

Outcomes-Based Education (OBE):

A Transformational Perspective on Quality and Mobility in Higher Education

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The objective of this paper is to identify the outcomes-based education as a transformational approach which could positively impact the issues of learning quality and mobility within Ontario's higher education. Based on the review of the most recent literature, five scholarly papers have been identified, studied and critically analyzed. The philosophical worldview of the researchers, their subsequent research methodologies and rationale as well their thesis, anti-thesis and findings are being discussed through this study.

The first section entitled 'The Importance of Outcomes-Based Learning in the Future of Ontario's Higher Education' analyzes the paper written by Mary Catharine Lennon (2010), a Policy Analyst at Higher Education Quality Council of Ontario (HEQCO) and a PhD Candidate in Theory and Policy Studies in Higher Education at OISE/UT. In her paper, 'Signalling Abilities and Achievement: Measuring and Reporting on Skill and Competency Development', she examines policies and strategies for developing common definitions regarding the implementation of OBE by using a social constructivist approach. The thesis of Lennon's research creates the ground for the study of the new role of faculty and students in the OBE paradigm. 'The New Faculty Roles in an Outcomes-Based Education System' is the title of the second discussion. In this section, the paper written by Elizabeth A. McDaniel, Dean of Faculty and Academic Programs at the Information Resources Management College of National Defence University (US) which explores the experience of her team within 4 different outcomes-based education models using a phenomenological approach is being critically approached and discussed.

The last discussion enhances the relationship between "Outcomes-Based Education and Student Success in Community Colleges' by the analysis of the paper entitled 'Learning Outcomes for the Twenty-first Century: Cultivating Student Success for College and the Knowledge Economy', written by Cindy L. Miles and Cynthia Wilson, and published in 2004 which reports the experience of sixteen community colleges within OBE. In the end, a philosophical worldview will be proposed for further inquiry of the issue within Ontario's higher education.

The Importance of Outcomes-Based Learning in the Future of Ontario's Higher Education

In her article 'Signalling Abilities and Achievement: Measuring and Reporting on Skill and Competency Development' which is "the third report in a series examining international trends in developing higher education systems that support the knowledge based economy (KBE) for the purposes of enhancing Ontario's higher education policy initiatives", Mary Catharine Lennon, a Policy Analyst at Higher Education Quality Council of Ontario (HEQCO) and a PhD Candidate in Theory and Policy Studies in Higher Education at OISE/UT "reviews initiatives designed to measure and report on individuals' acquisition of skills and competencies. It examines policies and strategies for developing common definitions when stating expectations about learning outcomes, transparency in communication of goals and accomplishments both prior to and following education and training, and the mobility of students within education systems and institutions, nationally and internationally. Tools and strategies for assessing student performance in achieving stated learning outcomes are examined as to their intent and implementation. Also addressed are the qualifications frameworks that other countries have developed to define outcomes and expectations at each qualification level". (Lennon, 2010, p. 3)

The philosophical worldview proposed in this study is the social constructivist approach. In this paradigm, "the researcher's intent is to make sense of (or interpret) the meanings others have about the world. Rather than starting with a theory (as in postpositivism), inquirers generate or inductively develop a theory or pattern of meaning" (Creswell, 2009, p. 8). In this approach, the focus is on the specific contexts in which people live and work, in order to come up with a better understanding of the historical and cultural settings of the participants. "The basic generation of meaning is always social, arising in and out of interaction with a human community. The process of qualitative research is largely inductive, with the inquirer generating meaning from the data collected in the field". (Creswell, p. 9)

According to Creswell, 'understanding', 'multiple participant meanings', 'social and historical construction', and 'theory generation' constitute the 4 major elements of the constructivist approach. Lennon creates an understanding of the topic by defining learning outcomes and key competencies as well as the related assessment tools such as the traditional qualifications frameworks. In this regard, she

adapts the definition of the European Commission which is also mentioned as a working definition of the term in the European University Association (EUA) Bologna Handbook (2006).

Learning outcomes, defined by the European Commission in terms of the knowledge, skills, and competencies to be acquired, are considered 'statements of what a learner knows, understands and is able to do on completion of a learning process'. (Lennon, p. 4)

This adaptation of learning outcomes' definition is an important component of Lennon's worldview as it lays the ground for her construction of the social and historical context as well as her theory generation which is being occurred based on a qualitative case study of the 'European Higher Education Model'.

In this review, the European Union (EU), and selected EU member states provide case studies of activities in assessing and reporting on graduates' achievements in acquiring skills and competencies because several have been particularly active in this respect.

Through what became known as the Bologna Process, the EU has aimed to develop the European Higher Education Area (EHEA) by 2010; progress toward this goal has included initiatives supporting broad agreements on learning outcomes, increasing standardisation of curriculum for the purposes of comparability, and devising common methods for reporting on skills, and competencies acquired through studies. The European model is being employed in other regions of the world, and is an important development in qualification assessment and reporting for the labour market. (p. 3)

A survey of the literature on learning outcomes comes up with a number of similar definitions of the term which do not differ significantly from each other. "From these definitions, it is clear that:

- Learning outcomes focus on what the learner has achieved rather than the intentions of the teacher;
 - Learning outcomes focus on what the learner can demonstrate at the end of a learning activity"
- (Kennedy, Hyland, & Ryan, 2006, p. 5).

