

# Learning Outcomes and Credit Transfer

Examples, Issues, and Possibilities

A BCCAT Special Report

*Prepared by John FitzGibbon, Associate Director, Transfer & Articulation, BCCAT*

*February 2014*



Celebrating **25** years of  
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# Introduction

The efficiencies gained through credit transfer systems for higher education and for students are well understood in many places around the world and there is increased interest in examining different credit transfer models suitable to different jurisdictional contexts. In a previous review of transfer models and systems in BC, North America, and beyond, BCCAT noted that “several jurisdictions have utilized the idea of basing articulation decisions on courses outcomes” (Finlay, 2009 p. 3). This paper provides a more detailed look at models of transfer that incorporate learning outcomes in credit transfer decision making.

The impetus for this examination is a number of global trends and activities that have the potential to affect higher education in BC, including:

- the increasing emphasis on enabling cross-jurisdictional student mobility;
- the example of the European Bologna Process initiative to write all higher education programs in terms of learning outcomes and adopt a common degree road map across the continent;
- the increased marketing of educational programs to domestic students and the vast international student market;
- the decline in traditional domestic student numbers; and
- the push to widen the labour market by re-training older workers and providing access to post-secondary education for non-traditional students.

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***In a global higher education context of increasing competition for student recruitment, inter-institutional student mobility, credit transfer flexibility, and quality assurance policies, learning outcomes have become part of recent international trends in institutional, curricula and pedagogical reform having profound effects on all aspects of curriculum development, implementation and evaluation. (Hubball & Gold, 2007, p. 5).***

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These trends drive discussions on making credit transfer more widely available, efficient, rigorous, and transparent. Effective credit transfer systems are seen as an aid to greater access to tertiary education, as well as a means to lower student and institutional costs (Bekhradnia, 2004; Junor & Usher, 2008; Trick, 2013). This paper will further explore the academic literature on the role and possibilities of learning outcomes in articulation and transfer, and offer some directions that others are exploring based on that review.

# Learning Outcomes:

## Definition

Learning outcomes represent a view of education that focuses on the results or outputs of the educational process as expressed in the knowledge, skills, and abilities that students can demonstrate as a result of completing a course or program. The alternative perspective is based on a description of the instructor's intention regarding what will be taught and learning is quantified in terms of the length of courses and programs, access requirements, material covered, textbooks used, and types of assessments (Adam, 2008). Peter Ewell (2001) describes student learning outcomes as “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 collegiate experiences” (p. 6). The European Commission, in establishing common definitions for qualifications frameworks and other policy directions across the continent, states that learning outcomes “describe what a learner is expected to know, understand and be able to do after successful completion of a process of learning” (European Communities, 2013 p. 11).

While there may be some commonality in conceptualizations of learning outcomes, there is little uniformity in what to call them. For example, institutions may refer to the outputs of their education process as core competencies, expected student-centred learning outcomes, intended learning outcomes, or institutional aims. What these have in common is the intention to be explicit about what the student can be expected to know and be able to do as a result of successfully

completing a program or course. Within institutions, there is a similar challenge as some faculty still see outcomes and objectives as interchangeable in their expression within course outlines (Carter, Coyle & Leslie, 2011). What may be described by some faculty as learning outcomes may be described by other faculty as behavioural objectives (Ascough, 2011). While a number of scholars (e.g., Ewell (2001), Adam (2008)) and many jurisdictions distinguish between competencies/competences and learning outcomes, this paper will use “learning outcomes” as the generic term to describe what students have achieved as a result of the learning process.

A discussion of the use of learning outcomes in transfer and articulation is made more difficult by their use for other purposes. A survey of the literature identifies three broad categories for the application of learning outcomes: for quality assurance and program and institution improvement; for improvement in teaching and learning; and as the basis for credit accumulation and transfer systems.

### *Quality Assurance and Improvement*

- descriptions of learning as the basis for accreditation of programs and institutions;
- basic descriptions of credentials in credential and qualifications frameworks;
- a means to describe what learners will demonstrate as the basis for quality assurance;
- the basis for program improvement or program evaluation in an institution;
- the means by which agencies, professions, government, or regulatory bodies describe what must be demonstrated in order to be certified;

### *Improvement in Teaching and Learning*

- a means to describe sequencing of learning within a course or program;
- a common currency for descriptions of what constitutes quality programming;
- as the means by which to encourage improvement in teaching and learning;
- a means to communicate what students will achieve to employers and others;

### *Credit Accumulation and Transfer*

- a means to describe what is expected of students when applying for assessment of prior learning;
- the basis for decisions relating to credit accumulation and credit transfer.

(Adam, 2008; Bjornavold & LeMouillour, 2009; Carter, Coyle & Leslie, 2011; Ewell, 2001; Gallavara et al., 2008). While these purposes are related, this paper will focus on the use of learning outcomes for credit transfer.

