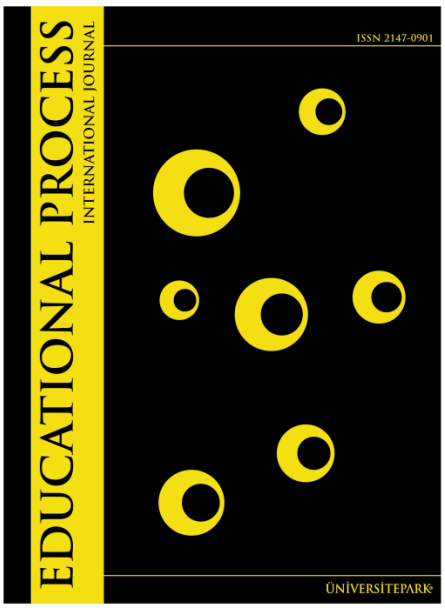

Educational Process: International Journal

ISSN: 2147-0901 | e-ISSN: 2564-8020 | www.edupij.com

Educational Process International Journal • Volume 8 • Issue 3 • 2019

Learning Outcomes – A Good Idea, Yet with Problems and Lost Opportunities

Andrew G Holmes

To cite this article: Holmes, A. G. (2019). Learning Outcomes – A Good Idea, Yet with Problems and Lost Opportunities. *Educational Process: International Journal, 8*(3), 159-169.

To link to this article: http://dx.doi.org/10.22521/edupij.2019.83.1

Andrew G Holmes, University of Hull, United Kingdom. (e-mail: a.g.holmes@hull.ac.uk)

EDUPIJ • Volume 8 • Issue 3 • 2019 • pp. 159–169.

Learning Outcomes – A Good Idea, Yet with Problems and Lost Opportunities

ANDREW G HOLMES

Abstract

Learning outcomes are used throughout assessment processes in higher education. In many countries their use is mandatory, with a frequent assumption that they bring many positive benefits to educational processes. Yet, there are tensions associated with them and their current mode of use has far less flexibility than they should provide. This paper considers from a conceptual basis some of the tensions associated with the use of prescribed pre-articulated learning outcomes and the question of whether learning outcomes, as currently operationalized, provide the benefits they were meant to deliver. This is of significance to educators throughout higher education.

Keywords: Learning outcomes, assessment, adult education, teaching and learning, lifelong learning, constructivist pedagogy.

DOI: 10.22521/edupij.2019.83.1

EDUPIJ • ISSN 2147-0901 • e-ISSN 2564-8020

edupij.com

Introduction

Learning outcomes are descriptive statements articulating "what a student should be able to know and do at a defined stage of a programme and/or within a defined element in the programme of study" (Ellis, 2004, p. 2) or "statements of desired outcomes expressed in terms that make it clear how measurement can be achieved" (Melton, 1996 p. 409). Essentially they are "What a student knows or can do as a result of learning" (Otter, 1992 p. 2). Learning outcomes describe the knowledge, skills and attitudes students should have acquired upon completion of a program of study, or stage within a program (Mann, 2004).

The term *learning outcomes* has its origins in outcomes-based education (Nusche, 2008). Both Allan (1996) and Melton (1996) provide an overview of their history and development and the background from which they emerged. Allan's (1996) paper identifies significant stages in their development and is referred to here in order to provide necessary context.

The origins of learning outcomes can be traced to what Allan identifies as the first "significant stage" in their development, that of Tyler's (1949) concept of Educational Objectives, which focused on narrow observable behavioral objectives. Educational Objectives emphasized the role of the educator, and the behavioral changes that the institution wished to bring about in the student. Teaching was conceptualized from a behaviorist perspective as being something that was "done" to the student by the lecturer, with learning being a one-way transmission of content from lecturer to student. The student was regarded as a *tabula rasa* able to be filled with knowledge by the lecturer, an approach that Freire (1968) argued was akin to the banking concept of education.

This position contrasts markedly with later constructivist student-centered approaches to teaching and learning.

Allan's second significant stage in the development of learning outcomes is Instructional Objectives (Popham, Eisener, Sullivan, & Tyler, 1969). These were statements of what a student would be able to do after a learning experience. Rooted in a positivist paradigm, these emphasized observable student behavior, and specified the conditions in which the behavior should occur. A key point is that Instructional Objectives were situation-specific and not designed to be transferable.

Allan's next significant stage identifies Behavioral Objectives (MacDonald-Ross, 1973) followed by the development of Learning Objectives (Cohen & Manion, 1977). These were seen as being formulations of educational intent, comprising behavioral objectives which the student should achieve, and non-behavioral objectives which specified what the lecturer did (i.e., teaching objectives). Learning was conceptualized here as a process that both lecturer and student were jointly responsible for, and one that the lecturer should be able to plan in advance for what the student should learn, as such it was more aligned with constructivist approaches.