Similarly, the term ‘competence’ has been defined as a key component of an outcomes-based education (OBE) model. “The relationship between learning outcomes and competences is a complex area – the subject of some debate and considerable confusion. ‘Competence’ and ‘competences’ are used in association with learning outcomes in different countries in a number of ways – hence the problem. ‘Competence’ can broadly refer to aptitude, proficiency, capability, skills and understanding, etc. A competent person is someone with sufficient skills, knowledge and capabilities. Some take a narrow view and equate competence just with skills acquired by training. It should be recognised that there is no precise common understanding or use of the term”. (Adam, 2006, p. 7)

However, Lennon emphasizes on the significant role of key competencies in the definition of an outcomes-based education model and the importance of selecting a specific categorization of this key factor. In this regard, she adapts the classification of key competencies compiled by the Organisation for Economic Co-operation and Development (OECD) for general education and lifelong learning and approved by the European Centre for the Development of Vocational Training (CEDEFOP) in order to be considered for application to vocational education and teacher training.

Defining key competencies can help focus the learning outcomes, and may serve as the drivers for specific learning outcomes. The OECD has compiled a classification of key competencies. Developed in the late 1990s and linked to the Programme for International Student Assessment (PISA), the Definition and Selection of Competencies (DeSeCo) project groups competencies into three categories:

1. Using tools interactively (use language, symbols and texts interactively, use knowledge and information interactively, use technology interactively);
2. Interacting in heterogeneous groups (relate well to others, co-operate, work in teams, manage and resolve conflicts);
3. Acting autonomously (act within the big picture, form and conduct life plans and personal projects, defend and assert rights, interests, limits and needs). (Lennon, p. 5)

Lennon also affirms that “at higher education levels, particularly in colleges, more specific competencies are set out. Ontario, for example, has developed a summary of ‘essential employability skills’ which sets out 6 categories of skills: Communication, Numeracy, Critical Thinking & Problem Solving, Information Management, Interpersonal, and Personal. The framework indicates the learning outcomes associated with each skill and sub-skill”. (p.5)

Although Lennon admits that “Learning outcomes assessments may provide valuable information; however, there is concern that the results can be used as ranking tools to assess, grade, and compare institutions if they are not carefully implemented. Yet, establishing clear expectations of learning outcomes for the purposes of transparency, mobility, and accountability are important to ensure quality, transparency, and compatibility among the credentials. Furthermore, with the common practice of developing qualifications frameworks, it is necessary to have a solid understanding of the skills, competencies, and knowledge gained within each qualification bracket.” (p. 7)

In the continuation of her constructivist approach to create a structural understanding of the outcomes-based education model, Lennon recognizes the qualifications frameworks as important tools which measure student performance against expected learning outcomes. “Although similar to the statements of expected learning outcomes, the purpose of qualifications frameworks is to demystify the knowledge, skills, and competencies to be acquired through the chosen educational program. The general aims are to support an understanding for students, institutions and employers about how to navigate the system. If assessment of the compatibility of programs, degrees and diplomas for the student and the labour market is completed, then both national and international mobility become more feasible” (p.7).

In this order, Lennon refers again to the description of the term by OECD and the European Union. “Qualifications frameworks are important tools to signal to the labour market the skills and competencies held by graduates, the principal goal of a national framework is to achieve a better match between educational provision and the needs of the labour market and aim to integrate and coordinate national qualifications subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society” (p.7).

The strategy of inquiry or research methodology undertaken by Lennon is a qualitative case study of the European Higher Education area which is aligned with her constructivist worldview. “The most aggressive work done on developing a common framework for higher education skills and competencies has occurred in Europe. Aspects of the Bologna Accord and the Copenhagen Accord have been introduced into other regions in the world, specifically the Tuning Project”. (p. 9)

Lennon believes that “Ontario should be aware of these developments as a good example of how learning competencies and assessments are being introduced into higher education systems” (p. 9). However, she recognizes that:

The Government of Ontario has also developed a comprehensive qualifications framework to provide students, parents, employers, and others involved in the postsecondary education system with information on the various options and avenues of study. The Ontario Qualifications Framework (OQF) identifies the main purposes of each qualification, outlines the learning expectations for graduates who hold each type of qualification, and shows the relationship between the different qualifications. It is a well-developed tool that addresses both inputs and outputs of broad program areas that may allow for general international comparisons (p. 8).

Creswell defines the qualitative research as “a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The process of research involves emerging questions and procedures, data typically collected in the participant’s setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. Those who engage in this form of inquiry support a way of looking at research that honors an inductive style, a focus on individual meaning, and the importance of rendering the complexity of a situation” (Creswell, p. 4).

A massive undertaking related to the development of standardized learning outcomes and competencies has been underway in Europe for nearly ten years. The Bologna Declaration of 1999 saw 20 ministers of education in member states of the European

Union agree to form the European Higher Education Area (EHEA) by 2010. The goal of what became known as the Bologna Process has been to bring all higher education institutions into alignment with the Anglo-Saxon model of two-tiered PSE studies. Another goal of the process is to facilitate student mobility by developing a clear understanding of the value of each credential. Student mobility is eased by the European Credit Transfer System (ECTS), which assigns credit values to curriculum in the more traditional inputs method". (Lennon, p. 9)

In this respect, Lennon studies the case of the Bologna Process and its subsequent aspects and strategies including the Tuning Project, the Dublin Descriptors, the Diploma Supplement, the Lisbon Strategy for an integrated Labour Market and the Copenhagen Process for Vocational Education and Training.