## **Learning Outcomes in Credit Transfer**

Learning outcomes have been identified as playing several different roles in the credit transfer process. The first is providing what Adelman (2009) refers to as a 'reference point' or common language for describing courses and programs (p. 51). The wider the range in variability of programming due to language, culture, and distance, the more a common framework using recognizable and reliable course information is useful. The second is as a basis for assessing course

or program quality when accepting credit for courses delivered outside of the home institution. In the absence of cross-jurisdictional accreditation, common grading standards, or similar criteria for assigning credit values, some proxy for establishing the quality of courses is helpful in determining equivalency. Efficient credit transfer determinations are also a major factor. Building trust in the quality of other institutions' programs, and preparing and negotiating articulation agreements can be a time-consuming process. Any means to make this process more efficient is likely to be explored by jurisdictions interested in supporting student mobility, even though it would still be necessary to create shared understanding and trust in quality. Outcomes based articulation modes can't forego the necessary interaction to get there—entirely. The fourth factor is the interconnectedness of higher education and the growth of the global tertiary marketplace. Institutions, whether competing or collaborating with each other, need a means to facilitate this increasing interconnectedness.

Perhaps the most important function learning outcomes can provide is in shifting the focus to the results of learning from input measures (Adam, 2008; Bjornavold, & Le Mouillour, 2009). For example, in most jurisdictions, articulation has traditionally been mostly input-based, relying on topics, assignments, and textbooks. Outcomes conceivably introduce a more nuanced means of assessing student learning. Learning outcomes can help to provide a meaningful description of learning using common language (Adelman, 2009; CEDEFOP, 2009; Gallavara et al., 2008). Learning outcomes are more amenable to describing students' learning as they progress through a program, because they can encapsulate both the broad outcomes of a program of study and the

specific competencies expected of a module or unit of study. They can be a reference point for describing the sequence of learning, allowing institutions to judge whether a course satisfies prerequisites and/or is at the level of difficulty normally associated with a particular level in a program. In Europe, with its large geographic area, diverse cultures, and many languages, a common point of reference is essential when attempting to build a credit transfer system. The European University Association, in its review of a decade of changes in European higher education, described the value of learning outcomes as enabling “learning undertaken in different contexts to be compared relatively transparently and free of preconceptions or prejudices, thus facilitating the comparison and recognition of learning between different contexts” (Sursock & Smidt, 2010, p. 65). Presumably, if learning outcomes can aid in establishing common frames of reference across the various European institutions, they could do the same in more homogenized systems of higher education.

Transfer credit policies are influenced by the convergence or divergence of quality standards. In BC, the growth of colleges as transfer institutions required that their transfer programming meet the standards of the receiving university programs. The articulation system in the province, allied with government and institutional reviews and reporting structures, has ensured a convergence of quality standards. In this milieu, employing the common reference point of learning outcomes may not be as necessary as in other jurisdictions where the history of the post-secondary culture has not provided the same common understanding of institutional and programming quality. In BC, students can move from institution to institution with credit, knowing that transferred courses will

prepare them to be successful at the next institution and will be roughly of the same quality. In Ontario, where the college and university sectors of the higher education system are being asked to collaborate on student mobility, there are very different types of curriculum and differences in preparation level for programs (i.e., the college and university high school preparation streams). Learning outcome assessment is suggested as the best means to ensure quality in a rigorous and systematic way (HEQCO, 2012).

The attraction of a common reference point extends far beyond institutions and national boundaries, and is illustrative of how tertiary education is becoming more connected globally. Tremblay, Lalancette, and Roseveare (2012), in their report on the feasibility of assessing higher level learning outcomes across jurisdictions for the OECD, note that the interest around the world in defining learning outcomes by discipline, institution, and entire jurisdiction is indicative of higher education systems being increasingly interconnected and global in orientation. They note that 70 countries have adopted qualifications frameworks that define learning outcomes associated with each credential and that interest in “Tuning,” the European-based process of describing and aligning degree programs using learning outcomes, has “expanded into the Americas, Africa, Central Asian Republics and Russia (with feasibility studies in Australia, Canada and China)” (p. 42). They suggest that this interest has implications for student mobility, transferability of credentials, and degree recognition (p. 37). Floud (2006) comments, “the old forms of trust, appropriate to an elite system [such as prior knowledge of the awarding institution or confidence in the processes of external verification by peers], are insufficient when confronted with millions of students, hundreds of

thousands of courses, thousands of universities and with the demands of millions of employers (as cited in Gallagher, 2013 p. 70).

The growth of a global education market and interest in student mobility has encouraged governments to look for the most efficient yet effective means of enabling credit transfer. Bekhradnia (2004) notes that building trust regarding the quality of sending programs, through discipline-specific articulation committees and research into transfer success, is a key element in creating a successful transfer system. However, BC's system of course articulations, supported by discipline-specific committees, could be seen as cumbersome and time-consuming in a jurisdiction developing transfer systems without the benefit of BC's history of incremental additions to articulation agreements over the years. Carter, Coyle, & Leslie (2011) note that agreement on the learning outcomes to be demonstrated by students at the conclusion of a program could lessen the need for individual course comparisons and reduce the need for course-to-course articulation agreements. They suggest using standardized learning outcomes to develop block transfer agreements that cover a system is a more efficient method of supporting student mobility. However, identifying program outcomes for block laddering is a different process and leads to a different type of transfer than developing course articulation agreements, even if based on learning outcomes. The former does not facilitate mid program

or incomplete program credit transfer very well—an important consideration as transfer occurs very often prior to program completion.

