability and improvement is clear in their documentations. As quality audits are believed to be beneficial for continuous quality improvement in postsecondary institutions (Filippakou & Tapper, 2008; Harvey, 2007), the audit processes under the QAF and the OCQAS framework themselves may have laid a policy foundation for continuous quality improvement in Ontario postsecondary institutions.

Another important factor in the local EQA context is the self-regulatory approach adopted by the QAF and OCQAS frameworks and the resulting arms-length relationship of Ontario postsecondary institutions with the government in quality assurance related matters. The adoption of the self-regulatory approach was a result of the institutional autonomy of postsecondary institutions. A high level of institutional autonomy is a feature of Canadian universities and the government has limited policy capacity to intervene into university affairs (Weinrib & Jones, 2014). This is true for Ontario universities, which established the QAF as a pre-emptive action against possible interventions from the government. Although the college sector has traditionally been far less autonomous than the university sector, along with the government’s move toward deregulation, colleges were encouraged to gain greater autonomy (Charles, 2011). The creation of the self-regulatory OCQAS framework resulted from, and indicates, the expanded autonomy of the Ontario college sector. When seen in a broader context of EQA models, the Ontario EQA system mainly characterized by self-regulatory quality audits appears to fall under the “British model” of autonomous institutions found in many Commonwealth countries (Harvey, 1998) or the “English model of a self-regulating community of fellows” (van Vught & Westerheijden, 1994). In other words, unlike models in other parts of the world, the Ontario EQA model is not characteristic of centralization and vested external control nor of heavy reliance on the market system.
A third factor that is important to understanding the context of the EQA on curriculum development is that curriculum development is always believed to be a territory preoccupied by academic communities within Ontario postsecondary institutions. Evidence from this study shows that although the EQA processes, in actual practice, have exerted impact on the development of academic programming, they were not designed to drive curriculum development processes; rather, they are intended to serve as a guide or a set of standards against which to evaluate the learning outcomes of academic programs for accountability purposes. This context may not be true in other jurisdictions. For example, in most of continental Europe, the government can have the authority to determine curriculum-related matters at least in principle (Brennan & Shah, 2000a, 2000b).

Last but not the least, the EQA mechanisms for Ontario postsecondary education are heavily outcomes-based. As discussed earlier in Chapters 6 and 7, each EQA mechanism is drawn upon certain learning outcomes based standards and all the outcomes-based standards are consistent with each other so that they represent a full spectrum of standards for all the credentials offered by Ontario postsecondary education. This outcomes-based approach is consistent with the endeavour made by the pan-Canadian intergovernmental organization, CMEC, in creating the Canadian Degree Qualifications Framework (CMEC, 2007). Applying the outcomes-based approach to defining qualifications framework is also seen in many other jurisdictions, for example, in Australia (Wheelahan, 2011) and the European Higher Education Area (Bohlinger, 2007-2008). The consistent use of the outcomes-based approach to EQA and the widespread implementation within postsecondary institutions is a feature of the Ontario EQA system. This feature is in line with the orientation toward use of learning outcomes in postsecondary education across the world.

These characteristics of the EQA context to some extent helped explain some of the key findings of this study. Due to the widespread use of the outcomes-based standards in the EQA mechanisms in Ontario, it is no surprise that those standards have impacted the development or refinement of the learning outcomes of academic programs offered by Ontario universities and colleges so that the other parts of the program curricula, such as methods of delivery and sequencing courses, also have to be modified. Further, quality auditing as an EQA mechanism has provided universities and colleges with much latitude to develop internal quality assurance processes that fit their institutional missions and cultures; the self-evaluating initiatives they have
creatively established help effectively bridge the gap between the purposes of accountability and quality improvement. The thinking behind the self-regulatory approach to system-wide EQA mechanisms in Ontario is also most likely to be embedded in how individual postsecondary institutions manage their own internal activities. The case studies in this dissertation all exhibit processes featuring self-evaluation and self-regulation within each institution. Without the self-evaluation piece in the EQA process shown in Figure 31, the dimension of accountability would dominate the process so that the dimension of quality improvement might be compromised.

That being said, in a less autonomous and self-regulatory postsecondary environment in another context, postsecondary institutions may be more likely to feel that the external outcomes-based requirements are imposed on academic programs and internal educational practices. Thus, it seems that the model derived from this study (Figure 31) may work best in a relatively “mature” EQA system that consists of postsecondary institutions with a relatively high autonomy. The level of “maturity” can be defined by Jeliazkova and Westerheijden’s (2002) Phase Model of quality assurance systems development. The model demonstrates the evolving relations between postsecondary education and the government from a “one-to-one control mechanism” at the lower phase of quality assurance development to an advanced phase that features “more complex and presumably more effective forms of accountability, where concepts as academic excellence and autonomy take on a new meaning” (p. 437); as a quality assurance system evolves toward a higher phase, its focus shifts from the external dynamics to the internal dynamics. When an EQA system is at a more mature stage, a self-evaluation mechanism that balances accountability and improvement could be possibly established and implemented within a postsecondary institution. In another scenario, in which the whole EQA system may not be at a mature stage but certain individual institutions enjoy a higher level of autonomy, the EQA impact model regarding curriculum development may also work. The hypotheses made above support that the conceptualized generalization of findings from a case study serves as a tentative working hypothesis rather than a conclusion (Lincoln & Guba, 1979). These hypotheses should be tested in future empirical research.

The discussions above demonstrate that the context does not only constitute “a matter of fact” but also “a matter of concern” for the study (Sobe & Kowalczyk, 2012) and that only when the findings are associated with the context do the findings of the study become meaningful.
Global forces shaping the local.

The local perspectives drawn from the seven case studies in this dissertation can be linked with the global forces in relation to two major areas—establishment of EQA mechanisms and analysis of their impacts; and outcomes-based education and the outcomes-based approach to quality assurance and curriculum development.

