

**Higher Education Learning Outcomes: Language, History, Value, Benefits and Debates:
A Briefing Paper**

Introduction

Learning outcomes are a core topic in pedagogic theory and practice in higher education. This paper functions as a general briefing and update. The paper outlines the history of learning outcomes, their evolving and perceived value and benefits, and explains why learning outcomes are once again at the forefront in debates on higher education. The overall intent is to provide an introduction to past and present theory on the basis that academic professionals today are better able to make decisions on learning outcomes with sound knowledge of both.

The paper begins with an introduction to learning outcomes describing what they are, current definitions and an outline of key issues in terminology and meaning. The section following overviews the writing of learning outcomes and role of taxonomies. The paper then traces the historical evolution of learning outcomes to the present day, and the final section concludes with the key values and benefits accorded to their use. Included within the historical summary is detail on the more recent and developing role of learning outcomes in higher education policy formation. Overall the paper encompasses issues of language, history, contemporary context, values, benefits and ongoing debates.

What are Learning Outcomes?

Learning outcomes are an established pedagogic tool, not only in higher education, but at every level of education in the past as well as today (Adam, 2006). This section begins by introducing contemporary definitions, past meanings and ongoing issues of ‘slippage’ in language and terminology.

Contemporary definitions. Across Europe and North America, as well as in many other international locations (Kennedy, Hyland, & Ryan, 2006), definitions of learning outcomes now demonstrate a remarkable consistency. For example, in Europe, learning outcomes are generally, “statements of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning” (Adam, 2006, p.4). In the United States similarly “Student learning outcomes statements clearly state the expected knowledge, skills, attitudes, competencies, and habits of mind that students are expected to acquire at an institution of higher education” (National Institute for Learning Outcomes Assessment [NILOA], 2017). And finally, in Canada, learning outcomes are “what students should know or be able to demonstrate... upon completion of a course or program” (Deller, Brumweller, &

MacFarlane, 2015, p. 4). On the surface at least, definitions appear to confirm considerable international agreement over what learning outcomes are. There is also shared agreement that learning outcomes focus classroom activity on the activities of the student learner, as opposed to those of the teacher (Adam, 2006).

It is routinely stated that learning outcomes signify a change in tradition (Adam, 2006; Fitzgibbon, 2014; Kennedy et al., 2006). This change is expressed as a move from a teacher-centered approach to learning, focusing on what the teacher does, to a student-centered approach, focusing on what the student learns and is expected to be able to do (Caspersen, 2017; Kennedy et al., 2006; MacFarlane & Brumwell, 2016). Adam's (2006) statement explains this more fully:

"It [this change] promotes the idea of the teacher as a facilitator or manager of the learning process and recognises that much learning takes place outside the classroom without a teacher present. It further involves the idea that the students should be actively involved in the planning and management of their own learning and take more responsibility for this as the student progressively develops as an independent learner." (p. 12).

Learning outcomes therefore firmly place the focus on what students will learn and how teachers will design student learning opportunities to encourage the student to achieve specific outcomes. Despite apparent agreement however, there remain important issues regarding how learning outcomes are understood and discussed, and these are issues of language, terminology and meaning.

Issues of Language, Terminology and Meaning

Challenges in interpreting learning outcomes arise partly as a result of their long evolution in theory and terminology (for a full explication of the terminology used see: Appendix 1: Glossary of Terms). Educational objectives and outcomes were both terms applied long before today. Tyler (1949) first used educational objectives and goals but these terms were then succeeded by instructional objectives (Mager, 1962). Allan (1996) credits Eisner (1979) with changing objectives to expressive outcomes and suggests Otter (1992) was the first source of the term learning outcomes. Eisner (1979) and Otter (1992) agreed that the term outcomes referred to "what the student achieves as opposed to what the teacher intends to teach" (Allan, 1996, p. 99). Within early sources the exact definition of successive terms was the constant subject of debate, but complex debate equally led to increasing ambiguity, particularly over the meaning of the term objectives (Allan, 1996). With the addition of competency-based education in the 1970s the terminology proliferated further (Elam, 1971; Burke, Hanson, Houston, & Johnson, 1975). As a result, and still today, it is common to find learning outcomes being used interchangeably with terms such as aims, objectives, goals, intents and competences (Allan,

1996; Kennedy et al., 2006). Recent sources attempt to disentangle these but equally confirm continued conflation of terminology and use (Allan, 1996; Adam, 2006; Kennedy et al., 2006). The confusion among objectives, outcomes and competences is particularly marked.