In a higher education system in which transfer is legislated or tightly controlled by government, learning outcomes may be an efficient method of determining how closely one curriculum matches another, one which may rely less on faculty input. Where quality of institutional programming is also legislated or subject to similar accreditation procedures, the process theoretically could be reduced to a one-to-one matching of learning outcomes. At least one web platform product is predicated on this assumption. See, for example, the Elumen website at [elumen.info](http://elumen.info) for information about the ReProTool, a software used with the European Credit Transfer and Accumulation System (ECTS) and Tuning Process described by Pouyioutas, Gjermundrod, & Dionysiou (2012). However, faculty play the key role in curricular and outcomes adjudication for academic integrity and it is unlikely that any form of software product would replace this.

Building trust and understanding of program quality in other institutions through faculty interaction, such as in the BC model, is difficult in large jurisdictions or across the country, except within very specific disciplines. When negotiating pan-Canadian agreements, the Canadian Armed Forces have used learning outcomes in a number of programs to define the standards they would like achieved by students as they

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***... as Europeans undertook an epochal effort to harmonize dozens of very disparate university systems, they decided to make students' demonstrated levels of learning the touchstone for transfer protocols and for guiding student progress toward next-level degree programs. (Gaston, 2010, p. xii)***

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move from institution to institution across the country (G. Cran, personal communication, May 25 2013). The Canadian Armed Forces approve institutions to offer trades and business programs for their personnel and provide a competency map similar to that given to institutions by the accounting professions.

The next section will discuss how these general functions related to learning outcomes in credit transfer play out in selected jurisdictions. British Columbia is used as the starting point.

## Selected Jurisdictional Examples

### British Columbia

The general aims of credit transfer in British Columbia are to enable access to degree programs, facilitate credential completion, and ease progression to subsequent credentials through ladder pathways across the province. Depending on the discipline, discussions on course and program content by articulation committees may include explicit reference to expected learning outcomes, for example to agree on core curriculum in degree or diploma programs, meet regulatory body expectations, or to develop Flexible Pre-Majors or block transfer agreements. In addition, institutions may submit course learning outcomes along with other information as part of the articulation request using the Transfer Credit Evaluation

System (TCES) form.<sup>1</sup> In some institutions, there is an expectation that courses and programs be expressed in learning outcomes, and these form the basis for requests for credit transfer to other institutions or as the basis for ladder program agreements.

A number of program areas have developed courses in terms of learning outcomes for some time, especially in the applied areas. Although learning outcomes can and do occur in course outlines across a wide variety of disciplines, they are more likely to be found in such areas as health care, human services, tourism, hospitality, and the trades and technologies. In some of these areas, courses are developed as part of common or core curricula mandated by the province such as the program standards developed for the trades.<sup>2</sup> The expectation is that graduates of programs demonstrate common outcomes, although the method that they are arrived at may differ. Where articulation is requested in these disciplines, the request is usually supported by a list of learning outcomes. Other disciplines, especially those in Arts and Science, have different traditions of describing courses and programs. Discussions at articulation committee meetings indicate that in many disciplines, especially in Arts and Science, more information is requested about courses than learning outcomes can provide, including methodology and learning activities, assessment and weighting, instructor qualifications, texts, topics, and objectives.

A number of professional bodies identify the learning outcomes (often referred to as competencies)

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<sup>1</sup> See [bccat.ca/info/handbook/pages/transfer-friendly-course-outline-form](http://bccat.ca/info/handbook/pages/transfer-friendly-course-outline-form)

<sup>2</sup> See [itabc.ca/discover-apprenticeship-programs/search-programs](http://itabc.ca/discover-apprenticeship-programs/search-programs)

required for pre-service training, which allow for both entry into the profession and movement across the country. Examples of these are technologists, technicians, engineers, registered and practical nurses, health care assistants, dentists and dental assistants, forest professionals, biologists, chemists, and the accounting professions. Representatives of the professional bodies often attend articulation committee meetings in order to discuss certification and training requirements.

Another area that uses learning outcomes to establish transfer protocols is Adult Basic Education (ABE) (British Columbia Ministry of Advanced Education, 2013). The ABE Handbook, published annually, identifies a series of goals intended to facilitate student mobility and credit transfer between institutions. The ABE Articulation Steering Committee sets and maintains learning outcomes that respect the autonomy of colleges and institutes while creating equivalent course content. The Working Committees review course outlines, determine disciplinary learning outcomes, and articulate courses based on those learning outcomes to produce a provincial transfer guide. The resulting grid is published in the ABE Handbook and posted on the Ministry of Advanced Education and BC Transfer Guide websites.