Allan's final significant stage in the development of learning outcomes takes in the work of Eisner (1979). Eisner differentiated between objectives, which implied a pre-formulated specific learning-goal, and outcomes, which included both intended and non-intended products of a learning experience. Outcomes were seen as being broader, overarching consequences of learning, which, unlike objectives, were not situation-specific, did not have

to relate to specific contexts, nor necessarily to standards of performance. Consequently, they allowed for the potential transferability of learning from one context to another. Although not discussed by Allan, the inclusion of non–intended outcomes additionally allowed for serendipitous learning, although as will be seen, any benefits from this have largely been disregarded in the way outcomes have been implemented in higher education.

The use of prescribed, pre-formulated, learning outcomes contributed to the shift in emphasis from a behaviorist conception of teaching to more of a constructivist student-centered one in higher education. Allan (1996, p. 100) identified that "uncoupling of subject-specific outcomes from the stricture of behavioral outcomes represents a significant turning point in…curriculum design in higher education". Further to that, the use of the term "subject-specific outcome" to replace "learning objective" serves both to clarify the meaning of the terminology and to facilitate the shedding of the mantle of behaviorism with which the word "objective" is associated (Allan, 1996, p. 100).

Learning outcomes therefore allowed a shift in focus from what the lecturer was able to, or should, teach, to what the achievements and level of understanding of the student are expected to be (Attard, 2010). This moved emphasis away from behaviorist content-coverage models of teaching to more constructivist student-focused pedagogy (O'Neill & McMahon, 2005).

Bloom's Taxonomy of Cognitive Objectives (1956) "one of the most widely applied and most often cited references in education" (as cited in Forehand, 2010, p. 41) along with later revisions and additions (Bloom, 1984; Bloom, Krathwohl, & Masia, 1999; Krathwohl, 2002) was a key influence in the introduction and use of learning objectives and outcomes in education. The identification of a cognitive domain, divided into six ascending levels, from knowledge through to evaluation: knowledge, comprehension, application, analysis, synthesis, and evaluation enabled the development of level descriptors, and the identification of key words and the types of questions that could be asked to evaluate, assess and facilitate learning at different levels. Today, numerous guides to writing learning outcomes exist, predominantly based on Bloom's work (see, for example, Carroll, 2001; Kennedy, Hyland, & Ryan, 2006), as do hundreds of websites, individual university guidelines and awarding body regulations.

Learning outcomes in higher education

One document cited by many (e.g., Heywood, 2000) as being a key paper in the development of learning outcomes in higher education, particularly in the United Kingdom, is the 1992 UDACE (Unit for the Development of Adult Continuing Education) project report entitled "Learning Outcomes in Higher Education" (Otter, 1992). The project utilized Bloom's Taxonomy, along with Carter's (1985) Taxonomy of Objectives as the starting point for further developing the use of learning outcomes. The UDACE research examined whether or not it was possible to describe a university degree in terms of its outcomes, essentially, what a graduate knows, can do, and understands. Its two main premises were that that the central purpose of higher education was learning and that "the measurement of learning might be best described through the description of outcomes…rather than the more traditional description of learning input, syllabus or course content" (Otter, 1992, p. i). Concluding that "a stronger focus on outcomes in higher education would enable quality assurance processes to be more transparent and rigorous" (p. i), and that it was essential

that outcomes be assessed and recognized in accreditation systems. Academic credit was positioned as being explicitly linked to student achievement through the assessment of outcomes. This would also provide for a better way of recognizing and accrediting prior learning and informal learning. It was suggested that this would directly help to facilitate widening participation and access to university for adult learners and those with non-traditional qualifications (Otter, 1992).

The project's executive summary identified two achievements. Firstly, that it had tested and refined a model for the development of learning outcomes through "an iterative and collaborative process from within the academic culture, rather than by imposing managerial models from outside" (Otter, 1992, p. iii). Secondly, that it had developed a quality model, which linked the definition and assessment of learning outcomes with an approach to coherence and a credit framework. Importantly, it was argued that "Learning outcome statements…[enable] students…to achieve each outcome, or sensible groups of outcomes at his or her own pace" (Otter, 1992, p. 4). In the 25 plus years since the UDACE report's publication, the use of prescribed learning outcomes, along with credit-based modular academic programs, have become embedded in higher education practice in the UK, and across much of Europe and North America.