Aims and objectives are sometimes written from the teacher's point of view (what the teacher will do) whereas learning outcomes typically address what the student is expected to learn (Kennedy et al., 2006). Ideally, aims would include broad course content planned by the teacher while objectives would describe a further breakdown into more specific areas of knowledge or skills. However, objectives in practice, can also reference what the student will learn rather than what the teacher intends to teach (Kennedy et al., 2006). Objectives in practice are therefore written from either the teacher's, or the student's, point of view. The result is that "many regard learning outcomes and objectives as the same thing (Adam, 2006, p. 5).

The term competences is similarly confusing. Competences are often understood as narrow, often practical or applied, skills developed through training. However their meaning is also often extended, as in the European *Tuning* project (European University Association, n.d.), to encompass development of wider knowledge, attitudes and abilities (Kennedy et al., 2006; Morcke, Dorning, & Eika, 2013). Further, the broader term, objectives-based education can also be used to encompass all three: objectives, competences and learning outcomes (Morcke et al.; 2012). What therefore are the implications of *slippage* in language and meaning for universities introducing learning outcomes today?

As a recent HEQCO study states, progress with learning outcomes will require a common language and agreed meanings, as studies and discussions continue to reveal marked differences of interpretation (MacFarlane & Brumwell, 2016). An earlier HEQCO study stated "[the literature] has also given rise to a myriad of ways of interpreting and realizing the objectives of learning outcomes, many of which are particular to specific institutions or disciplines" (Deller et al., 2015, p. 4). Consistent language therefore is an issue. As will be explained further, a key goal of higher education policy is to create a language of comparability to support, not only provincial and national student mobility, but also international student mobility. Learning outcomes in this incarnation are significant for credit transfer nationally and internationally, while international transfer in turn has implications for consistency in standards and quality (Adam, 2008; Fitzgibbons, 2014).

Before addressing the historical evolution of learning outcomes, the following section will overview some key resources for writing learning outcomes and introduce taxonomies which provide supporting language.

Writing learning outcomes, and taxonomies of learning objectives. The intent here is not to address the *how* of writing learning outcomes but rather to reference selected texts and taxonomies of learning objectives (and thereby verbs) in common use.

There is no shortage of resources on learning outcomes therefore sources recommended here are intentionally limited. An excellent general text on learning outcomes (already referenced) is Adam (2006) while Kennedy et al. (2006) is an excellent text on writing learning outcomes. Both sources are highly regarded but both originate in Europe. For North America specifically, and on writing learning outcomes in particular, the following are two useful gateways to a small and select group of resources. The first is the learning outcomes website of the Higher Education Quality Council of Ontario (HEQCO): see <http://www.heqco.ca/en-ca/OurPriorities/LearningOutcomes/Pages/How-to-write-learning-outcomes.aspx>, and the second is the equivalent web page of the National Institute for Learning Outcomes Assessment (NILOA) at the University of Illinois at Urbana-Champaign : see <http://www.learningoutcomesassessment.org/SLOSresources.html> Both webpages belong to wider and fully searchable websites.

A final and strongly recommended resource for writing learning outcomes is Adelman's (2015) paper: *To Imagine a Verb: The Language and Syntax of Learning Outcomes Statements*. However, to place Adelman's (2015) paper in context, learning taxonomies must first be explained.

When writing learning outcomes it is common to utilize a learning *taxonomy*. Learning taxonomies usefully structure and classify learning objectives. However the key point is that a range of verbs is integral to the taxonomy and these verbs are then drawn on to write appropriate learning outcomes. Perhaps the most widely-used and best known taxonomy is the Taxonomy of Cognitive Skills (Bloom, Englehart, Furst, Hill & Krathwohl, 1956). *Bloom's taxonomy* was first included in *The Taxonomy of Educational Objectives, The Classification of Educational Goals, Handbook I: Cognitive Domain* (Bloom et al., 1956). Bloom et al.'s (1956) foundational six meta-categories are widely-known: knowledge, comprehension, application, analysis, synthesis and evaluation. A range of verbs is listed under each category and overall the taxonomy can thereby assist in identifying and formulating a learning outcome. A second well-known taxonomy is Biggs and Collis's (1982: see also Collis & Biggs, 1986) *Structure of the Observed Learning Outcome* (SOLO). SOLO presents an alternative to Bloom's taxonomy, comprising five increasing levels of complexity in learning, from surface to deep, with accompanying verbs at each of the five stages. However Adelman (2015) presents another option.