A number of disciplines have used learning outcomes to define programs in order to develop block transfer agreements. The block transfer agreements in Tourism, Hospitality, and Business Management are based on agreed-upon learning outcomes at the diploma and degree levels, and these are regularly reviewed by the articulation committees in order to keep the agreements current. In a different form of agreement, the Computing Education Articulation

Committee identified the common learning outcomes for lower division courses leading to the major in developing its Flexible Pre-Major. The committee members realized that the same topics and skills were covered in the first two years of Computing Education programs at different institutions but not in the same sequence or depth; thus, they identified all of the learning outcomes expected of students in the lower division when developing their pre-major agreement. In 1998, the English Articulation Committee developed an Aims of First Year Courses protocol in order to enhance transferability of courses and identify shared expectations for student skills and abilities. The committee has since updated the document a number of times (BCCAT, 2012).

## Ontario

The government of Ontario has shown considerable interest in expanding opportunities for credit transfer, given the current era of fiscal restraint in higher education and the need to support students in obtaining credentials in reasonable time at minimal cost (Ontario Ministry of Training, Colleges & Universities, 2011). However, Ontario's higher education system is differentiated, with colleges and universities offering different types of programs to students with different backgrounds and strengths. Traditionally, transfer between the systems was not common or encouraged. A reasonable approach to supporting mobility in such a milieu is to encourage the sectors to work together to develop progression to credentials, with each sector providing appropriate but minimally overlapping programming as well as other tactics, including course articulation. One way of achieving this is to align programs within the post-secondary sector to common program standards, and then to encour-

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***... determining learning equivalency using program standards rather than course by course comparison is innovative. Program standards have clearly defined learning outcomes for programs across the province so it is an efficient way to improve pathways and provide more students with choices. (Ontario Ministry of Training, Colleges & Universities, 2011 p. 7)***

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age ladder pathways involving study at different institutions that eventually lead to credentials. In its proposal to the Ontario Minister of Training, Colleges and Universities to revise the 2005 Private Career Colleges Act, the Ontario Association of Career Colleges (OACC) suggested that agreement on common program standards and learning outcomes by apprenticeship programs, career colleges, community colleges, institutes, and universities was important in creating seamless pathways for students (OACC, 2013).

In a system that encourages ladder programs, there needs to be agreement on broad program aims and on the role played by the preparatory programs. The assumption in this type of transfer arrangement is that the 'sending' program provides students with the lower-level courses in a program, and programming does not overlap with courses offered at the receiving institution.

The discussion focuses on preparation and progression rather than equivalency. Learning outcomes by their nature lend themselves to expressing levels of difficulty - an important attribute when building a ladder program.

## United States

The use of learning outcomes in higher education is widespread in the US. Progression from two-year college programs to four-year universities is aided by the common reference point that learning outcomes provides. The six regional higher education accreditation agencies recognized by the US Department of Education and the Council for Higher Education Accreditation (CHEA) require similar processes for reporting, founded on the learning in courses and programs being expressed as learning outcomes. Credit transfer across state borders is not as developed as in-state transfer, and those initiatives that could support more national mobility seem to be dependent on agreement on broad general outcomes.

Articulation and transfer policies in the US have been seen as a means of improving degree completion, especially among minority and low-income students (Dougherty & Reid, 2007). A number of states in the US have developed transfer arrangements founded on common learning outcomes for lower division education core curricula and Associate Degrees. Norrie and Lennon (2013) point out that most US institutions have adopted common learning outcomes for undergraduate programs (p. 9). While the majority of articulation is at the program and course level, a number

of states, including Pennsylvania and Oregon, use outcome-focused standards to encourage greater credit transferability and student mobility across their systems (OACC, 2013).

While most states have developed transfer policies that enable state-wide movement of credit, there are a few initiatives that address student mobility across the country. For example, the Degree Qualification Profile (DQP) developed by the Lumina Foundation, a private US-based foundation, uses wide generic learning outcomes in establishing degree descriptions that are common enough for students to gain credit in other jurisdictions. Four states are currently exploring this framework (Lumina Foundation, 2011). Allied to this initiative is the Association of American Colleges and Universities (AAC&U) Liberal Education and America's Promise (LEAP) campaign, which promotes the use of Essential Learning Outcomes for transfer and accountability (2013). A similar effort, the Quality in Undergraduate Education (QUE) project, which ran from 1997 to 2004, worked with faculty in 21 colleges and universities in four states to draft voluntary standards and student learning outcomes in six arts and science disciplines with undergraduate majors (Albertine & Henry, 2004). A number of states have also experimented with the European idea of tuning within disciplines (Adelman, 2009; Gaston, 2010). The state of Texas has been a leader in tuning, bringing together faculty, students, recent graduates, and employers to establish common learning

outcomes by degree level for eight disciplines, and it is working on an additional four disciplines. Outside of institutional efforts, the American Historical Association is working to define learning outcomes for associate, bachelor's, master's, and doctoral degrees in history (American Historical Association, 2012). Recently, the Western Interstate Commission for Higher Education (WICHE) announced the Interstate Passport Initiative, one goal of which is to "conduct a pilot project in five WICHE states to establish block transfer agreements within and among those states for the lower-division general education core, based on successful integration of LEAP's Essential Learning Outcomes" (WICHE, 2014).