Due to the governance structure for (postsecondary) education, Canada has been a country that has no formal, unified quality assurance mechanism that is external to postsecondary institutions (CCL, 2009; Klassen, 2012; Oldford, 2006). Canadian postsecondary education is well-recognized (OECD Observer, 2010) and its quality is primarily assured by the internal mechanisms of postsecondary institutions. Like many other countries, with rising demands from globalization and internationalization and increasing calls for accountability of postsecondary education, the need for external quality assurance mechanisms was pressing (CICIC, n.d.). The EQA mechanisms that were created in the past fifteen years in Ontario represent efforts by various stakeholders to fill this gap and to keep up with the global trend. Goff (2013) has identified a number of areas of influence that gave rise to the creation of the EQA mechanism for Ontario universities—political, economic, media, international, technological and social. Many of these forces are of global concern.

As a growing number of EQA mechanisms are established across the world, increasing attention has been given to the impacts of those EQA mechanisms on postsecondary education. Ontario is no exception. Ontario EQA professionals were keen to join the international community and participate in world-wide discussions on quality assurance issues. PEQAB’s hosting the biannual conference of the INQAAHE in 2007 signalled such a desire. The OCQAS framework has been reviewed against global EQA standards by international quality assurance consultants twice since its inception (Massy, 2006; Randall, 2010). This is another signal that Ontario quality assurance mechanisms aspire to align with international best practices. As a quality assurance system has taken shape in Ontario in the past fifteen years (Liu, 2015b), the discussions of EQA have also gradually evolved from policy development to policy implementation. Along with this shift, discussions on the impacts of EQA mechanisms will increasingly become centre stage. The case studies in this dissertation demonstrate this movement in EQA discourse and research. The case of Ontario suggests that the interest in EQA could shift from building a quality assurance system to evaluating the impacts of quality
assurance activities taking place within the system, and from the system-level perspectives to the local perspectives at the institutional, departmental or individual level.

This study illustrates the power of the idea of outcomes-based education, which permeated not only into the realm of teaching, learning and the curriculum but also dictated the direction of quality assurance policies and processes. In Ontario, outcomes-based education is no longer a pedagogy that individual educators choose (or not) to use but is mandated by government policies for college programs and incorporated into EQA processes for universities. The construction of these policies was influenced by other jurisdictions. As Frake-Mistak (2013) revealed in her dissertation, a major rationale for developing the UUDLEs was to keep up with what the rest of the world had already been doing. The uses of the outcomes-based approach are not new nor unique to Ontario; they were suggested by a couple of earlier publications for international communities (CEDEFOP, 2009; Santiago et al., 2008). The focus on learning outcomes is a reflection of a student-centred mindset, which is also intriguing to policy makers (Harvey, 2008). Policy makers could take advantage the notion of “student-centred” for the purpose of holding postsecondary education accountable. Scholars have ascribed the prominence of the notions of outcomes and competencies in the contemporary postsecondary education environment to the changing relationship between postsecondary education and society (Barnett, 1994) and the pressing demands for accountability (Sigler, 2007). These trends are probably true of postsecondary education in most countries of the world.

**Global trends through the local lens.**

To tease out the global perspectives from the local case studies, I have reported the comments that were connected with a broader context in the “Connectivity between the Global and the Local” sections of the case studies in Chapters 6 and 7. Although those comments constitute a very small part of the findings, they remain meaningful and complement the major findings of the study. First, it was recognized that outcomes-based education as exemplifying a learner-centred approach to teaching and learning is a global trend in postsecondary education; an interviewee at University D and an interviewee at College C appear to echo on this point. Second, increasing engagement of faculty members in conversations about teaching and learning is being encouraged within postsecondary institutions, as an interviewee from University A commented. A third one was an insight shared by an interviewee from College A. That is, when developing the curriculum of an academic program, faculty members might be constrained by a
limitation that they may concentrate more on individual courses than on the whole picture. Therefore, the role of curriculum consultants may become more important than ever in guiding faculty members in the conversations about curriculum development. All these comments are related to teaching and learning in postsecondary education.

Finally, the Ontario case in this study reflects several global trends in quality assurance as identified by Harvey (2008).

A shift from control and accountability to improvement and enhancement. The outcomes-based standards used in Ontario—the DLEs for university programs, the Credentials Framework for college programs, and the degree standard for degree-granting programs offered outside Ontario public universities—all serve the accountability purpose and exercise control and power on different types of academic programs in Ontario. Only when they are placed in certain EQA frameworks could they possibly be integrated into a broader scheme that aims to achieve the balance between accountability and improvement. All the key documents for the three EQA frameworks aim for continuous improvement and include requirements that are intended to nurture continuous improvement inside postsecondary institutions. On the policy implementation end, continuous improvement is often an important consideration in the minds of institutional or departmental administrators, as clearly shown from most of the case studies. The OBE initiatives in these case studies enabled the external and internal procedures, or accountability and improvement, to be in a symbiotic relationship.

A shift from system building to culture building. Now that a well-balanced EQA system across various sectors of postsecondary education is in place in Ontario (Liu, 2015b), the focus of quality assurance related work has turned to how to build a culture of quality. The more recently developed QAF for the university sector has made the cultivation of a culture of quality part of its goal (OUCQA, 2014). On the institutional level, the EQA impact was exhibited not only through policies and procedures created in response to the EQA requirements but also through changed cultures, a dimension of EQA impact identified by Brennan and Shah (2000a, 2000b). Even though interviewees were not asked explicitly about changed culture, it can be observed through the perceived benefits of those OBE initiatives, such as viewing the curriculum as a whole and curricular changes made to academic programs. In other words, the changed cultures have arisen from the effects of the self-evaluation process in the OBE initiatives.
A shift from inputs-based to outcomes-based. In Ontario, the orientation to the learning outcomes in EQA policies began when the Ministry’s program standards were introduced to Ontario colleges in the 1990s. Later on, the Credentials Framework, the DLEs and the Ontario Qualifications Framework were created so that a set of outcomes-based standards have been established for both universities and colleges. The implementation of the QAF has reinforced the implementation of the DLEs, which inform the educational practices particularly in academic programming and curriculum development within programs and departments of universities. The CVS and PQAPA processes under the OCQAS framework, along with the PEQAB framework, have created a synergy for orienting college programs toward being outcomes-based. This strong learning outcomes orientation provides a background for this dissertation and intellectually inspired the research design for conducting the seven case studies to examine how the orientation played out on the macro policy level as well as the micro program level.