The Bologna Accord examines how universities are addressing issues of modernizing the university system and focuses on learning outcomes through the Tuning Project, which sets outcomes for programs and educational systems. At the college level, the Copenhagen Accord similarly sets to assign outcomes, skills, and competencies to programs across Europe. Thus, learning outcomes work as a quality assurance mechanism within institutions, educational systems, and the broader academic community, and as a means of establishing expected norms from programs and short-cycle diplomas. Ontario might want to consider the strategies of Europe when conceptualizing how to move forward in developing a comprehensive program for assessing the skills and competencies students acquire through training and standardizing methods of reporting and acknowledging in specific credentials. (p. 12)

The paper concludes that "it has become increasingly important to take the development and assessment of graduates' skills, competencies, and knowledge into account. Having the right people in the right jobs is vital in a knowledge based economy. A better understanding of the marketplace and the skills and competencies required for success within it is essential, as is ensuring that those needs are

addressed through the programming available in higher education institutions. In addition, by identifying a graduate's aptitudes vis-à-vis stated learning outcomes increases the likelihood of an appropriate fit for defined position descriptions, and assures employers that Ontario's graduates are ready to hit the ground running". (p. 13)

Outcomes-Based Education: A shift of Paradigm

In the beginning of her paper, Lennon refers to Nusche's (2008, p. 8) statement on OBE and points out that the "outcomes-based evaluation is a relatively new model of measuring' education, and has only recently been introduced into higher education systems" (p. 4). The main questions are what outcomes-based education is, how long it has been introduced into higher education systems and does OBE represent a paradigm shift? SPT Malan, Professor of the Department of Teaching and Training Studies, Faculty of Education, University of Pretoria tackles these questions in his paper 'The New Paradigm of Outcomes-Based Education in Perspective' by tracing the roots of OBE and putting the outcomes-based education into perspective. In his effort to trace back the origins of OBE, Malan refers to William Spady as the leading advocate of this educational system and believes that based on Spady's studies, the outcomes-based education has not been newly introduced into higher education systems.

Spady defines OBE as "a comprehensive approach to organizing and operating an education system that is focused on and defined by the successful demonstrations of learning sought from each student. Outcomes are clear learning results that we want students to demonstrate at the end of significant learning experiences and are actions and performances that embody and reflect learner competence in using content, information, ideas, and tools successfully (Spady, 1994, p.1-2)". Regarding the OBE paradigm, Spady states: "WHAT and WHETHER students learn successfully is more important than WHEN and HOW they learn something (1994, p. 8)". Spady "concedes that the world is filled with examples of outcomes -based models, and even that outcomes-based systems go back at least 500 years to the craft guilds of the Middle Ages. The concept of outcomes-based models and systems is therefore not new (1994, p. 4)".

Malan builds up on Spady's studies and concludes that "OBE is firmly rooted in past educational approaches and does not represent a paradigm shift as advocated by OBE proponents. At best OBE can be described as an eclectic educational philosophy taking the best from previous approaches and framing it in a new visionary system that is appropriate to the needs and demands of a democratic South Africa. As in the case of previously highly publicised - but at some stage discredited - educational approaches, only time will reveal the true value of OBE." (Malan, 2000, p. 28)

However, Malan recognizes the positives sides to OBE and endorses Spady's vision of OBE as 'a systems transformation approach'. "There are many positive sides to OBE, as its transformational approach indicates. It brings about a national focus on education as a means to an end and not an end in itself. It forces uncoordinated and laissez-faire educational planning, managing and teaching practices into the background and introduces strategic educational planning that is aimed at achieving results." (p. 28)

In the end, Malan emphasizes the role of the educational practitioners, learners and parents in creating a successful OBE model. "Learners have to assume greater responsibility and actively participate in the learning process. Educational practitioners have to become more attuned to planning and managing learning environments and must be committed to the ideal of valid and reliable assessment. Parents have to exercise their democratic right to ensure that the quality of education remains unquestionable and that learners are properly prepared for life after school or higher-education studies." (p. 28)

At this point, we should get back to Lennon's thesis statement where she argues that "research shows that students, faculty and employers all benefit from defined learning outcomes. Students are better able to make informed choices, faculty are able to translate outcomes into skills and employers gain a better understanding of what they can expect graduates to know and be able to do" (Lennon, p. 4). The following sections will examine Lennon's statement by the analyses of more scholarly papers and the literature review of the positive impacts of OBE on the quality of the learning environment.

The New Faculty Roles in an Outcomes-Based Education System

In the EUA Bologna Handbook, Kennedy et al. (2006) states that “as already indicated, international trends in education show a shift from the traditional ‘teacher-centred’ approach to a more ‘student –centred’ approach. While traditionally the focus was on what the teacher did, in recent years the focus has been on what students have learned and can demonstrate at the end of a module or programme” (p. 24).

Whilst there has been some criticism of outcome-based education in the literature, a learning outcomes approach to teaching and learning has received strong support at an international level. For example, Jenkins and Unwin (2001) assert that learning outcomes:

- Help teachers to tell students more precisely what is expected of them.
- Help students to learn more effectively: students know where they stand and the curriculum is made more open to them.
- Help teachers to design their materials more effectively by acting as a template for them.
- Make it clear what students can hope to gain from following a particular course or lecture.
- Help teachers select the appropriate teaching strategy matched to the intended learning outcome, e.g. lecture, seminar, group work, tutorial, discussion, peer group presentation or laboratory class.
- Help teachers to tell their colleagues more precisely what a particular activity is designed to achieve.
- Assist in setting examinations based on the materials delivered.
- Ensure that appropriate teaching and assessment strategies are employed. (Kennedy et al., p. 24-25)

‘New Faculty Roles in Learning Outcomes Education: the Experiences of Four Models and Institutions’ is the title of a paper written by Elizabeth A. McDaniel, Dean of Faculty and Academic

Programs at the Information Resources Management College of National Defence University along with B. Dell Felder, Deputy Vice President for Academic Affairs at Zayad University in the United Arab Emirates; Linda Gordon, Associate Professor of Liberal Arts at Nova Southeastern University; Mary Ellen Hrutka, Associate Vice President for Academic Affairs and Dean of Undergraduate Programs at the University of Maryland, University College and Stephanie Quinn, Provost at Millikin University.