Adelman's (2015) paper offers 20 separate categories instead of five or six, each with an accompanying list of what he describes as *operational verbs* (pp.17-19). Adelman (2015) distinguishes

between operational and *non-operational* verbs, his key point being that while operational verbs produce observable student behaviors that can be assessed, the non-operational verbs “do not produce observable behaviors or objects” (p. 16). He specifies many non-operational verbs including the following: “recognize, develop, relate, consider, prepare, comply, reflect, realize, anticipate, foresee, observe, review, extend, work” (p. 16). As none of these verbs describe student actions that can be truly observed, they therefore cannot be judged or accurately assessed. Each of Adelman’s (2015) 20 categories is based on actions/activities that faculty commonly demand of students, and each category offers at least five possible operational verbs. Adelman (2015) clearly states his ultimate aim: “all of you - not just some of you - have to be far more explicit in your student learning outcomes standards than you are at present”(p. 22). His purpose is improved precision in the writing of learning outcomes.

History, Pedagogy and Policy: the Evolution of Contemporary Learning Outcomes

Their initial incarnation apart, theories underpinning learning outcomes regularly repeat earlier rationales; familiar statements can be found at every stage of their evolution. It is also true that despite differences, the aim of theorists throughout has consistently been to improve the effectiveness of teaching by focusing on student learning through specification of objectives or outcomes. The idea of an end-point as a means to improve teaching has, in fact, had many incarnations.

The history of learning outcomes is therefore long and only four principal developments will be outlined here: behaviorism, objectives-based learning (OBE) as conceived of by Spady et al. (1988, 1991), constructive alignment, and finally, the recent role of learning outcomes in higher education policy reform. Terminology, however, is equally an issue here; terminology is therefore clarified first.

History and terminology. It is common in summaries of the history of learning outcomes to find that their entire evolution from Tyler (1949) up until today, has been aggregated as either *objectives-based education* or *outcomes-based education*, with both abbreviated to OBE. This account will therefore first differentiate these titles, and will broadly follow Havnes and Proitz (2015) and Liu (2015). In both the latter texts, the roots of learning outcomes are located in early educational behaviorism, but the abbreviation *OBE*, specifically references the outcomes-based education movement that began with Spady (1988) in the United States. Both Havnes and Proitz (2015) and Liu (2015) describe Tyler (1949), Bloom et al. (1956: 1964) and Mager (1962) as early precursors of OBE, with Spady (1988) and Spady and Marshal (1991) as the initiating theorists of outcomes-based education (OBE) from which later, and contemporary, learning outcomes are seen to arise. Note that *objectives-based learning*, as opposed to outcomes-based education (OBE), is a term often applied to the preceding stages of early behaviorism that began with Tyler (1949).

Early behaviourism and objectives-based learning. Early educational behaviourism dates from the mid-20th century (Adam, 2006; Kennedy et al., 2006; Liu, 2015) originating in the behavioural psychology of Pavlov (1849-1936), Watson (1878-1958), Thorndike (1874-1949) and Skinner (1904-1990). Behavioural psychology first influenced employment and training in US industry, business and the armed forces (Adam 2006), but finally emerged in educational theory in the writings of Tyler (1949), Bloom et al., (1956, 1964), Mager (1962) and Skinner (1968).