Methodological contributions of the multi-level analysis.

“The potential of more varied and multi-level units of analysis, including global, intranational and micro-level comparison” is recognized as a new direction for the field of comparative education in the new century (Crossley & Jarvis, 2000, p. 263). The multi-level analysis advocated by Bray and Thomas (1995) reflects a shift in approaches to comparative education research from concentrating on the nation-state context and the analysis of policy at the macro level to combining local-level sensitivity with broader social and political analyses (Crossley, 2009). The multi-level analysis helps overcome the problem of “neglecting recognition of the way in which patterns at the lower levels in education system are shaped by patterns at higher levels and vice versa,” which often occurs to much research that remained at a single level (Bray, Adamson, & Manson, 2007, p. 8). Resonating with the notion of the multi-level analysis, Bartlett and Vavrus (2009) have posited the vertical case study approach and argued that qualitative work in comparative and international education must examine how the global and the local mutually shape each other.

Drawing upon the multi-level analysis advocated in comparative education literature (Bray & Thomas, 1995), this study addressed the research question using the vertical case study approach. The approach allowed me to examine how the macro-level policy analysis and the micro-level observation of policy implementation issues interact each other, thus fitting well
with the purpose of investigating the EQA impact process and connecting the issues of global concern and of local concern.

**Implications for Quality Assurance and Curriculum Development**

This section will focus on the discussion of a few aspects of what the findings suggest about quality assurance and curriculum development—the two major areas of concern in postsecondary education on which this study examined.

The findings in this study confirm that quality assurance is a political process as well as a technical process, as observed by other scholars (Harvey & Newton, 2004; Skolnik, 2010). Apparently, quality assurance—external and internal—involves sets of complex technical procedures and tools to facilitate the implementation of those procedures. This is true of the system-wide EQA mechanisms for Ontario postsecondary education as well as six out of the seven cases (except Case 4 at University D), where the OBE initiatives represent the internal quality assurance procedures that feature sophisticated techniques in need of support from professionals such as educational developers.

On the other hand, those system-level and institutional-level quality assurance mechanisms did play a role as instruments for promoting conformity in academe, thus reflecting the political nature of quality assurance (Skolnik, 2010). The presence of those outcomes-based standards in the system-wide EQA mechanisms, regardless of the DLEs for the university sector or the Credentials Framework and program standards for the college sector, constitutes an unprecedented power for university and college programs to conform to a single norm for credentials. The QAF for the university sector, although striking a balance between institutional autonomy and system-wide accountability (Lang, 2015), does push Ontario universities in the direction of isomorphism, mimetic or coercive, by implementing a set of quality assurance processes approved by the OUCQA.

The political nature is also reflected in the development and implementation of quality assurance mechanisms. The pre-emptive strategy in adopting quality audits in the QAF and OCQAS frameworks indicated the political aspect of developing EQA policies. As was also found in Frake-Mistak’s (2013) dissertation, the process of developing the DLEs revealed the relationships of power and ideologies of globalization and neoliberalism. At the institutional level, the strategies used to implement EQA-related requirements were also deliberately designed
to fit the institutional mission and tradition, as suggested by the Senate-approved university learning outcomes at University B in this study.

This dissertation highlights the value of improvement in quality assurance schemes. Effective implementation of quality assurance mechanisms needs to give priority to improvement over accountability. Although quality assurance undoubtedly serves the purpose of accountability, its effective implementation has to rely on the intrinsic drive for improvement inside postsecondary institutions, rather than superficial compliance with EQA requirements. This fits with Harvey and Newton’s (2011) improvement-led view of quality assurance: “improvement is its own accountability”; that is, “if an organization continually improves it is being accountable” (p. 231). As seen in the findings from the case studies in this dissertation, when institutions focussed on quality improvement, no matter what dimensions of quality their work underlined, the purpose of accountability was also fulfilled. To recount an example, for University B, developing university learning outcomes was an initiative that fit the institutional culture and tradition, thus reflecting the fitness-for-purpose conception of quality. In its drive for quality improvement, the university also met the accountability requirement under the QAF, i.e., use of learning outcomes and DLEs. On the reverse side, when faculty members simply “cooperate” by complying with quality assurance requirements but have no intrinsic motivation for improvement, the accountability scheme is unlikely to lead to continuous quality improvement. This happened to some programs at Universities A and C.

On the side of curriculum development, the case studies show that curriculum development is probably increasingly subject to external influences and requirements from EQA mechanisms are a major one. Quality assurance policies do reflect principles and ideologies that orient curriculum development in certain directions; the outcomes-based model is an excellent case for this. However, the outcomes-based approach is not the only model for curriculum development. When the outcomes-based model dominates the discussion, other curriculum development models should not be dismissed. The interdisciplinary science program at University D illustrated this well: while the program emphasized learning outcomes, it also embraced other types of learning such as research-based learning and team-based learning in its curriculum.

For the outcomes-based model of curriculum development, tension does exist between the policy-driven and pedagogy-driven dimensions, as demonstrated at three university cases that palpably felt EQA impacts. The tension that emerged in the process of implementing EQA
mechanisms reflects the long-standing debates regarding curriculum ideologies (Schiro, 2008). It is the social efficiency ideology that motivates the use of learning outcomes and DLEs in the QAF whereas many university faculty members employ a scholar academic ideology to guide their curriculum practice. The mismatch gives rise to frustration and resentment among some faculty members.

This study has made a strong case that quality assurance and curriculum development can be connected; and they probably become increasingly connected in actual practice. As alluded to earlier in the discussion of the roles of teaching and learning centres in the OBE initiatives, Gosling and D’Andrea’s (2001) quality development model provides a connector between curriculum development and quality management. Perhaps it is time for the conceptual model to come to fruition in practice. Brennan and Shah (2000b, p. 14) categorized approaches to quality management into four foci: academic, with a subject focus on knowledge and curriculum; managerial, with an institutional focus on policies and procedures; pedagogic, with a people focus on skills and competencies; and employment, with an output focus on graduate standards and learning outcomes. These categories are not discrete and separate but could be integrated in a holistic way, as Pratasavitskaya and Stensaker (2010) have found in quality management research. All OBE initiatives examined in this dissertation embody the combination of managerial, academic and pedagogic dimensions of quality management, although the combination varied from case to case. They all integrate quality assurance and curriculum development needs into one initiative.