The paper states that “innovative models that focus on learning outcomes engage faculty in new ways of facilitating and assessing learning, while their institutions seek to support and reward their participation. Innovators from four different institutions provide an overview of their approaches to implementing principles of outcomes-based education, compare their models, and explore the changes that are precipitated in the roles, rewards, resources, structures, and models. While the four institutions and models differ on several significant variables, the innovators identify common key elements and issues that the academy must address in order to transform the educational experience and culture to a more learning-centered enterprise.” (McDaniel, Felder, Gordon, & Hrutka, 2000, p. 143)

The philosophical worldview of this study is the social constructivist approach as proposed by Lennon’s research and enhanced by Malan. “With a socio-constructivist base that makes allowances for stakeholder input, OBE may become a living educational model, adapting to new demands and needs” (Malan, 2000, p. 28). While Lennon’s approach to inquiry is the qualitative method which identifies the European Model of OBE and its subsequent components as a strong case study, McDaniel explores the experience of her team within 4 different outcomes-based education models using again a qualitative method but this time the research strategy is a phenomenological approach. In this respect, she facilitates the dialogue between four stakeholders by asking seven open-ended questions about faculty’s experiences in different OBE models.

The institutions represented by the authors of this article are engaged in the implementation of four very different learning outcomes models. Despite the differences in their institutional missions and cultures and the models they are implementing, the four programs discussed: embody the new learning paradigm, assess students against clearly

articulated learning goals, move students through the curriculum based on their demonstration of competency, encourage student learning outside the traditional credit-for-contact model, foster innovative pedagogy and the use of information technologies and engage full-time and part-time faculty in new roles. (McDaniel et al., p. 145)

“Phenomenological research is a strategy of inquiry in which the researcher identifies the essence of human experiences about a phenomenon as described by participants. Understanding the lived experiences marks phenomenology as a philosophy as well as a method, and procedure involves studying a small number of subjects through extensive and prolonged engagement to develop patterns and relationships of meaning. In this process, the researcher brackets or set aside his or her own experiences in order to understand those of the participants in the study.” (Creswell, 2009, p. 13)

The authors of this article, panellists at the 1999 AAHE Forum on Faculty Roles and Rewards, are committed to innovative outcomes-oriented undergraduate education. They represent institutions at various stages of implementation of their learning outcomes models. Both public and independent, their institutions enrol residential and commuter, traditional age and adult students; they use a wide range of delivery methods, distance education, and instructional technology. In a question and answer format we discuss the essential elements of the various learning outcomes models and the accompanying transformation of faculty roles, including issues related to faculty governance, academic freedom, load and productivity issues, incentives and reward systems, facilities and funding. (McDaniel et al., p. 145)

The thesis statement of this study highlights the shift from “the old instructional paradigm to the new learning paradigm, a shift in the purpose of institutions from producing instructions to providing learning” (McDaniel et al., p. 143).

In many institutions of higher education a significant shift is underway in educational philosophy and focus and in programs, courses, and format. This shift is from being teacher-centered to being learner-centered, and more specifically learning outcome-

centered. The shift may be occurring because of the demands for accountability related to funding or because faculty are intrigued with new ways of teaching and learning that put student learning at the center of the academic enterprise. (p. 143)

First, the authors set the background and create an understanding of the research issue by a literature review of the topic through the works of Davis (1995); Dolence & Norris (1995); Guskin (1994); Plater (1995) and Astin (1992). “Throughout this decade futurists have been writing about the coming revolution in higher education. Their forecasts have been precipitated by new technologies and the Internet, pressures of accountability and accreditation, competition from corporate distance education providers, and the emphasis on assessment of student learning. Alexander Astin (1992) advocated a new model for evaluating institutional quality that is based less on institutional resources (e.g. library books, research funding, faculty awards, student entrance examination scores) and more on the student talent developed by the institution. Faculty are challenged to do whatever it takes to enhance student learning, and the value added by the educational experience becomes the measure of institutional quality”.

(McDaniel et al., 2000, p. 144)

Then McDaniel (p. 146-155) creates a dialogue with the participants around the following questions:

1. In the learning outcomes models being implemented at your institutions, how have learning, teaching, and the educational process been reconceptualised?
2. Learning outcomes models are built around common learning outcomes for student performance that cross, overlap, and transcend specific course requirements. How do these models challenge faculty to collaborate, commit, share, and communicate with each other in new ways?
3. Does collaboration on academic outcomes prompt any faculty to resist on the grounds of academic freedom?
4. How are existing academic structures and systems modified to support the development of learning outcomes models?

5. What are the rewards or incentives for faculty to re-invent themselves or otherwise assume radically different roles?

6. What impact do these models have on faculty time commitment and the formulation of faculty load?

7. Can students learn and master outcomes separate from courses?

The SWOT analysis of the answers helped to identify the following issues as the most important challenges to be considered in a shift from the old instructional paradigm to an outcomes-based education model within the 4 institutions which were at various stages of their learning outcomes models at the time of the study (See Table 1).

- Faculty's belief in a shift to the OBE model,
- Faculty's challenge to shift from individual work to teamwork.