Behaviourists essentially believed all human learning was the result of external stimuli, and teaching itself was soon understood as a form of stimulus. Educational theorists translated behaviourism directly into the need to identify desirable student behaviours which could, and should, be encouraged by teaching. Tyler (1949) sought to identify, through observation, specific and measurable changes needed in student behaviours (p.53). Therefore, although there are clear differences, it is not difficult to see why Tyler's early (1949) educational objectives are viewed as precursors of later learning outcomes. In a similar vein, Mager's (1962) instructional objectives added what is a now familiar emphasis on "what the learner is able to do at the end of a course of instruction" (Allan, 1996, p.95). As theory progressed from Tyler (1949), through Bloom et al. (1956, 1964) to Mager (1962) it involved increasing attempts to tighten language and render learning objectives more and more specific.

Bloom et al. (1956) famously encouraged specificity by expanding the language of objectives, introducing the now-renowned six hierarchical levels of cognition: knowledge, comprehension, application, analysis, synthesis and evaluation. Bloom, Masia & Krathwohl (1964) later added the affective domain, and a psychomotor domain also followed. Remarkably, Bloom's original 1956 study continues to be regularly consulted today as a still popular taxonomy of language for designing learning outcomes.

This early movement was eventually rejected by some as a result of critiques of over-prescription, excess specification and weakness in encompassing the true breadth of possible educational learning outcomes (Stenhouse, 1975; Eisner, 1979). Eisner (1979) significantly cautioned against ignoring less predictable but important educational aims that would not submit to measurement (Allan, 1996, p. 98). Although critiques today can be more focused on ideology, neo-liberalism and instrumentalism, critiques of over-specification and the limitations of learning outcomes remain current and common.

Following early behaviourism, the next major incarnation of outcomes begins in the 1980s; Spady (1988) revived the focus on outcomes in the US, followed later by Jessup (1991) in the UK. This is the phase directly known as Outcomes-based education (OBE).

Outcomes-based education (OBE). Morcke et al. (2013) refer to recurring “cycles of advocacy for, then criticism of OBE” (p. 851) and Spady’s (1988) renewed vision continues to conform to this pattern (note that Morcke et al. [2013] apply *OBE* as an all-encompassing term, from Tyler [1949] on). However, in advocating OBE, Spady (1988) was expressly responding to a different imbalance; he believed instruction had swung too far towards administrative convenience and the time constraints of the school calendar. In this new conception, OBE remains firmly within a continuing cycle containing much that is familiar from the past, and from earlier behaviourism (Morcke et al., 2013). Spady (1988) advocates “basing what we do instructionally on the outcomes we want to achieve” (p. 5), and describes outcomes as “the knowledge, competences and quality we want students to be able to demonstrate when they finish school” (p. 5). There is also a direct echo of *mastery learning* (Bloom, 1971, 1974, 1976; Keller, 1968) in recommendations to vary time components to recognize the different pace at which different students learn. Other elements, however, directly prefigure developments today.

Spady (1988) identifies cascading types of outcomes including exit, program, course, unit and lesson outcomes (p. 7), all of which reflect our current approach to learning outcomes. *Exit outcomes* are similar to the university-wide learning outcomes students are expected to be able to demonstrate upon graduating. As referenced above, for Spady (1988) exit outcomes are “the knowledge, competencies and qualities we want students to be able to demonstrate when they finish school and face the challenges and opportunities of the adult world” (p. 5). There is also an emphasis on the principle of designing down and designing backwards from outcomes themselves, to create *alignment* within the whole instructional system (Spady, 1988, Spady & Marshall, 1991). As Spady (1988) first wrote, “After clearly defining exit outcomes, outcome-based practitioners design curriculum content and structure, instructional delivery, student assessment and credentialing” (p. 8). In short, learning outcomes must be conceived first, and before other stages in instructional design. According learning outcomes priority in instructional design prefigures the practice of *alignment*, not only within contemporary curriculum mapping, but also within the theoretical development known as *constructive alignment* (Biggs, 1996, 1999; Biggs & Tang, 2007). As Biggs (2014) recently explained, “The term “alignment” is used because both teaching and assessment need to be aligned to the intended learning outcomes” (p. 9). Interestingly, Biggs (2014, p. 6) locates the origins of constructive alignment itself within Tyler’s original 1949 text.