Summary

In this chapter, I have discussed the key findings of the study from five perspectives: (1) the impacts of EQA mechanisms on curriculum development in Ontario postsecondary education; (2) the impact processes of EQA mechanisms; (3) EQA policy development and implementation; (4) connectivity between the global and the local; and (5) the implications for quality assurance and curriculum development. The discussion has attempted to achieve two purposes: (a) to address the research question by integrating what was learned from the seven cases into what was learned about the Ontario EQA system and linking the perspectives of the individual, the academic units and the institutional and the global vertically and the perspectives of the Ontario university and college sectors horizontally; and (b) to examine the findings from broader perspectives by drawing upon similar studies from literature review and the discussion
of relevant issues in the global context. The insights from these discussion will inform the concluding remarks to be made in the last chapter of this dissertation.
Chapter 9. Concluding Remarks

This chapter will conclude the dissertation by summarizing the key contributions and insights of the study and extending their implications in a broader context, evaluating the limitations of the study, and suggesting future directions of research.

Contributions and Implications

This dissertation involves an EQA impact study focusing on curriculum development. The study was also related to policy development and implementation issues and was concerned with an issue of global concern—the relationship between accountability and improvement in quality assurance for postsecondary education.

The case studies illustrate that the accountability schemes in EQA mechanisms in Ontario did lead to some areas of improvement in curriculum development within postsecondary institutions on one hand and there existed implementation gaps on the other hand. This suggests that the EQA impact process is complex; different experiences of individuals and local academic units interact with each other to effect the actual outcomes. However, the translation from accountability to improvement is possible. It often takes time to overcome barriers and narrow the implementation gap and demands an institutional initiative that can enable the translation. Postsecondary stakeholders should be more confident about the implementation when they are involved in a quality assurance process. The findings also provide EQA agencies with empirical evidence supporting their confidence that the vision of achieving continuous quality improvement is not illusionary but a promising goal to achieve.

To answer the research question of the study, a model of EQA impact on curriculum development was derived from the findings of the case studies. The model, as shown in Figure 31 in Chapter 8, makes several propositions. First, EQA policies and processes can exert impact on curriculum development through a set of outcomes-based standards. Second, an internal self-evaluation mechanism initiated by the postsecondary institution itself is critical to the impact of the outcomes-based EQA standards on the outcomes-based curriculum. Third, the self-evaluation mechanism could be policy-driven or curriculum-driven; there exists tension between the two dimensions. Fourth, enabling factors for the creation of the self-evaluation mechanism include the institutional environment, strong leadership for support, and the instrumental role of the teaching and learning centre. Also, the self-evaluation mechanism is more likely to take shape in an environment of high institutional autonomy. In this study, the OBE initiatives at three
As such, the model attaches importance to the self-evaluation and self-regulation aspects of internal quality assurance of postsecondary institutions and calls attention to the critical role of quality management inside the institutions to balancing accountability and improvement purposes of an EQA mechanism. Quality management represents an emerging field in higher education (Pratasaviskaya & Stensaker, 2010). When EQA requirements become external stimuli for change (Brown, 2012), quality management in postsecondary education is no longer a static process but involves change management and organizational learning. To translate EQA requirements and processes into quality improvement inside postsecondary institutions, a team of quality management that is capable of managing change and foster organizational learning will become increasingly important.

This dissertation provided evidence for the expanding roles of educational developers, who can be instrumental in facilitating or even initiating the self-evaluation mechanism that will be used to convert EQA requirements to effective pedagogical and instructional practices. Gosling and D’Andrea’s (2001) quality development model seems to be helpful in terms of conceptualizing this emerging role. It is time for educational developers to explore this direction of their profession. Academic administrators of universities and colleges may want to seek professional support from educational developers when implementing any initiatives that relate to EQA and the curriculum. One recommendation for the three quality assurance agencies is to build closer connections with educational developers and organize training and workshops at their regularly held professional conferences.

Outcomes-based education initiatives in themselves were of interest to both administrators and educators inside postsecondary institutions and policy stakeholders outside academic communities. A technical report on the seven case studies themselves was published in April 2015 by the Higher Education Quality Council of Ontario (Liu, 2015a). In this dissertation, those OBE initiatives were not only used as a lens through which to examine EQA impacts on curriculum development but also found to be enablers and connectors between the intended outcome standards in EQA mechanisms and the actual outcomes to be possibly achieved by students as defined by the curriculum. In other words, OBE initiatives provided a possible solution to bridging the gap between accountability and improved learning in an outcomes-
oriented environment of postsecondary education. It should also be noted that the outcomes-based approach embedded in those OBE initiatives was not the only way in which quality assurance can be connected with curriculum development; however, it represents an increasingly used quality assurance principle that could affect curriculum development practices not only in Ontario but also in other postsecondary contexts where outcomes-based accountability schemes are embraced.

This study showcased various uses of the outcomes-based approach to initiatives within postsecondary institutions and varying views and beliefs on outcomes-based education. The challenges encountered by universities and colleges were found to differ. Faculty buy-in was identified as a huge obstacle to implementing outcomes-based education and leadership at the institutional and local academic unit levels was found to be an important contributor to the success of executing OEB initiatives. Therefore, greater efforts should be made to educate those taking a leadership role about the rationale, strengths and possible drawbacks related to the OEB initiatives. Myths and misconceptions need to be clarified for leaders before they communicate the idea to their faculty colleagues. In all communication and action plans, the improvement-led view of quality assurance should overweigh the accountability-led view.