The accreditation process in the US, although not state-governed, has tended to standardize many higher education processes, including the way that curriculum is written and evaluated. In a review of regional accreditation and learning outcomes, Provezis (2010) notes "All regional accreditors expect learning outcomes to be defined, articulated, assessed, and used to guide institutional improvement" (p. 7). In addition, Ewell (2001) observes that all of the large accrediting bodies in the US require public institutions to demonstrate the linkages between course and program outcomes and to identify the means to assess them. Recently, the Western Association of Schools and Colleges (WASC), one of the six regional accrediting agencies, indicated that it was support-

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***Two- and four-year campus transfer partners [are] working together in nine states to align transfer policy and practice around the authentic assessment of student competencies (AAC&U, 2013).***

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ing the piloting of the Degree Qualifications Profile as a means to address issues of accountability, the meaning of the degree, and quality (Klein-Collins, 2013). This aspect of quality assurance within states and within public higher education helps to ensure that transfer is from and to programs of equivalent quality (Klein-Collins, 2012). However, Gaston (2010) suggests that the European Bologna Process and its emphasis on the use of learning outcomes can still provide some lessons for the US in dealing with such issues as consistency in programming, continuity from one program to another, quality assurance, and student mobility.

## Europe

Adam (2008) notes that European countries are basing a wide variety of higher education policy reforms and initiatives on the use of learning outcomes. These changes are exemplified by the Bologna and Tuning Processes, which have had a significant impact on higher education policy worldwide. Countries around the world have examined these processes, either to replicate them or to align their own processes with them (Adelman, 2009; AUCC, 2009; Gallagher, 2013; Gaston, 2010). It is important to note that the major usefulness of the Bologna initiatives, from a government perspective, is integration of students into European labour markets and as a basis for acceptance of credits completed during student exchanges, rather than providing pathways to credential completion for domestic students using multiple institutions. A number of countries and institutions have adopted systems for the transfer and, to a lesser extent, for the accumulation of academic credits. These credit systems were either introduced

by legislation or by institutional agreement (European University Association, 1999).

Begun in 1999, the Bologna Process is an iterative one, with a number of policy and process steps being added over the past decade. In order to harmonize quite different university systems, institutions agreed to adopt a comparable three-cycle degree structure based on jointly agreed-upon principles. This initiative was supported by the development in each country of a qualifications framework compatible with the European Higher Education Area (EHEA) qualifications framework, describing degrees and other qualifications in terms of learning outcomes. The common element of the various frameworks are the Dublin Descriptors, which describe what a graduate at each of three degree levels (bachelor's, master's, and doctorate) should know and be able to do in five core competences (Gaston, 2010). The move to adopt a common degree structure and develop qualifications frameworks now includes nearly 50 countries and over 4,000 institutions. Although supported by governments of the region and the European government, the Bologna Process began as, and continues to be, a collaborative effort by the participating universities and their higher education systems. It is intended to harmonize programs to the extent that student mobility is enabled, but not to the extent that programs are standardized.

'Tuning' is a faculty-driven process initiated in 2000 that involves describing and aligning degree outcomes on the basis of competencies and learning outcomes (Tuning Educational Structures in Europe, 2013). The Tuning process involves communities of academics developing common frames of reference for each of the three degree cycles, with the referenc-

es expressed as generic and subject-specific learning outcomes in a number of subject areas. This process aims to maintain institutional and discipline autonomy while identifying areas of enough commonality to allow for recognition of credit across the European system (Junor & Usher, 2008; Tremblay, Lalancette, & Roseveare, 2012). The Tuning methodology is based on a ten-step approach that includes defining the program profile and its key competencies; formulating program, course and unit learning outcomes; and determining the approach to teaching, learning, and assessment, as well as ensuring that the program covers key generic and subject specific competences (Norrie & Lennon, 2013). Junor & Usher (2008) suggest that the Tuning project may have a significant long-term effect on student mobility as it “implies a real convergence of quality standards rather than a simple declaration of equivalencies” (p. 30).

Underpinning the Bologna Process is the European Credit Transfer and Accumulation System (ECTS), a standard for comparing academic credentials and performance across the continent. Students are awarded ECTS credit points for completion of courses, sections of courses, or programs--the credits being based on an estimation of the student workload required to demonstrate the learning outcomes of the course or program. The system is built on the assumption that the workload of a full-time student for one year is approximately 1,800 hours or 60 credits. Credits are obtained after completing assigned work and an assessment of the student’s achievement against the specified learning outcomes (European Communities, 2009). Gaston (2010) notes that the

ECTS’s credibility depends on the comparability and trustworthiness of the outcomes generated through the Tuning process. The development of the learning outcomes for a program therefore drives the student workload, the credit awarded, and, presumably, the pedagogy appropriate to achieving the outcomes.

An associated development is the Diploma Supplement. Even though qualifications might be expressed and developed as learning outcomes, students move with their transcripts as evidence of completed courses and programs and traditionally-formatted transcripts are not able to provide much detail about student achievement or the intents of the program. The Diploma Supplement summarizes student attainment by listing the courses with grades attained and describes the nature, level, context, content and status of the completed program.<sup>3</sup> The Diploma Supplement is designed to enhance transparency and facilitate academic and professional recognition of higher education qualifications by explaining the content of a student’s transcript in terms of what the student understands and is able to do (Bjornavold & Le Mouillour, 2009; Gaston, 2010; Tremblay, Lalancette, & Roseveare, 2012).