Finally, and of relevance to those designing learning outcomes today, the learning outcomes specified by Spady (1988) and Spady and Marshall (1991) are neither over-stipulated nor restrictive but rather, are broad, value-based and wide-ranging. Spady (1988) recommended that exit outcomes “go far

beyond the narrow subject-matter emphasis” (p. 6) stating that on graduation students should be able to: problem solve; make good decisions; express themselves creatively; interpret the creative works of others; show concern, tolerance and respect for others; adapt well to, as well as effect, personal and social change; sustain self-esteem through emotional, intellectual and physical well-being; and finally, demonstrate self-directed learning (p. 6). Revisited in 1991 (Spady & Marshall), Spady’s (1988) earlier vision of OBE was then expanded to focus on a high-tech, culturally diverse and global future. There are remarkable parallels in this paper (Spady & Marshall, 1991) with contemporary thinking today. They (Spady & Marshall, 1991) cite a “need to transcend language, cultural, national, and racial differences” (p. 71) in a world of “increasing pluralization and polarization of social, cultural, political and economic life” (p. 71). In this vision *transformational exit outcomes* are designed to deliver students who think critically and perceptively, problem solve and collaborate effectively, and innovate creatively and with advanced technological skills.

Spady’s (1988, 1991) conception of outcomes-based education, perhaps ironically, faced enormous opposition in the USA from right-wing religious conservatives (Tucker, 1998). However, cognitive psychology and constructivism were already laying the foundations for a new incarnation of learning outcomes.

Constructive alignment. A key and ongoing objection to learning outcomes is that there is little researched evidence to identify their precise impact on student learning (Havnes & Proitz, 2016; Morcke et al., 2013), and there is a definite research opportunity here. However, theories of constructive alignment from educational psychology do directly support the role of learning outcomes in teaching effectiveness (Biggs, 1996, 1998; Biggs & Tang, 2007; Ramsden, 2003). Research-based justification for constructive alignment comes from psychology, and particularly cognitive psychology, while cognitive psychology itself is underpinned by constructivism (Biggs, 1996). The constructivist would essentially assert that learners’ interactions with their experienced environment *construct* learning. Examples of *learning interactions* might include: experiments, social interactions, riding a bicycle etc.

Biggs (1996) describes constructivism as a body of theory united by “the centrality of the learner’s activities in creating meaning” (p. 347). In Biggs’s (1996) rationale, high level performance objectives (Biggs uses *objectives* rather than outcomes) are set for the learner, which then determine the design of teaching methods and assessment. Objectives come first, but ultimately objectives, teaching methods (designing what the student will do) and assessment tasks must be in clear alignment. If well-designed, constructive alignment is believed to foster a *deep approach* to learning in the student,

through learning activities directed from the outset at engagement through high levels of student performance (Biggs, 1996, 1999; Ramsden, 2003).

The theoretical base of constructive alignment specifically justified and underpinned a growing emphasis on learning outcomes in Europe and this, in turn, gave significant impetus to a focus on learning outcomes elsewhere internationally. As Deller et al. (2015) state, “Although the learning outcomes approach is rooted in American psychology, it gained particular momentum in Europe with the launch of the Bologna Process in 1999” (p. 4). The Bologna Process (European Commission, n.d.) itself directly connects the most recent incarnation of learning outcomes to the ongoing formation of national and international higher education policy. As Liu (2015) confirms, “though OBE began historically as a type of pedagogic innovation, it has gone far beyond an instructional or curriculum concern in the current environment. OBE can be pedagogy-driven and/or policy driven” (p.41). Liu (2015) refers directly here to the new role of learning outcomes in higher education policy reform.

Higher education policy reform: a new role for learning outcomes. An important question, therefore, as the focus on learning outcomes grows in Canada (MacFarlane & Brumwell, 2016), is why learning outcomes now? Part of the answer is that the focus is not actually new. However, in addition to the ongoing history of learning outcomes as a core pedagogic tool, learning outcomes are also now central to higher education policy developments internationally (Adam, 2004, 2006, 2008; Ewell, 2001, 2005). The following contextualizes this development.