OBE initiatives have been examined elsewhere by other researchers (Abner, Bartosh, & Ungerleider, 2014; Jones, et al., 2002) but with a different purpose and focus. Six of the eight competency-based initiatives reported by Jones et al. were featured by competency-based curricula and the report had much focus on how competencies were developed and assessed. The Abner et al. report investigated the impact of competency-based education on the cost and quality of postsecondary education in its seven case studies. Unlike those studies, the seven case studies in this dissertation have revealed another dimension of outcomes or competency-based education initiatives, that is, their connection with quality assurance policies. Thus, the discussions about OBE have shifted from the discourse of the curriculum to the discourse of institutional and system-wide policies related to quality assurance and quality improvement. This shift in discourse may further dissolve the boundary between the OBE and non-OBE programs and initiatives, a tendency that Abner et al. (2014) have observed, when the idea of OBE is diffused into the policies for postsecondary education. Perhaps the shift is an indicator of what Sigler (2007) called the Age of Outcomes that is characteristic of the current environment of postsecondary education.
Rather than focusing on assessing the magnitude of EQA impacts, which would be a quantitative study, this dissertation involved a qualitative case study design that aimed to examine the processes in which EQA mechanisms had impacted curriculum development. The decision was made out of the consideration that only through the qualitative, process-based approach could how EQA policies and processes had been translated into internal quality improvement be possibly detected and could the areas for improvement be possibly known. The approach proved to be effective to serve the research question better than an impact measurement approach. A literature-based analytical framework (Figure 8) was used as an instrumental tool for the analysis in this study and could hopefully be useful for other researchers interested in analyzing an EQA impact process. The notion of “process causality” and the realist approach to impact analysis were used to inform the analytical framework. The dissertation was an attempt to explore the usefulness of these conceptual perspectives in EQA impact analysis.

The dissertation has extended the conceptual work that explores the connections between quality assurance and curriculum development (Jackson, 2000; Mansfield & Mitchell, 1996; Proitz, 2010) to an empirical study that examined seven OBE initiatives in Ontario postsecondary education. Through those case studies, the dissertation has added more empirical evidence to support the impact of EQA on the curriculum via the outcomes-based approach from the perspective of system-wide EQA mechanisms as the existing literature focuses on the evidence from the perspective of a single professional accreditation scheme (Khalifa, Aboaba, & Shafie, 2012).

Compared with other EQA impact studies, this study did not focus on organization and management nor teaching and learning per se, but on curriculum development, an area that has not received much attention in the research. Although changes in organization and management were not the concern for the study, the findings did reflect the impacts in terms of internal policies and procedures, which were related to the organizational infrastructure for curriculum development. Centralized organization and strengthened management accompanied changes in curriculum development processes. The curriculum, as the heart of education (Null, 2011), though not equivalent to actual teaching and learning, represents the intentions of education providers and the expected outcomes of students, therefore serving as the precursor of teaching and learning practices. The decision of focusing on curriculum development was based on the assumption that if EQA policies and processes did not turn a stone in the curriculum, they would
be less likely to impact actual teaching and learning activities. Evidence from the case studies suggests that this assumption appears to be valid. When whether quality assurance endeavours have turned into actual positive outcomes in student learning is a moot point (Banta, 2010; Houston, 2010; O’Mahony & Garavan, 2012), studying EQA impacts on curriculum development seems to be a more feasible alternative approach than focusing on the impacts on actual learning. Researchers of EQA impacts might want to consider giving greater attention to how EQA mechanisms affect the curriculum when they wonder about the impacts on actual learning. Therefore, EQA impact studies targeting at the curriculum can be an important area for future research.

Finally, when writing this dissertation, I deliberately incorporated the global context for quality assurance into the study; even though the study focuses on a series of initiatives within a single postsecondary system, it really concerns a number of key global issues. I also added the perspective on the connectivity between the local and the global and tried to apply the multi-levelled approach to analyzing case study data. All these methodological decisions benefited from the comparative education literature. Exploring these issues within a global context has enriched the discussion and provided me with more insights on the issues that appear to be local so that the dissertation could connect with the audience from other parts of the world. My learning experience might be helpful to other doctoral students who are interested to extend the work from the local to the global.

Limitations

A few limitations should be acknowledged about the study. First, the study employed purposeful sampling when selecting the cases—OBE initiatives. The selection was based on my visits (personal visits, email communication or website search) to about half of the English-speaking public universities and colleges in Ontario. Failure to access the other postsecondary institutions in the system is likely to result in missed OBE initiatives that could be interesting for the purpose of the study. Despite my intention of including a diverse set of cases into the study, the selected four university and three college cases would probably not represent all the scenarios where the EQA mechanisms were implemented in Ontario. However, the validity of the findings drawn from the sampled cases still holds as case study research is concerned with analytical generalization, rather than sampling generalization (Yin, 2014).
Second, the study did not fully overcome the methodological challenges in EQA impact research. The data collection mainly relied upon what the interviewees had perceived and shared with me about the impacts of EQA mechanisms on their educational practices; some of them showed me their program learning outcomes or curriculum mapping documents to illustrate their points. As approximately half the interviewees were frontline educators and voluntarily participated in my study, their shared experiences and comments probably approximated the reality and carried much more credibility than the perspectives from quality assurance agencies in terms of EQA impact.

The findings on quality improvement in this study were mainly concerned with quality as fitness for purpose as the OBE initiatives were designed and implemented to achieve the respective institutional goals. While getting involved in the OBE initiatives, some faculty members’ perspectives on curriculum development changed and began to see the bigger picture than the courses they taught. To these individual faculty members, quality as transformation occurred. However, the study did not attempt to investigate the actual impact on student learning or quality as transformation for students. A proper examination of this aspect of impact would require the collection of student data associated with certain quality improvement initiatives. This dissertation were not able to accommodate this expanded scope of the study.

A third limitation is that although the data collected for this study, at an aggregate level, represented a wide range of views on the outcomes-based approach to quality assurance and the curriculum, the majority of the interviewees held a generally positive view toward the outcomes-based approach. This selection bias was related to the self-selection process of participating in a research project that examined issues related to uses of the outcomes-based approach. To overcome the bias, during the interviews I intentionally asked probing questions regarding the challenges and difficulty they had observed their colleagues experience in order to strike a balance of views in the collected data; when analyzing the data, I gave greater attention to those less positive comments and experiences.