Although many of the elements of the Bologna Process are works in progress, their impact on higher education policy in the European zone and elsewhere are significant including the drive to achieve common agreement on the structure of credentials, the means to describe learning, and efforts to better report and accumulate the results of student learning (European University Association, 2010; Gaston, 2010).

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<sup>3</sup> For examples of European Diploma Supplements see [europass.cedefop.europa.eu/en/documents/european-skills-passport/diploma-supplement/examples](http://europass.cedefop.europa.eu/en/documents/european-skills-passport/diploma-supplement/examples)



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***Learning outcomes also play a fundamental role in the enormous but embryonic process of European curriculum reform. Bologna countries have agreed to use learning outcomes for multiple applications, including the development of new style national qualifications frameworks, lifelong learning, credit transfer and accumulation requirements, recognition needs and quality assurance purposes. (Adam, 2008 p. 8).***

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Adelman (2009) notes that the Bologna Process is “the most far reaching and ambitious reform of higher education ever undertaken” and that “the core features of the Bologna Process have sufficient momentum to become the dominant global higher education model within the next two decades” (p. viii) and that there is interest in the Bologna model and the Tuning Process in the Caribbean, Latin America, China, South Asia, and Australia.<sup>4</sup>

## Australia

Like many other countries, Australia sees student mobility as both an internal and external opportunity to increase credential completion, revenue, and program efficiency, and as providing a more rounded educational experience for domestic students. Major potential markets and competitors for Australian tertiary education, such as China and the Association of Southeast Asian Nations (ASEAN), are examining the Bologna Process as a model for their education systems, and this has had a significant influence on Australian thinking (Tremblay, Lalancette, & Ros-

veare, 2012). In a discussion paper on the implications of the Bologna Process for the country, the Minister of Education, Science and Training suggested that the way to increase the country’s market share of international students, especially from Europe, would be to advertise the three cycle degree structure; promote the use of an Australian Diploma Supplement; implement a credit accumulation and transfer system similar to or compatible with the ECTS; and develop an accreditation/quality assurance framework that meets the Bologna criteria (Bishop, 2006).

Australia’s interest in transfer mechanisms such as a common credit system is driven by both the need to support domestic student mobility and the need to accommodate and attract a growing pool of international students. The Equivalent Full Time Student Load (EFTSL) system, which is a measure of the study load of a full-time student, provides a common measure of student workload across Australian universities.<sup>5</sup> However, unlike the ECTS, the EFTSL is built on credits for courses and units taken and does not relate workload to learning outcomes.

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<sup>4</sup> See Tuning Latin America at [tuningal.org/en](http://tuningal.org/en) and Tuning Educational Structures in Europe for links at [unideusto.org/tuningeu/home.html](http://unideusto.org/tuningeu/home.html)

<sup>5</sup> See [education.gov.au/administration-guidelines](http://education.gov.au/administration-guidelines)

Like Canada, requests for transfer credit tend to be dealt with on a case-by-case basis (Bishop, 2006). Junor & Usher (2008) point out that in Australia, as in Canada and the US, transfer is more oriented towards credit transfer within each state's post-secondary system and specifically towards vocational to higher education, rather than as a support to mobility across the country or among all forms of post-secondary education.

The Australian government also funded a project very similar to the Tuning process, using the same sort of disciplinary communities and including professional bodies, students, graduates, and employers. Gallagher (2013) reported that the Learning and Teaching Academic Standards project, which concluded in 2011, worked to develop learning outcomes for thirteen academic, professional, and trades subjects.

## Issues in the Use of Learning Outcomes for Credit Transfer

As previously discussed, learning outcomes can form the basis for credit transfer in a variety of jurisdictions. There are, however, some issues at play in their use, associated with the general philosophy of how learning in higher education should be described; faculty and institutional autonomy; the standardization of curriculum and credentials; how credits are defined; and program quality.

Whether learning outcomes are used as a basis to assess transferability may depend on the nature of

the higher education system and whether transfer is mandated by government (through policy or legislation) or negotiated between institutions. In the latter case, the appropriateness of learning outcomes as a basis to establish equivalency may depend on the nature of the discipline and, more often than not, its relationship to workplace preparation.

Not all disciplines approach the use of learning outcomes in the same way. The more the sending program is related to career, technical, or professional programming and the need for standardization of skills delivered by multiple institutions, the more likely that courses will be expressed in learning outcomes and have some form of common curriculum elements. Bekhradnia (2004) suggests that successful identification and development of learning outcomes is unlikely to occur without some agreement on common curriculum. For example, where there is a history of professional body or government influence on accreditation, there tends to be a greater willingness to incorporate common learning outcomes.

In academic subject areas, especially in the Humanities, it is more difficult to come to agreement on measurable descriptions of what a student will be able to know and do as a result of program completion, except in quite broad terms. This is partly due to a belief on the part of many academic faculty that defining learning in terms of what students are expected to demonstrate is not as beneficial as providing an opportunity for students to explore within a discipline and learn in terms of their own capability and not to pre-set limits. Some faculty also point to the difficulty of accurately translating abstract concepts into outcomes as contributing to the difficulty of accurately measuring their achievement (AUCC, 2009). There is



also a belief that learning outcomes unduly standardize curriculum and thus erode faculty autonomy.