Summarily, as processes of globalization, social equity, economics and education have coalesced, higher education has experienced increasing student numbers, growing student mobility, and inevitably, increasing costs. This process has been evolving since at least the early 1990s and continues today to create significant change for universities, faculty and staff (Altbach, Reisberg & Rumbley, 2009; Trow, 2005). As costs have grown, so too has the number of stakeholders in higher education. In addition to governments and taxpayers themselves, costs have increasingly been transferred to students and their parents giving all an increased stake in higher education. As a direct result, accountability for public funds has also increased in importance, and as governments are seen to grow and expand accountability agendas, learning outcomes, as an integral element, have become tightly associated with government accountability measures (Salmi, 2008, Shanahan, 2012). Learning outcomes are an integral element of higher education policy reform because, in internationally transforming quality assurance structures, they increasingly constitute so much of the core and developing language (Adam, 2008; Ewell, 2001). To more fully grasp the nature of this, more detail is required on the Bologna Process (European Commission, n.d.) and changes arising from globalization.

The impact of globalization on higher education has been particularly characterized by increasing cross-border student mobility and, thereby, concerns over comparable national and cross-border quality and standards (Altbach et al., 2009; Organization for Economic Co-operation and Development [OECD], 2005). A direct result has been that quality assurance frameworks and agencies have multiplied internationally to support both mobility and quality. It is this process that was given additional impetus by developments in the European Union in the late 1990s. It is here that the language of learning outcomes came to the forefront of policy formation.

The Bologna Declaration (European Association of Institutions in Higher Education, 1999) references a joint meeting of the European Ministers of Education in 1999 that declared a shared intent to establish a European Higher Education Area (EHEA) (Adams, 2006, 2008; Havnes & Proitz, 2016; Kennedy, 2006). A central aim of the EHEA, through what became known as the Bologna Process (European Commission, n.d.), was to ensure the mobility of students, and thereby skilled workers, between all member countries (EHEA, n.d.) of the EHEA. Logically and in practice, mobility necessitated the establishment of comparable qualifications and quality standards across Europe. As national quality frameworks were leveraged to support mobility, the language of learning outcomes increasingly occupied a central role as the language of comparability, overall standards and quality (Adam, 2006, 2008). Developments in Europe then rapidly gave greater impetus to the consideration of mobility, standards and comparability internationally (Association of Colleges and Universities of Canada [AUCC], 2009; Ewell, 2001, 2005; Council of Ministers of Education, Canada [CMEC], 2007; OECD, 2005). Through this process, the language of learning outcomes further proliferated and travelled. Although optional for Provincial Ministries, CMEC's Degree Qualification Profile, for example, is based on a learning outcomes approach (CMEC, 2007). A good indication of the issues involved is contained in the AUCC (2009) document, *The Bologna Process and Implications for Canadian Universities*.

To summarize, through the increasing role of learning outcomes approaches in credit transfer and quality-related documentation, learning outcomes have become inextricably linked to higher education policy, higher education quality assurance policies and government accountability requirements. This association with government higher education policy, however, has linked learning outcomes to a policy agenda sometimes considered more economic and political than educational (Neave, 2012; Shanahan, 2009). This latter perspective has long been a strong factor in negative faculty responses to learning outcomes. However, there is equally a broader picture to be considered both historically and pedagogically.

As stated, governments are viewed as implementing a growing accountability agenda in higher education (Neave, 2012; Salmi, 2008; Shanahan, 2009), but what is also clear is that learning outcomes are already embedded in what is an evolving and irreversible process of change. Additionally, learning outcomes continue in many other respects to be applied in the daily business of higher education for continuing pedagogic reasons (Adam, 2004, 2006; Ewell, 2001, 2005; Liu, 2015; MacFarlane & Brumwell, 2016). In short, beyond higher education policy debates, there still remain important pedagogic questions for teaching professionals and institutional leaders, specifically in respect of instructional design within individual subject disciplines, departments and universities. Key questions remain, for example: what do learning outcomes actually contribute to student learning, what can learning outcomes contribute to teaching quality and standards, and what values and benefits can learning outcomes bring particularly within local and disciplinary contexts? Acknowledging critiques, Adams (2008) is not alone in advising that the important issue is a sensitive approach to the construction and implementation of learning outcomes, albeit in full awareness of ongoing debates (p.15).