Further Research

Further investigations should focus on the impacts of each of the EQA mechanisms in Ontario. As this dissertation explored the impacts of all EQA mechanisms for Ontario postsecondary education, the number of cases included to examine the impacts of each of the EQA mechanisms was limited. Follow-up studies focusing on the impacts of one EQA
mechanism would be more informative about its implementation. This focus would also allow an in-depth study into the impacts of the mechanisms on actual teaching and learning within related postsecondary institutions. A longitudinal, qualitative study would be more helpful for examining impacts on student learning as it takes time for the impact to trickle from the policy level to the institutional and departmental levels and finally to be seen in improved student learning if there is any.

Another direction that a further study could take is to compare the impacts of an EQA mechanism in Ontario (for example, quality auditing) on curriculum development with those of a similar EQA mechanism in a contrasted postsecondary context, for example, in a postsecondary education system with less institutional autonomy or a system mostly under the government’s regulation. The comparison would shed light on how an EQA mechanism operates and impacts postsecondary education in different educational environments.

The analytical framework (Figure 8) used in this study should be explored in further research and the propositions made in the model of EQA impacts on curriculum development (Figure 31) derived from the findings should be tested in more studies to determine their usefulness to EQA impact research.

Final Words

The Ontario quality assurance system is still evolving. By March 31, 2015, the PEQAB had completed the assessment of almost 500 applications after 15 years of operation and many of the approved degree programs have been granted renewed consent. After two rounds of quality auditing under the PQAPA process, Ontario public colleges have entered a new stage of institutional accreditation; however, the outcomes-based approach will probably continue to be in place. By 2018, the first round of quality auditing will be completed within the university sector. What will the landscape of Ontario postsecondary education look like after that? And ten years from now, what will the curriculum of academic programs offered by Ontario postsecondary education look like? Will the outcomes-based approach still dominate the quality assurance and curriculum development practice in Ontario?

The educational environment across the world has become outcomes-oriented—not only in postsecondary education. As long as calls for accountability and competition for limited resources are present in the educational sector, the Age of Outcomes will probably continue on. Hence, issues related to outcomes-based standards in quality assurance and outcomes-based
educational models will continue to be relevant to educators and educational researchers. The intellectual and practical challenges associated with the outcomes-based approach will continue to need attention.
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Appendices.

Appendix A. Instruments for Case Identification and Selection
Appendix B. Consent form for policy administrators, along with interview questions
Appendix C. Consent form for academic staff, along with interview questions (one example)
Appendix A. Instruments for Case Identification and Selection

Two instruments were used to facilitate case identification and selection: an information request form and an outcomes-based education implementation inventory.

Appendix Ai: Information Request Form

1. To the best of your knowledge, does your institution have outcomes-based educational initiatives, programs or projects?

*Outcomes-based educational initiatives* are defined as purposeful actions undertaken by postsecondary providers directed at defining, teaching toward, and assessing learning outcomes in their educational practice (modified from Jones, Voorhees & Paulson, 2002).

☐ No, I am not quite familiar with this notion (i.e., outcomes-based education).
☐ Yes, we have quite a few such initiatives. I can provide the details.
☐ Yes, we have quite a few such initiatives. I am not able to provide the details but I am willing to refer you to someone else.

Please specify the name and the contact information of the referral: ____________________

2. Does your institution have the following institutional-level outcomes-based educational initiatives?

☐ Online resources about learning outcomes development and/or assessment
☐ A curriculum mapping tool available to use across the institution
☐ A faculty or student survey instrument available to use across the institution to help develop or assess learning outcomes
☐ Workshop or training opportunities with a focus on learning outcomes
☐ Staff dedicated to learning outcomes development and/or assessment
☐ Staff dedicated to supporting the institutional quality assurance process (new program development, program modifications and cyclical program review)
☐ Other, please specify _________________________________________________________

3. Could you provide a bit more information about some of those institutional-level initiatives or program-level initiatives?

Initiative 1:

A brief description: ____________________________________________________________

Academic unit: __________________________________________________________________

Does the outcomes-based educational initiative involve the following characteristics? Please check all that apply.
Well-articulated learning outcomes or competencies through a set of outcome/competency statements
Curriculum or program design and development process starts with pre-defined outcome/competency statements
Assessment tools and methods are available to measure pre-defined outcome/competency statements
Teaching strategies are aligned with pre-defined outcome/competency statements
The educational environment is oriented toward learning outcomes or competencies rather than educational resources or inputs

Who is the best person to contact for more information on this initiative?

Initiative 2:
A brief description: _____________________________________________________________
Academic unit: ________________________________________________________________

Does the outcomes-based educational initiative have the following characteristics? Please check all that apply.

Well-articulated learning outcomes or competencies through a set of outcome/competency statements
Curriculum or program design and development process starts with pre-defined outcome/competency statements
Assessment tools and methods are available to measure pre-defined outcome/competency statements
Teaching strategies are aligned with pre-defined outcome/competency statements
The educational environment is oriented toward learning outcomes or competencies rather than educational resources or inputs

Who is the best person to contact for more information on this initiative?
Appendix Aii: Outcomes-Based Education Implementation Inventory

Institution: _____________________________________________________________

Initiative: _____________________________________________________________

Academic unit: _________________________________________________________

To your best knowledge, to what extent do you agree or disagree that the following statements truthfully reflect the initiative?

Scale: 1: Strongly disagree; 2: Disagree; 3: Neither agree nor disagree; 4: Agree; 5: Strongly agree; 9: No idea

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<td>There is a comprehensive documented statement of student learning outcomes.</td>
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<td>The academic staff are made fully aware of the existence of the</td>
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<td>stated learning outcomes and are very familiar with them.</td>
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<td>The students are made fully aware of the existence of the stated</td>
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<td>learning outcomes and are very familiar with them.</td>
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<td>The educational strategies (e.g., problem-based learning,</td>
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<td>community-based learning etc.) fully reflect the stated learning</td>
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<td>outcomes.</td>
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<td>Learning opportunities (e.g., labs, tutorials, etc.) are selected to</td>
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<td>properly match the stated learning outcomes.</td>
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<td>The course contents are planned to fully reflect the stated learning</td>
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<td>Learning outcomes are used to assess students’ progress towards</td>
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<td>the stated exit learning outcomes.</td>
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<td>The assessment methods adopted (e.g., use of portfolios, work-</td>
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<td>based assessment) reflect the stated learning outcomes and inform</td>
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<td>the stated outcomes.</td>
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<td>The stated learning outcomes inform what is seen as a desirable learning</td>
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<td>environment.</td>
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<td>Student admission decisions are based on the level of achievement</td>
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<td>expected of students prior to entry in stated learning outcome domains</td>
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*(constructed on the basis of Harden’s (2007) OBE implementation inventory)*