In conclusion, the role of the faculty in creating a successful shift from the old educational model to OBE is being recognized as a crucial factor that needs to be considered in a policy-making decision process. "From our earlier dialogue we learned that the most important ingredient in learning outcomes models of undergraduate education is faculty involvement and ownership and that with such involvement many apparently insurmountable issues can be overcome" (McDaniel et al., p. 156). Some of the proposed rewards that would ease the involvement of the faculty in this process are (p. 153-156):

- Hiring someone in the Office of Academic Affairs to respond to faculty requests for data relating to teaching and learning and also hiring someone to direct institutional research to help shift the focus of the university's data infrastructure and systems to support faculty efforts to improve student learning;
- Consensus-building across as well as within disciplines;
- Faculty get course releases or stipends to have the time and resources to develop learning modules;

- Intrinsic rewards provide powerful incentives for our faculty... The personal and intrinsic rewards for faculty stem from commitment to student success and mastery;
- Rewards also come from feeling empowered, having an influence on the quality of the educational programs, and enhancing excellence in teaching;
- To offer participating faculty some financial rewards that reflect the University's commitment and appreciation for their efforts;
- Other forms of reward are funding to attend national conferences, invitations to national experts to spend time on our campus, and support for other forms of professional growth.

The analysis of the answers to the questions shows that while the phenomenological strategy undertaken by the researchers is aligned to their philosophical worldview and is effective in the identification of the common key elements and challenges that must be addressed in all four institutions, a quantitative approach (interview, survey) which could later study the relationship between several significant variables that differentiate the institutions – status, faculty, stage, role of assessment, outcomes, credits for prior learning, experiential learning, technology- and the participants' experiences would create a better understanding of the mechanism of OBE within diverse learning environments.

Thus, the research question could be reformulated in this way: How would the above mentioned variables impact the roles of faculty in an OBE model?

Because faculty are engaged in new and evolving roles in these models, the determination of faculty load remains one of the important unresolved issues. In many ways outcomes-oriented education is radically different from the current credit-for-contact model of higher education; and its implementation requires significant adjustment to most institutional policies, procedures, and structures. From our experience, the benefits for student learning and the challenges and rewards of these new faculty roles make re-thinking higher education structures and policies well worth the effort. (McDaniel et al., p. 156)

Table 1- SWOT analysis of the new faculty role in OBE: The experiences of four models and institutions

Strengths	Weaknesses	Opportunities	Threats
<p>Outcomes-based learning and assessment approaches comprise effective mechanisms for improving the educational experiences of our students and an effective tool for faculty, programs, and departments in order to obtain better results in terms of student learning for their investment of time and resources.</p> <p>OBE reflects a shift in language and in power; in the social role of higher learning; in learning as public, explicit, and shared, and as a communal enterprise.</p> <p>Faculty determine the appropriate learning strategies and assessment strategies to match the intended outcomes.</p> <p>The faculty who volunteered to participate because they believe in outcomes-based education are benefiting from their collaboration and opportunities to share creative strategies to facilitate learning.</p>	<p>It has been a challenge to shift from individual faculty work to faculty teamwork.</p> <p>A special challenge has been compliance with external regulations and accreditation standards.</p> <p>Faculty members sometimes complain that the shift to learning outcomes takes time away from the core mission of teaching and time spent with students.</p> <p>Some faculty are afraid of change because they may feel the changes mean someone wants to get rid of their course or force them to change their way of teaching.</p>	<p>Many of the faculty believe, however, that the implementation of learning outcomes approaches will lead to greater efficiency and quality in teaching and learning; but for faculty this shift takes a leap of faith.</p> <p>No specific model of outcomes-based education was championed, and the faculty were free to determine how OBE would be designed.</p> <p>Focus on outcomes can lead to considerable savings of a faculty member's time and effort, to instruction that is better geared to the students' preparedness without loss of standards, and ultimately to greater learning.</p> <p>Work hard to develop a culture of civility, respect and collaboration.</p> <p>Be able to call upon shared commitments and values to get you through some of the rough spots.</p>	<p>The belief that a shift to an outcomes-based education environment might 'normalize' the educational experience of students or reduce learning to its lowest common denominator, produce a mechanistic view of teaching and learning and oversimplify the very complex and nuanced learning processes that this requires.</p> <p>Some resistance to outcomes-based approaches despite the fact that the University is dedicated to teaching as well as research.</p> <p>A prior condition for a shift to learning outcomes education is an understanding of faculty's time and their expectations about time.</p> <p>Disagreements over intended outcomes and standards for assessment can divide the academic community</p> <p>Disincentives, such as promotion and tenure structures that currently do not support this kind of investment of faculty time and effort.</p>

Outcomes-based Education and the Concept of Knowledge

Richard G. Berlach, Professor of the College of Education, University of Notre Dame Australia in his paper entitled ‘Outcomes-Based Education and The Death of Knowledge’ challenges the OBE paradigm and rejects the positive aspects of this educational model by first referring to the changing meanings of the term. “Outcomes-based education (OBE) is like a chameleon – at the point when its defining attributes are becoming discernable, it changes form and colour. Even its chief architect keeps changing his mind, moving from traditional OBE through transitional OBE to transformational OBE (Spady, 1994; Spady and Marshall, 1991) – terms which, rather than clarify, morph the monster further”. (Berlach, 2004, p. 2)

In his introduction, Berlach states that:

The purpose of this paper is twofold. First, to briefly examine how the OBE agenda, which is now in full swing across Australia, is being interpreted, implemented, and received by the community of educators. Second, to focus on what I perceive to be serious deficits of OBE as a paradigm. Many have in a blinkered fashion lauded OBE’s virtues but failed to address its glaring deficits. In part, my paper aims to provide the necessary corrective. In all of this, I intend examining the Federal context in cursory fashion and concentrating on the State with which I am most familiar and where OBE has now been the modus operandi for some ten years – Western Australia. (Berlach, 2004, p. 2)