The implied pedagogical benefits of learning outcomes

It is strongly suggested (e.g., Attard, 2004) that learning outcomes represent one of the essential building blocks for a transparent higher education and qualification system, and that their introduction represents a change in emphasis from teaching to learning, contrasting the traditional lecturer-centered viewpoint with the adoption of a student-centered approach (Adam, 2004). Otter (1992) maintained that the principal benefit of an outcomes-led approach lay in providing a focus for staff, students and employers to examine more clearly what they were seeking to achieve, enabling them to contribute actively to the development of a common understanding of the nature and purpose of higher education and of specific programs and awards.

The use of learning outcomes should provide for consistency and transparency in the assessment processes for both student and educator, helping academics choose a relevant teaching and learning strategy, and emphasizing the student's active role in the process of learning through an experiential student-centered approach (Ellis, 2004). Assessment is through demonstration of actual achievement, rather than being based on the time, or a specified period of time, that a student has spent engaged in study. As Ecclestone identified, "explicit outcomes enable alternative ways of generating evidence to achieve the outcomes instead of requiring attendance and time serving" (Ecclestone, 1999, p. 33). Crucially, they should allow for a level of negotiation between student and educator about the type of assessment evidence that the student will produce, and of the criteria which they will be assessed against, thereby allowing students to have more control over assessment processes by allowing them to initiate assessment when they have sufficient valid evidence of their achievement that meet the set criteria (Ecclestone, 1999). Gibbs argues that they empower students because they are not content-based, but outcome-based (Gibbs, 1995).

Learning outcomes therefore may be seen to play an important role in higher education processes of assessment and learning. Providing academics with a structure to clearly identify and articulate to students what they will or should know, be able to do or

understand, and what they may produce as evidence for assessment, and for students to actively engage as learners and decide when they will submit their evidence. They should act as an enabler for transferable skills, the accreditation of prior learning, including certificated and experiential learning, and through this, help to widen participation across the university. Yet, have all these pedagogical benefits been fully realized in practice?

Benefits of quality-assurance processes

In the United Kingdom, the 1997 Dearing Report instigated, along with other initiatives, a National Qualifications Framework for Higher Education and a Further and Higher Education Qualifications Framework (FHEQ). Dearing required all UK higher education institutions "to define learning outcomes for their programmes and to link learning outcomes to teaching and assessment" (Dillon, Reuben, Coats, & Hodgkinson, 2005 p. 1). In Europe, the 1999 Bologna Agreement explicitly identified the need for all EU university programs to be comparable and broadly aligned. Learning outcomes helped facilitate improvement and comparability of standards within and across institutional, national and international borders. Member states were required both to adopt common terminology and standards for provision and for undergraduate degrees to be relevant to the European labor market. This served a dual purpose of both "promoting higher education as an export business" (Holford, 2014 p. 7) and a social dimension which "aimed to open higher education more across the social spectrum" (p. 7). By 2004, a review of the Bologna process identified a growing emphasis on learning outcomes at the local, national and international level (Adam, 2004).

In 2000, the UK's Quality Assurance Agency for Higher Education (QAA) required universities to have processes in place for the monitoring of student attainment based on learning outcomes (Quality Assurance Agency for Higher Education, 2000). By 2004, they further identified that "most departments in most institutions, have fully adopted the principles of programme design with respect to learning outcomes" (Quality Assurance Agency for Higher Education, 2007, p. 1), and that after three years, "Almost all of the institutional audit reports published…explicitly mention learning outcome" (Quality Assurance Agency for Higher Education, 2007, p. 1). Similar processes took place throughout Europe. By the end of the first decade of the 21st century, learning outcomes had become embedded in and integral to institutional and individual practice in higher education. Within the UK, the QAA's Quality Code states that Higher education providers must ensure that the assessment of students is: robust, valid and reliable and that "the award of qualifications and credit are based on the achievement of the intended learning outcomes" (Quality Assurance Agency for Higher Education, 2011, p. 1). Learning outcomes then, particularly in terms of UK higher education, are clearly taken very seriously.

In-practice tensions caused by learning outcomes for both quality assurance and pedagogical purposes

Because learning outcomes are used both for the processes of teaching and assessment, and for quality assurance, this has led to certain tensions, which manifest as problems in practice. Melton (1996, p. 418) argued that one "serious problem" with learning outcomes is that students have different abilities and progress at different rates; therefore, "they will be ready for assessment at different points in time." Yet this problem should not occur if outcomes allow students to determine what assessment evidence they will need to produce

in order to meet a certain outcome, and by when. University systems utilizing learning outcomes should, if outcomes are used as intended in the UDACE report, allow students to be assessed when they believe they are "ready" i.e., students should be able to decide when they can submit work for assessment. But higher education managerial and administrative systems are rarely, if ever, sufficiently flexible to accommodate this. Universities have predetermined assessment periods within the academic year, with specified deadlines by which students must submit their work. Administrative systems also usually prevent students from submitting work earlier than the assessment deadline, and penalize them heavily if they submit work after it. Often students will fail a module or receive a substantially reduced grade if they do not submit by the assessment deadline. This practice clearly undermines one of the stated potential benefits of using outcomes – that of allowing students to initiate assessment when they have gathered sufficient evidence of their achievement.