Is there anything else distinctive about the initiative?
Appendix B. Consent form for policy makers and administrators, along with interview questions

OISE
ONTARIO INSTITUTE FOR STUDIES IN EDUCATION
UNIVERSITY OF TORONTO
Informed Consent Form – Policy Makers

Title of the Research:
The Impact of External Quality Assurance Policies on Curriculum Development in Ontario Post-secondary Education

Researcher:
Ms. Qin Liu
Doctoral Candidate of Higher Education
Department of Leadership, Higher and Adult Education
Ontario Institute for Studies in Education
University of Toronto
Rm. 6-235, 252 Bloor St. West
Toronto, ON M5S 1V6
Telephone: 416-768-2911
E-mail: qinql.liu@mail.utoronto.ca

Purpose of the Research:
Ontario has a relatively well-established quality assurance policies and mechanisms for post-secondary education. The major system-wide quality assurance policies include the Ontario Quality Assurance Framework for the university sector, the Credentials Framework and the provincial program standards for the college sector, and the Ontario Qualifications Framework. The overarching question of my research is: How have external outcomes-based quality assurance policies impacted curriculum development in Ontario post-secondary education? I am approaching both policy makers and academic staff in Ontario post-secondary institutions to address this question. The research is conducted under the supervision of Dr. Glen Jones (his contact information shown above).

My questions to those who are involved in the policy development and implementation are concerned with the formulation process of those quality assurance policies for Ontario post-secondary education, their applications, and the intended impact of those policies on curriculum development in particular. The objective is to help me develop a better understanding of the background and the intentions of those quality assurance policies.

Research Procedure:
I am inviting you to participate in an interview about those questions. The interview will be a maximum of 1.5 hours long at a location that is convenient for you. I would prefer a face-to-face interview. However, I can also accommodate an interview via phone or Skype if that is your preference; in this situation, I will ask you to scan/fax or email the consent form back to me prior to the interview.

Supervisor:
Dr. Glen A. Jones
Ontario Research Chair in Postsecondary Education Policy and Measurement
Department of Leadership, Higher and Adult Education
Ontario Institute for Studies in Education
University of Toronto
Rm. 6-227, 252 Bloor St. West
Toronto, ON M5S 1V6
Telephone: 416-978-8292
E-mail: gjones@oise.utoronto.ca
The focus of the interview will be on the intentions of the quality assurance policy with which you were or have been involved, and the intended impact of the policy on curriculum development in particular. For your information, I have included an appendix that lists major questions for the interview at the end of this consent form.

Your participation is entirely voluntary. During the interview, you may at any time refuse to answer a question or withdraw from the interview process without providing any reason and without any negative consequences. You may request that any information, whether in written form or tape recording, be eliminated from the project. At no time will you be judged or evaluated and at no time will you be at risk of any harm. No value judgments will be placed on any of your responses. Please feel free to ask any questions about the research and your involvement with it at any time. If you decide to withdraw from the study, any information that I collected from you will be destroyed and will not be used anywhere in the study.

It is the intention that each interview will be tape-recorded and later transcribed to paper; however, you have the choice of declining to have the interview taped. Tape-recording is only used with your permission. In two weeks or so after the interview, I will send you the interview transcripts for you to read and add any further information or to correct any misinterpretations that could result.

When the study is completed, I will send you a report on the findings upon your request. By this time, the interview data will no longer possibly be deleted.

Confidentiality:

I will keep my interview with you and any information I have learned from you strictly confidential.

During the data analysis process, you will be assigned a number that will correspond to your interview and transcription. Quotations will be used in my doctoral thesis, subsequent publications or conference presentations. In any of these forms of reporting, I will only use a proxy number or a pseudonym to represent you and your affiliated organization so that you cannot be identified.

I am the only person who will access the interview data. The data will be safely stored in my own password protected computer, with pseudonyms or generic descriptors attached to them. All the data will be deleted or destroyed three years after I have completed my thesis writing.

Risks and Benefits:

No risks or harms are anticipated for participating in the interview. There will be no monetary compensation for participation in this research.

As no systematic investigation has been conducted in Ontario regarding the intentions of the current quality assurance policies, your insights on this will be extremely valuable. I really appreciate your participation in this research and will be happy to send you a copy of the summary of my research findings at the end of my research.
People to Contact:
If you have any questions about the purpose of the study and the interview request, please feel free to contact the researcher, Qin Liu, or her thesis supervisor, Dr. Glen Jones. Their contact information is provided at the beginning of this consent form.
If you have any concerns or questions about your rights as a participant or about the way the study is conducted, please contact the Office of Research Ethics at the University of Toronto at (416) 946-3273 or ethics.review@utoronto.ca.

Consent:
By signing below, you are indicating that you are willing to participate in the study, you have received a copy of this letter, and you are fully aware of the conditions above.

Name: _____________________________________
Signature: ____________________________________
Date: ______________________________________

Please initial if you would like a summary of the findings of the study upon completion: _____
Please initial if you agree to have your interview recorded: _____

Please keep a copy of this form for your records.
Appendix: Major Interview Questions for Policy Makers

The following questions will guide the interview.