Berlach approaches the issue of the outcomes-based education by holding to the philosophical assumptions of the advocacy/participatory worldview. “This position arose during the 1980s and 1990s from individuals who felt that the postpositivist assumptions imposed structural laws and theories that did not fit marginalized individuals in our society or issues of social justice that needed to be addressed. This worldview is typically seen with qualitative research as well... in the main, these inquirers felt that the constructivist stance did not go far enough in advocating for an action agenda to help marginalized peoples. An advocacy or participatory worldview holds that research inquiry needs to be intertwined with

politics and a political agenda. Thus, the research contains an action agenda for reform that may change the lives of the participants, the institutions in which individuals work or live, and the researcher's life". (Creswell, p. 9)

Therefore, Berlach's action agenda for reform is rethinking the OBE paradigm. "OBE lacks reflexivity. Even in the face of ever-mounting opposition, OBE keeps metastasising with apodeitic-like resolve. The bureaucrats and technocrats of the Education industry, probably because of the time and funds already expended, continue to justify and prop up a paradigm which experienced educators are finding increasingly loathsome" (p. 11). He believes that the outcomes-based education has changed the lives of the educators, the academia as well as his self. "OBE is currently the preferred model via which compulsory education in Australia is being interpreted. It is a train with a full head of steam. Extending the metaphor, I see a massive derailment in the not too distant future". (p. 3) Then, Berlach grounds his discussion around 5 key concerns:

1. "OBE is confusing. Because of its amorphous and nebulous nature, OBE is not easily definable" (p. 3),
2. "OBE is jargon-impregnated... Jargon can so easily be mistaken for substance – it can sound so impressive, promise so much, but deliver so little" (p. 5-6),
3. "OBE is deceptively transformative. It takes key terms from the lexicon of Education, ascribes to them new meaning, and then attempts to mould incumbents accordingly" (p. 6),
4. "OBE is suffocating teachers... Rather than providing teachers with an 'ah ha' experience in terms of interpreting the Progress Maps, my summation is that the Guides will merely add to the interpretative murkiness which already exists, that is, another layer of confusion" (p. 7-9),
5. "OBE suffers from assessment overload... Teachers are expected to produce never-ending tomes of evidence, usually in the form of student portfolios" (p. 9).

Based on the above considerations, Berlach argues that the consequence of the implication of OBE in higher education is the death of knowledge through its different aspects. First of all, he states that "the lack of knowledge occurs through lack of conceptual clarity" (p. 5) in this aspect that "the language of

OBE is the jargon of corporate business, or what Kohn (1993) has termed the ‘market place’. It appears to be corporatisation applied to education. OBE is obsessed with accountability, or more accurately, hyper-accountability, with everything requiring proof and an adiposity of evidence” (p. 3). In this regard, Berlach believes that outcomes are more about outputs rather than inputs, products rather than processes.

OBE advocates misunderstand education. Education is not a product defined by specific output measurers; it’s a process, the development of the mind... Outcome-based education is not education; it is experimentation. It is not academic; it is psychological. It appears that the time has arrived to look elsewhere for theoretical enlightenment. (p. 4)

Secondly, Berlach claims that “the death of knowledge occurs through jargon which obscures rather than illuminates the significant” (p. 6). Based on his comparative study of the terminology of OBE used by Brendan Nelson (2004), the Australian Government Minister of Education, Science and Training, and the language found in Spady, who is being recognized by Berlach as “the educational consultant and architect of OBE”, he finds the use of an ‘ideologically-laden language’ that is ‘frighteningly unmistakable’.

One always needs to scratch beneath the veneer of jargon and search for a well developed theory which has currency in praxis. If such is not found, then in the words of the venerable William Shakespeare, there may well be ‘something rotten in the state of Denmark’. (p. 6)

In his third concern, Berlach asserts that “the death of knowledge occurs when competent teachers are forced out of the profession by ideological aggravation” (p. 7). “A standard dictionary definition of teaching (e.g. OED) includes reference to imparting knowledge or giving instruction. OBE largely strips teachers of this function and makes them educational technicians. They are to become facilitators, guides, curriculum developers, child-minders – in short – bureaucrats. Few teachers, I would venture to say, joined the profession with the idea of becoming indentured servants to the OBE agenda” (p. 6). Thus he assumes that “fewer and fewer teachers, it seems, are prepared to embrace the OBE agenda and consequently, are opting out of the profession” (p. 7).

The fourth consideration is related to the amount of preparation needed for a teacher who performs under an OBE paradigm. Thus Berlach maintains that “the death of knowledge occurs when hyper-planning takes precedence over pedagogical imperatives” (p. 9).

At the risk of being accused of revisionist/modernist over-simplification, in the past, a WA teacher whose goal was to teach a poem would have done so. This is no longer the case. The same teacher is now required to wrestle with 13 Overarching Learning Outcomes and 5 Values outcomes from the Curriculum Framework (1998); several Learning Area Outcomes... and information contained within a plethora of “supporting materials”. To teach a poem?? To their credit, many already overworked teachers are trying their best to comply. My question is, why should they have to? What evidence is there that this is a superior way of teaching a poem? What evidence is there that all of this planning helps to achieve better student learning? (p. 7-8)

Finally, Berlach argues that “the death of knowledge occurs when evidence of learning becomes more important than the learning itself” (p. 11). “In a recent NSW government commissioned report on OBE; Eltis (2003) indicated that the following comment was typical of what teachers were expressing:

Teacher workload, including paperwork, preparation and selection of assessment tasks, re-writing of report formats, has increased enormously since 1995. Not only are we still coming to terms with all of the new syllabus and associated documents, there are too many other added pressures on teachers that are expected to be included in an already overfull teaching load. (p. 9)

Berlach later bases his conclusion on a statement from his colleague.