In most post-secondary systems, there is a tension between faculty and institutional autonomy and the desire by governments to influence institutional programming and to institute measures of quality that are meaningful to them and which respond to the public's need for information, educational opportunities, and trust in quality. Faculty and institutional autonomy as a fundamental part of higher education culture plays a large part in the degree of willingness to develop and use learning outcomes for transfer. Ewell (2013), in a discussion of the Degree Qualifications Profile, noted the tension between externally developed outcomes and those internal ones "usually developed over many years, which contain a host of embedded assumptions and compromises" (p. 19) and suggested that faculty would be reluctant to adopt learning outcomes they did not have a role in developing. While the Bologna Process is thought to represent a unified set of principles across the continent, supported by all institutions, issues of autonomy also appear to be present. Gaston (2010) citing a UK Commons report, noted that the UK and Ireland had more autonomous higher education institutions than the rest of Europe. There was concern that the Bologna Process could lead to the standardization of higher education in the European Higher Education Area, and not be flexible or responsive to changing social and economic requirements. In a discussion of the implications of the Bologna Process for Canada, a European faculty member suggested that "faculty are concerned about academic freedom, and in particular about the traditional role of the academic profession as a body that sets its own standards and conducts its own evaluation" (AUCC, 2009 p. 5).

The discussion of autonomy begs the question of the extent to which an institution feels it necessary to define its credentials and to control the entire process of achieving them. Experience with the BC Transfer System would suggest that the culture and history of articulation is based on the common objective of facilitating credential completion, with the assumption that students can and will move institutions as they gather credits, with the use of those credits constrained by certain parameters such as residency requirements. BC institutions have accepted the notion that student mobility is a good thing and, as in the US, that a degree can have validity and coherence for a student even if all of the courses have not been taken at the institution granting the degree. In Europe, where course equivalency was built on the need to accommodate one- or two- semester student exchanges, learning outcomes have provided a basis for agreement in the face of significant differences in culture and language. A move toward a more North American view of credential completion through transfer will take time. The European processes, on the face of it, seem to imply that a degree could be an accumulation of learning outcomes, rather than a coherent whole consisting of planned sequenced learning, including prerequisites and required courses approved as a package by the institution's academic governing body. Junor & Usher (2008) explore this point in their survey of transfer systems, and suggest that a simple accumulation of credits toward a credential is counter to the institutional aim of providing a coherent program of studies. However, the European notion of defining credentials in terms of learning outcomes and of building frameworks and processes that allow for accumulation of credit, i.e., learning outcomes, seems to be leading in that direction. This idea of accumulation of dem-

onstrated achievement on learning outcomes as the basis for credential completion may be encouraged by such efforts as the push for lifelong learning in Europe and bridging between vocational and academic programming in Europe, Australia, and New Zealand (CEDEFOP, 2009; Gallagher, 2013; Junor & Usher, 2008; Werquin, 2012). If learning can be defined and measured, then perhaps it is not necessary for it all to be delivered in the same institution.

The discussion of how credit accumulation can be used to facilitate student mobility raises the question of what constitutes credit. Learning outcomes help to set levels of student achievement but not grades, time, assessment, or the nature of the whole experience intended by the program, except in very broad terms. A number of scholars suggest that defining learning in terms of learning outcomes is at odds with the means to collect credit for learning, which is expressed in terms of time in contact with an instructor. Adelman (2009) points out that, when outlining degree requirements in a specific field, institutions will list courses, credits, and GPA, rather than achievement of learning outcomes. The

European credit accumulation and transfer system uses learning standards associated with specified levels in qualification frameworks to determine a transferable amount of credit but does not really address differences in workload or program expectations in different institutions (Carter, Coyle, & Leslie, 2011).

The interest in student mobility and credit transfer internationally is driven to some extent by the growth in study abroad opportunities for students, the interest in learning another language, internationalization of many campuses, and program expectations that include study at foreign institutions (Bishop, 2006;

Eurostat, 2009; Sursock & Smidt, 2010). Junor & Usher (2008) note that “to the extent that governments pay attention to mobility, it is international mobility rather than intra-national mobility . . . with the hope of increasing opportunities abroad” (p. 17). It is suggested that the increased pressure to attract international students is driving a move to standardization and uniformity in programming, a move that is made easier by the use of learning outcomes.

The process of one institution granting credit for another institution’s programming is often underpinned by trust in the quality of the sending institution. This trust could result from reputation, knowledge of the institution due to proximity, or belief in the efficacy of the accreditation or accountability processes that the institution undergoes. The rapid expansion of tertiary education in many countries and the globalization of education have made these traditional bases of trust more problematic (Gallagher, 2013). Learning outcomes have been seen by some as being able to provide a basis for trust, given that the jurisdiction that requires the defining of outcomes is likely responsible for also measuring their acquisition. The major conceptual issue is the need to be specific enough in defining outcomes to be able to declare that they are being achieved, yet to also be broad enough to achieve agreement across different institutions and jurisdictions. The Assessment of Higher Education Learning Outcomes (AHELO) project, which involves 249 higher education institutions across 17 countries and regions, is intended to determine if it is feasible to agree on learning outcomes in a discipline to the extent that it is possible to assess progress and compare across jurisdictions (Tremblay, Lalancette, & Roseveare, 2012 p. 197).