- When was the current policy developed?
- What problem(s) did the policy intend to address when the policy was first developed? In what cultural, economic and political contexts was the policy developed?
- What were the major considerations that shaped the formulation of the policy? What were the major considerations for the outcomes-based component in the policy?
- Whom did the policy intend to impact? How did the policy intend to impact on educational practice within post-secondary institutions?
- How does the policy compare with other policies of quality assurance used in Ontario or other jurisdictions?
- To your best knowledge, how has the policy been implemented? Has the policy produced the intended effects/outcomes? Has the policy produced any unintended outcomes?
- Is there anything else that might be useful to my understanding of the policy-making process of this policy?
Appendix C. Consent form for academic staff, along with interview questions (one example)

OISE
ONTARIO INSTITUTE FOR STUDIES IN EDUCATION
UNIVERSITY OF TORONTO
Informed Consent Form – Academic Staff

Title of the Study:
The Impact of External Quality Assurance Policies on Curriculum Development in Ontario Post-secondary Education

Researcher:
Ms. Qin Liu
Doctoral Candidate, Higher Education
Department of Leadership, Higher and Adult Education (Room 6-235)
Ontario Institute for Studies in Education
University of Toronto
252 Bloor St. West
Toronto, ON M5S 1V6
Telephone: 416-768-2911
E-mail: qinql.liu@mail.utoronto.ca

Supervisor:
Dr. Glen A. Jones
Ontario Research Chair in Postsecondary Education Policy and Measurement
Department of Leadership, Higher and Adult Education (Room 6-227)
Ontario Institute for Studies in Education
University of Toronto
252 Bloor St. West
Toronto, ON M5S 1V6
Telephone: 416-978-8292
E-mail: gjones@oise.utoronto.ca

Purpose of the Research:
Post-secondary education has been increasingly oriented toward learning outcomes. Recently, a number of outcomes-based education initiatives (OBE) have emerged in Ontario post-secondary education. To investigate these initiatives, I have selected the technology-supported curriculum mapping process at [university name omitted] as a good example of outcomes-based education (OBE) initiatives in Ontario.

For the selected OBE initiative, the purpose of my research is to investigate (1) how the OBE initiative and related quality assurance policies (if there is any) have impacted educational practice within the University; and (2) how the applications of the learning outcomes approach, as demanded by quality assurance policies, intersect with academic staff’s own teaching beliefs.

This study is part of my doctoral dissertation, entitled The Impact of External Quality Assurance Policies on Curriculum Development in Ontario Post-secondary Education, under the supervision of Dr. Glen Jones. This part of the research has received some funding support from the Higher Education Quality Council of Ontario (HEQCO); and I will produce a report to HEQCO in summer 2014.

Study Procedure:
I am inviting you to participate in an interview. The interview will be a maximum of 1.5 hours long at a location that is convenient for you. I would prefer a face-to-face interview. However, I can also accommodate an interview via phone or Skype if that is your preference; in this situation, I will ask you to scan/fax or email the consent form back to me prior to the interview.
The focus of the interview will be your perceptions of the OBE initiative of which you have been a part, and your own teaching beliefs. For your information, I have included an appendix that lists major questions for the interview at the end of this consent form.

I will create a safe environment for this interview. I will not assume that quality assurance mechanisms have hierarchical control over the curriculum. Nor will I assume that the outcomes approach is superior. Instead, I will be all ears to your voices to reflect upon the legitimacy of current quality assurance policies.

Your participation is entirely voluntary. During the interview, you may at any time refuse to answer a question or withdraw from the interview process without providing any reason and without any negative consequences. You may request that any information, whether in written form or tape recording, be eliminated from the project. At no time will you be judged or evaluated and at no time will you be at risk of any harm. No value judgments will be placed on any of your responses. Please feel free to ask any questions about the research and your involvement with it at any time. If you decide to withdraw from the study, any information that I collected from you will be destroyed and will not be used anywhere in the study.

It is the intention that each interview will be tape-recorded and later transcribed to paper; you have the choice of declining to have the interview recorded. Tape-recording is only used with your permission. In two weeks or so after the interview, I will send you the interview transcripts for you to read and add any further information or to correct any misinterpretations that could result. When the study is completed, I will send you a report on the findings upon your request. By this time, the interview data will no longer possibly be deleted.

Confidentiality:
I will keep my interview with you and any information I have learned from you strictly confidential from any of their colleagues.

During the data analysis process, you will be assigned a number that will correspond to your interview and transcription. Quotations will be used in my doctoral thesis, subsequent publications (including a HEQCO report) or conference presentations. In any of these forms of reporting, I will only use a proxy number or a pseudonym to represent you and your university, and only use a broad category to represent your position and your department (in other words, no exact professional title is attached to any quote) so that you cannot be identified.

I am the only person who will access the interview data. The data will be safely stored in my own password protected computer, with pseudonyms or generic descriptors attached to them. All the data will be deleted or destroyed three years after I have completed my thesis writing.

Risks and Benefits:
There will be no monetary compensation for participation in this research. It is possible that you might find one or two questions difficult to answer or feel uncomfortable answering during the interview (such as questions about challenges or not so positive aspects). In this situation, please feel completely free to opt out of those questions; there are no negative consequences whatsoever.
As you might be aware, no systematic investigation has been conducted in Ontario post-secondary regarding OBE practice, your insights on this will be extremely valuable. I will be happy to share a summary of my research results at the end of this stage of my research.

**People to Contact:**
If you have any questions about the purpose of the study and the interview request, please feel free to contact me, the researcher, or my thesis supervisor, Dr. Glen Jones. Our contact information is provided at the beginning of this consent form.

If you have any concerns or questions about your rights as a participant or about the way the study is conducted, please contact the Office of Research Ethics at the University of Toronto at (416) 946-3273 or ethics.review@utoronto.ca or the Chair of the Research Ethics Board at [university name and contact information omitted].

**Consent:**
By signing below, you are indicating that you are willing to participate in the study, you have received a copy of this letter, and you are fully aware of the conditions above.

Name: _____________________________________

Signature: ____________________________________

Date: ______________________________

Please initial if you would like a summary of the findings of the study upon completion: _____

Please initial if you agree to have your interview audio-recorded: _____

Please keep a copy of this form for your record.
Appendix: Major Interview Questions for Academic Staff

The following questions will guide the interview.

- What is your role in the OBE initiative?
- How has the OBE initiative impacted your work and educational practice?
- What are the positive aspects as a result of the initiative? What aspects have not been so positive?
- Overall, in what ways do you think the initiative has affected the existing educational practice?
- What do you think of the challenges involved in the initiative?
- What do you think has made the initiative happen?
- In your opinion, what may be the long-term impact of the initiative?
- Are you aware of the changes in the quality assurance process at the university or within the Ontario university sector? If so, what do you think of those changes?
- Is there anything else that might be useful to my understanding of the benefits and challenges of the OBE initiative?