I asked my colleague whether her school was in any way committed to the notion of OBE. With a wry laugh she simply said ‘no, outcomes-based education is for the masses, here we teach the country’s future leaders’ ... For the privileged, it seems that the impartation and consequent acquisition of knowledge is still a teaching-learning priority.

And for the rest of us? A continuing diet of outcomes I'm afraid. But then, as education authorities well know, the starving will eat anything. (p. 11)

The critical analysis of Berlach's study shows a lack of scientific evidence. In order to agree with the arguments boldly laid down in this paper, we need more relevant data regarding such claims as 'competent teachers are forced out of the profession by ideological aggravation'. Then we might ask how the researcher knows about the occurrence of this phenomena, is it based on his personal encounter or an evidenced-based research? And could this claim form the basis of our understanding of the effectiveness of the outcomes-base education?

A comparative analysis of Berlach's study against McDaniel's research discussing the same issue demonstrates the distinct characteristics of philosophical worldviews and their related research methodologies in shaping the perception of the audience related to a specific topic. While, McDaniel and her team investigate the role of faculty in an OBE system from a constructivist point of view, applying the phenomenological strategy of open-ended questions, Berlach's transformative philosophy is based on a narrative form of inquiry based on his own experience as well as his colleagues. They both point out the workload of the faculty in the new OBE system but conclude in a completely different ways. While McDaniel insists that "the benefits for student learning and the challenges and rewards of these new faculty roles make re-thinking higher education structures and policies well worth the effort" (McDaniel et al., p. 156), Berlach claims that "for the sake of expediency and possible professional advancement, teachers may be forced by bureaucratic expectations to maximise the measurable and minimise, or even ignore, the more affectively-freighted aspects of learning. If this happens, then not only would teaching have been redefined as argued earlier, but so too would have the very concept of Education" (Berlach, p. 10-11).

In order to understand the role of OBE in student learning as emphasized in Lennon's thesis statement, the next discussion embodies the relationship between the practices for assessing and using student learning outcomes and the improvement of student success by the critical analysis of the 21st

Century Learning Outcomes Project that involved sixteen diverse community colleges in the US and Canada.

Outcomes-Based Education and Student Success in Community Colleges

The paper entitled ‘Learning Outcomes for the Twenty-first Century: Cultivating Student Success for College and the Knowledge Economy’, written by Cindy L. Miles and Cynthia Wilson, and published in 2004 in the ‘New Directions for Community Colleges Journal’ “provides an overview of the League for Innovation in the Community College's project on learning outcomes. The 21st Century Learning Outcomes Project was a three-year project involving sixteen diverse community colleges that supported the development of practices for assessing and using student learning outcomes to improve student success” (Miles & Wilson, 2004, p. 87).

This project is Stage Two (Implementation and Advocacy) of a larger-scale League effort to bring new outcomes-based standards for student learning to the community college field. In Stage One (Planning and Research), the League, supported by The Pew Charitable Trusts, researched the extent of U.S. and Canadian community college efforts to define, assess, and document student achievement of twenty-first century learning outcomes (Wilson, Miles, Baker, & Schoenberger, 2000). Stage Two was a three-year project funded for the first two years by The Pew Charitable Trusts and continued with support from the League and participating colleges through June 2003.

The philosophical worldview proposed by this study is the pragmatic approach. “Pragmatism as a worldview arises out of actions, situations, and consequences rather than antecedent conditions (as in postpositivism). There is a concern with applications- what works- and solutions to problem. Instead of focusing on methods, researchers emphasize the research problem and use all approaches available to understand the problem” (Creswell, p. 10). The main goal of this project was “to increase the capacity of community colleges to define and document the acquisition of the critical competencies that students need to succeed in the workplace, in transfer education, and in today's society” (Miles et al., p. 88). In this order, “all sixteen colleges developed learning outcomes Web sites to share their project plans, reports,

and activities as well as self-assessments, outcomes rubrics, and assessment or documentation models” (p. 88).

“Pragmatism is not committed to any one system of philosophy and reality. This applies to mixed methods research in that inquirers draw liberally from both quantitative and qualitative assumptions when they engage in their research” (Creswell, p. 10). In this study, the researchers used the theoretical lens (advocacy/participatory) as an overarching perspective which explains their design of both qualitative (focus group and site visits) and quantitative (surveys) methods. As mentioned before, this project was conducted in two stages and researchers used several methods of inquiry in their study by undertaking transformative mixed methods procedures. In the first stage of ‘Planning and Research’, the researchers studied the feasibility of their project by undertaking the qualitative method of focus group. “Preliminary focus groups with college leaders in Phase 1 of the project convinced the funding agency and project directors that community colleges varied too much in structure, governance, and culture to expect a single common solution to such a complex endeavour. Differences notwithstanding, the project partnerships and interchanges led to similarities in outcome sets and in assessment and documentation strategies”. (Miles et al., p. 89)

Drawing on results from a preliminary survey and document analysis conducted by League staff, the focus group identified a set of eight broad categories of 21st century skills, encompassing the following so-called hard skills of literacy, numeracy, and technical ability, as well as soft skills such as teamwork, communication, problem solving, and the ability to interact with diverse groups: communication skills, computation skills, community skills, critical thinking and problem-solving skills, information management skills, interpersonal skills, personal skills, technology skills. (p. 89-900)

Then, the findings collected from stage one of the project set the ground for the second stage of ‘Implementation and Advocacy’. At this point, researchers gathered data from site visits and surveys. “Using these results, the League conducted five institutional site visits and a survey of U.S. and Canadian

community colleges to test agreement on this set of 21st century skills and to assess the status of North American community colleges in establishing and assessing student achievement of such skills” (p. 90).