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***In response, a model of “trust-free” specification of criteria has emerged but not without its own difficulties resulting from a tendency to over-specification with a consequential trivialization of outcomes and lowering of standards (Wolf 1995) and tension between educational purposes and accountability requirements. (Young 2007) (Gallagher, 2013 p. 70).***

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## Directions

The literature surveyed offers some interesting directions building on the work done using learning outcomes, largely related to activities associated with the Bologna Process such as Tuning, the Diploma Supplement, the ECTS, and qualification frameworks. The Association of Universities and Colleges of Canada (AUCC), in a review of the Bologna Process and its implications for higher education, noted the barrier to mobility created by the lack of a common means of recognizing credit. The AUCC suggested that instruments similar to the European Diploma Supplement, the Australian Higher Education Graduation Statement, and Canadian co-curricular transcripts, all based on learning outcomes, could aid in both national and transnational recognition of qualifications (AUCC, 2009 p. 15).

There is a need for agreed-upon terminology, especially in defining learning outcomes themselves and in distinguishing them from competencies. Gallavara et al (2008) noted Adam’s request at a Bologna seminar on learning outcomes to “develop an agreed terminology based on a shared understanding among staff, students and other stakeholders about what the key concepts mean” (p. 52). In a similar vein, the AUCC noted the need for “developing common data standards to better track and explain learning outcomes in ways that

are useful for both graduate schools and employers by focusing on what was learned, as opposed to activities” (AUCC, 2009 p. 11).

Another recommendation from the literature involves identification and documenting of learning outcomes at the degree level across jurisdictions, similar to the Tuning project in Europe. Gaston (2010) in discussing the value of developing outcomes at the discipline level and of developing a US form of the diploma supplement, suggests “that a consensus on what the baccalaureate should represent might prove at least equally plausible and perhaps more compelling” (p. 190). He notes Adelman’s (2009) recommendations calling for development of “clear and discrete criteria for learning and thresholds for performance at the system, institutional, and disciplinary level” (p. 185), disciplinary qualification frameworks at the degree level, and a diploma supplement. Ewell (2013) goes as far as recommending “mastery transcripts” showing what level each student has attained on each competency at a particular point in time (p. 19).

A theme through the literature is that learning outcomes, whether as threshold in Australia, or as part of the Tuning process in Europe, the US, Latin America, or the Caribbean, are best developed through discussions that involve professional bodies, accrediting bodies, employers, and graduates as well as academic

institutions and faculty (Adelman, 2009; Gallagher, 2013; Gaston, 2010).

As noted previously, the ECTS is a means by which students can determine how their credits relate to a particular credential and how credentials relate to each other. Gaston (2010) suggests that the US adopt a credit accumulation standard modeled on the ECTS. He notes that development of a credit accumulation system leads naturally to discussions of a qualification framework as a means to display credential equivalencies across jurisdictions. Since a considerable amount of transfer in the US is across state borders, there is considerable advantage to a national repository for earned credits. The example of the Bologna Process and progress on its various components on a continent with considerable variation in higher education traditions, demonstrates that the idea is feasible.

As the use of learning outcomes is influenced by trends in the international movement of students, institutions may wish to invest time in planning for international student movement. In their review of trends for the European University Association, Sursock & Smidt (2010) suggest that “Institutions should develop a strategy that defines the scope of their internationalization orientation, . . . [including] the identification of targets for short-term and full-degree mobility, the geographical target areas, target numbers of mobile students at each degree level, the types of cooperation that fit their overall needs, and the specific

HE networks of which they are part” (p. 81). It may be that this kind of planning is supported by more general agreement on learning outcomes across a system.

## Conclusion

The literature suggests learning outcomes can play an important role in supporting credit transfer. The use of learning outcomes in higher education is widespread for a variety of reasons, including transfer and articulation. Learning outcomes are used to provide a common reference for discussing course equivalencies, and as a means of enhancing the efficiency of the articulation process, and as a means of providing a common basis for describing courses and credentials across boundaries. While jurisdictions around the world may have quite different purposes and traditions in their credit transfer systems, there is some common interest in using learning outcomes as the vehicle for enabling student mobility. Efforts to harmonize higher education outputs have a number of issues attached, including the way that disciplines and institutions describe their programs and their different needs to control that process as well as more fundamental issues regarding how tertiary education describes credit. The efforts of the Europeans to provide for student mobility across the continent and other countries to replicate or harmonize their policies with the Bologna and Tuning Processes provide some interesting opportunities for further discussion.

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***When these national higher education systems work with the same reference points they produce a “zone of mutual trust” that permits recognition of credentials across borders and significant international mobility for their students. (Adelman, 2009, p. viii).***

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