At the core of faculty critiques have often been two concerns: the first, that learning outcomes will be tied too tightly to government skills agendas and narrow employment-related aims, and the second, an already familiar fear that over-specification will “dumb down education and constrict academic studies by reducing them to mere ‘Tick box’ training and rote learning” (Adam, 2008, p.15). Such critiques, however, sideline the wide range of potential pedagogic benefits long associated with learning outcomes. As Caspersen (2017) points out, learning outcomes have long been an established tool in the effective design of teaching activities. Learning outcomes approaches therefore exhibit “two conflicting aims: on the one hand, attempts to clarify social demands for set, accountable learning targets as a kind of standard: and, on the other, efforts to encourage individual learning” (Caspersen, 2017, p.3). If there is resistance to the first, however, what impact might that have on the second? The debate today is already moving on. Caspersen (2017) himself, and others, recognize that clear flexibility remains in the application of learning outcomes, particularly within disciplines (Adam, 2008; Ewell, 2001; Morcke et al., 2012) and he stresses that appropriate and sensitive approaches are the recommended response. In medicine, for example, Morcke et al. (2012) emphasize the need to acknowledge “those parts of practice ... that are inherently messy: particularly, complicated human ones that underpin effective therapeutic relationships” (p. 861). In short, it is sometimes very hard to be completely specific and clear when writing learning outcomes that will fully capture the generality of your intent.

To fully balance an account of learning outcomes today, it is important to consider what the potential contribution of learning outcomes to pedagogic practice currently is. The next section

examines how learning outcomes are currently being applied, and what are believed to be their key values and benefits today.

What are the Values and Benefits of Learning Outcomes Today?

It is interesting initially to look at a recent study from HEQCO in Ontario (MacFarlane & Brumwell, 2016). The HEQCO study aimed to ascertain how and why learning outcomes were being used in Canadian universities today, and as a result, the study is one indication of current views on learning outcomes in Canada. Similar studies in the US (Kuh, Jankowski, Ikenberry, & Kinzie, 2014) preceded this study, and HEQCO therefore adapted a US survey tool. The survey was issued to universities Canada-wide with a 71% response rate. It confirmed 43% of universities had institutional learning outcomes with the highest percentages in Ontario (50%) and the Western Provinces (47%), including British Columbia (MacFarlane & Brumwell, 2016, p. 19).

A second finding was that institutional commitment to improve student learning was the second most important motivating factor in the use of learning outcomes, while faculty or staff interest in improving student learning, came third. Professional program accreditation was the top reason, but as a driver, national calls for accountability, and/or transparency, remained low on the list (MacFarlane & Brumwell, 2016, p. 22). A good range of other drivers in the use of learning outcomes was also evident, including: institutional improvement, academic policy development, strategic planning, professional development, institutional benchmarking, and more (MacFarlane & Brumwell, 2016, p. 52). From this study alone it is suggested that, as a fundamental pedagogic tool, learning outcomes continue to contribute substantially to teaching quality and the improvement of student learning in Canadian universities. However, it is also worth looking at how learning outcomes are used.

The four top reasons given for using learning outcomes, in a Likert-like survey of Canadian universities, are: program review, curriculum modification, program accreditation and external accountability reporting requirements. This indicates the use of learning outcomes predominantly as direct measures for internal, external professional, and government accountability purposes (MacFarlane & Brumwell, 2016, p. 22). As an aside, the role of learning outcomes in program accreditation in North America is longstanding and not at all new (Ewell, 2001; MacFarlane & Brumwell, 2016, p. 34). Accountability and quality already exist as important considerations with related implications for the future use of learning outcomes. Regarding pedagogy alone, however, both in and beyond Canada, what do writers believe are the key values and benefits of university-level learning outcomes?

Before summarizing values and benefits, it is interesting to return to the earliest instance of objective-oriented teaching. Tyler's (1949) text emphasizes organization, efficiency, a need to identify priorities, and the potential in objectives for wider social and economic benefits. It is not difficult to find direct comparisons in sources today. Contemporary sources continue to describe learning outcomes in similar terms. Learning outcomes, for example, are generally described as aids to organization which add clarity, consistency and transparency for both teaching faculty and students. These ideas are evident in the following list of common values and benefits taken from contemporary texts (Adam, 2006; Jenkins & Unwin, 2001; Kennedy et al., 2006; Liu, 2015). They make a distinction between values and benefits in class and curriculum design, and values and benefits beyond class. The latter are closest to Tyler's wider benefits Tyler (1949).