The thesis of this study emphasizes MacClenny’s statement (1998) which describes some of the underlying causes of a growing demand and an external pressure for demonstration of learning outcomes: “The ugly truth about the current situation in American higher education, even in most community colleges, is that we do not have a clue what and how much students are learning- that is, whether they know and can do what their degree (or other credential) implies” (Miles et al., p. 87).

The above statement shows that there was no evidence that could define, demonstrate and measure the quality (what) as well as the quantity (how much) of learning at that time. Thus the research methodology using both qualitative and quantitative strategies could be justified as the best tool to gather information in order to respond to the project’s goal of “enhancing the capacity of community colleges to define and document students’ acquisition of critical learning outcomes” (Miles et al., p. 88).

Each college worked independently, with feedback and support from partner colleges and project staff, toward the common project goal by focusing on five institutional objectives:

- Define. Define a set of core competencies that encompass 21st century learning outcomes.
- Develop. Develop a set of curriculum components for 21st century learning outcomes with specific learning outcomes for each competency, levels of performance that students should meet, concrete indices of student work to demonstrate each level, and assessment strategies for measuring student achievement at each level.
- Deliver. Identify and implement best practices and multiple models of delivery and assessment of 21st century learning outcomes.
- Document. Develop non-traditional methods for documenting student achievement of 21st century learning outcomes beyond traditional grades, credits, and degrees.
- Disseminate. Share model programs and practices with other institutions. (p. 88)

The work of colleges toward the project's goal ended up with some unexpected outcomes and achievements, the important result of this project being recognized a shift of approach caused by the implementation of all five institutional objectives. "Although the project began with the goal of cultivating a focus on learning outcomes, several college teams quickly found this work to be a catalyst for major institutional change... particularly for colleges that had extensive institutional effectiveness and program review processes but no comprehensive processes for assessing and documenting learning at the individual student level... the project served as a means of connecting a number of loosely related initiatives all aimed at improving the quality of undergraduate education." (p. 97)

The challenges of undertaking the outcomes-based education approach identified by this research are being mentioned as the following (p. 97):

- Lack of collaboration among disciplines and other groups within the institution
- Lack of knowledge about assessment processes and tools
- Lack of awareness of the need for outcomes-based education
- Lack of appropriate, effective assessment tools and models
- A perception that some important learning outcomes are not measurable
- Traditional insulation from accountability for individual student learning at the classroom level
- Traditional resistance to self-assessment in higher education
- Lack of incentive for outcomes-based efforts resulting from past external requirements for accountability, funding, and policy that are rarely tied to individual student learning
- Increasing demands and constricting resources, which leave little time or incentive for educational reform efforts of this magnitude

The analysis of these challenges shows that the lack of awareness about the importance of the outcomes-based education as well as its assessment tools and strategies could be identified as the roots of other challenges such as the lack of collaboration among different groups within the institution and the perception that some outcomes are not measurable. However, the issue of assessment in an OBE

educational system remained as the main concern among different participants. “Throughout the project, participants universally identified assessment as the most difficult aspect of this work, and during seminars, focus groups, and site visits they explored the reasons for this determination” (p. 98).

The report concludes by an effective list of recommendations stating that almost all sixteen colleges that joined this research initiative are still engaged in implementing their learning outcomes agenda more than three years later and recognizing that “a learning outcomes approach can help a college demonstrate to its students that it offers them relevant curricula, meaningful information about their learning achievements, and more control over their learning to help them prepare for success in their professional and personal lives” (p. 99).

Other institutions embarking on a learning outcomes journey might take the following lessons from the pioneering experiences of these sixteen forerunners:

- Learning outcomes implementation must be a continuous campus conversation;
- The impetus for adopting an outcomes-based approach should be the institution's stated and lived value of student learning;
- Since the accountability movement is not progressing in some colleges with the speed and urgency it might if the need were critical, other motivators can be effective;
- Faculty should be deeply engaged and supported from the onset in the leadership of any effort toward outcomes-based learning;
- A college should implement outcomes-based learning using a model that fits its culture and value. (pp. 98-99)

Conclusion

Outcomes-based learning is not a new educational system but has been newly emphasized as a transformational perspective in higher education. This approach places the learner at the center of the learning process and introduces strategic educational planning that is aimed at achieving results. Therefore, the questions are ‘what’ and ‘whether’ rather than ‘how’ and ‘when’; so ‘how would the students learn?’ will be determined by ‘what should the students learn?’. In this paradigm, education becomes a means to an end rather than an end in itself.

Study shows that OBE is being recognized as the most important educational component of societies with a knowledge-based economy. In order to remain competitive in the global market, Canadian higher education has also started to show a significant shift toward this new direction. Despite the recognition of the importance of OBE in the future of post-secondary education in Canada, there is a lack of fresh research regarding the length and depth of this new implementation and its subsequent consequences in both colleges and universities. Based on the literature review, the critical analysis of the topic and my personal experience as a teacher, I believe that OBE is a transformational approach which could be considered as an effective tool in solving the issues regarding both quality and mobility in Ontario’s higher education. In terms of policy making, there is a need for a bottom-up approach as well as new policies at the government level. As the objective of my research is to bring a culture of change based on the study of the current situation, my philosophical worldview would be based on a transformative mixed-methods procedures in which I intend to use the theoretical lens of advocacy/participatory. An explanatory research will help me to specify the discipline/program and the educational environment.

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