Learning outcomes in class, course and curriculum design. In contemporary sources learning outcomes are believed to:

- Help students learn more effectively because they know what is expected of them
- Clarify for students what faculty intend them to gain from specific lectures, classes or courses
- Help faculty clarify to students what their expectations are for student learning
- Help faculty decide on and design their teaching methods by clearly mapping their own intent
- Help faculty select and match teaching strategies to specific learning outcomes
- Help faculty tell peers and colleagues what specific classes, courses, methods or activities are intended to achieve
- Help faculty directly to design the best and most appropriate assessment activities

Learning outcomes in curriculum design. Regarding the wider challenge of curriculum design, there are further and specific benefits. By enabling the broader view, learning outcomes highlight duplication, gaps or overlap, identify key purposes, and improve the design and range of appropriate assessment instruments across an entire course or program (Adam, 2004, 2006; Ewell, 2001; Kennedy et al., 2006). Learning outcomes here, in practice, contribute a practical pedagogic tool to enable peer conversations and support discussion and debate. In Canada, the use of outcomes or objectives, in this sense, is already evident in curriculum mapping processes in Canadian universities (Liu, 2015, p. 41; MacFarlane & Brumwell, 2016, p. 32). Beyond class, course and curriculum design, however, there are other benefits for student career planning and mobility.

Learning outcomes beyond class and curriculum design.

Student course, career and life planning, attributes and values. Clear statements of learning outcomes help students choose relevant courses and qualifications for the future, assisting students

with explanations and navigation throughout this stage. Specifically, learning outcomes are perceived to help students articulate their achievements to other higher education institutions as well as to employers, through detail provided on qualities, abilities, knowledge and skills students have acquired and can demonstrate (Adam, 2004; 2006; Kennedy et al., 2006). Finally, wider educational values continue to be acknowledged.

Student mobility, nationally and internationally. Learning outcomes, irrespective of policy or politics, can and do contribute a useful and common language to support student mobility. The increasingly shared international language of learning outcomes is critical to enabling multiple routes between different qualifications, institutions and countries, as well as through different systems and sectors, as internationalization becomes an inevitable fact of student life (Ewell, 2001, 2007; Fitzgibbon, 2014; Adam, 2004, 2006, 2008; Kennedy et al., 2006).

The paragraph above, however, does not constitute an exhaustive list of values and benefits but rather is intended to provide a basis for further discussion and debate.

Concluding Comments

Stephen Adam (2008) concludes his update on issues and applications of learning outcomes, with a quotation from Darwin, “It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change” (p. 20). Adam’s highlighting of change, as intended, is appropriately current.

The intent here has been, not only to outline the historical base of learning outcomes, but also to acknowledge their role as a signifier of ongoing and irreversible change in contemporary higher education, and, as Adam (2008) concludes, it will be the responsibility of academics to respond. It is suggested, that as well as their acknowledged role in ongoing debates, objectives or learning outcomes have been remarkably tenacious not for one, but for a range of reasons. It is pertinent to ask why the concept of a desired end-point in learning has been so persistent for broadly seven decades? What first makes sense is the familiar argument, that if an educational program is to be planned, and if efforts for continued improvement are to be made, it is useful, if not actually essential, to have some conception of the learning goals that are being targeted. It is equally accepted that not all outcomes of teaching can ever be fully predicted.

Caspersen (2017) and others note the relative lack of research explaining *exactly how*, and *in what ways*, learning outcomes improve teaching effectiveness and impact student learning (Havnes & Proitz, 2015; Morcke et al., 2012). However, all of these scholars are supportive of the continued potential of learning outcomes to improve pedagogy. Each calls for further research to gather evidence

to ensure that the pedagogical benefits of learning outcomes retain their full potential (Adam, 2008; Caspersen, 2017; Havnes & Proitz; Morcke et al., 2012). Peter Ewell (2005) summarizes all thus:

Adopting a learning outcomes perspective and emphasizing demonstrated student achievement has proven beneficial in many higher education settings across the world. But these gains have only been achieved through deliberate and balanced approaches that reflect stakeholder values and perceptions, and that keep the ultimate goal of improving student learning clearly in mind.
(p. 27)

DRAFT

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