As well as allowing students to demonstrate achievement when they are "ready," learning outcomes should allow students to do this in a variety of ways. This can allow for an element of negotiation between student and lecturer about course/module content, and for different students in a cohort to be able to demonstrate achievement of an outcome in the most appropriate way for them as individuals (Wiggins, 1998). Yet, very few university programs cater for this level of flexibility. Instead, it is a typical requirement that an outcome is demonstrated/achieved through a specified assessment method, for example, an essay, and the only choice students are provided with is *which* essay question to answer from a prescribed list. Students who fail to answer the essay question may be penalized, despite them having achieved a module's learning outcomes.

If the full potential of learning outcomes is to be realized, then the curricula should allow individual students to be able to negotiate what assessment evidence they will produce and to decide when to submit it for assessment. Yet, current rigid and inflexible administrative, managerial, and quality-assurance processes do not allow for this.

Negative affect that learning outcomes have on sustainable and lifelong learning

"Sustainable learning" is that which "encompasses the knowledge, skills and predispositions required to underpin lifelong learning activities" (Boud, 2000, p. 151). Boud argues that, whilst assessment serves a certification purpose, students also need to be prepared for assessment tasks which they may face *throughout* their lives. In considering the functions of assessment, Boud (2000) introduced the concept of "sustainable assessment," i.e., that which supports sustainable learning and which he identified as being "not a method but a way of thinking about all aspects of assessment practices" (Boud, 2000, p. 165). The concept of "sustainable assessment" is that assessment processes should meet the student's needs of the present without compromising their ability to meet their own future (lifelong) learning needs. Yet, as Sadler (2007, p. 387) argued, assessment practices frequently "focus on methods of getting students through – often at the expense of what it really means to learn."

Boud (2000, p. 151) argued that "If assessment tasks within courses at any level act to undermine lifelong learning, then they cannot be regarded as making a contribution to sustainable assessment." If too great an emphasis is placed on summative assessment for certification purposes – essentially what takes place in many university programs (Postareff,

Virtanen, Katajavuori, & Lindblom-Ylanne, 2012; Williams, 2014), this may undermine and constrain the student's future lifelong learning. In a later paper, co-written with Falchikov, Boud discussed the need for aligning assessment with long-term/lifelong learning; preparing students with the skills and dispositions needed for their future learning and development. They argued that within universities there is a "dominant view of assessment that is not sufficiently compatible with the goal of fostering learning" (Boud & Falchikov, 2006, p. 411) and signpost a requirement for change if the discourse of assessment is not to be disabling to lifelong and long-term learning.

If students are encouraged to focus only upon learning for certification and achievement, this can hinder their overall lifelong learning as they will start to believe that uncertificated and non-assessed learning has no intrinsic value or worth. Yet the use of pre-specified learning outcomes clearly encourages, and by default, requires this focus. One of the key conclusions of the 1992 UADCE project was that "outcome definitions which are not assessable are not of any practical value" (Otter, 1992, p. ii). This is antithetical to Boud's concept of sustainable and lifelong learning. Moreover, the assumption and labeling of outcomes which are not assessable as being valueless undermines some of the fundamental roles of higher education, such as those of inculcating values and attitudes which "contribute to the socialization of enlightened, responsible and constructively critical citizens" (Bengu, 1997, Section 1.3). It is also highly questionable as to whether every aspect of learning at university can, or should, be assessed, as is the assumption that an outcome, which is not assessed is automatically of no practical value.

As a consequence of this, learning outcomes may have serious negative effects for assessment processes, as they lead to students focusing solely upon their achievement of the required outcomes, and adopt a highly instrumental approach to assessment. There is also evidence emerging that contemporary students are becoming increasingly instrumental in their approach to assessment (Brown & Carusso, 2013; Ecclestone, 2010; Field, 2012; Williams, 2012). As Ainley and Allen (2012, p. 24) argued, students "displaying knowledge for assessment has replaced learning with test-taking." More recently, Boud (2014, p. 15) identified that students asking "Will it count?" is commonly heard when lecturers ask them to complete a task. If an exercise does not count towards the summative assessment, the achievement of a specific learning outcome, some students will not see the point of engaging with it. In a similar vein, Torrance (2012) argues that where students are only required to pursue stated pre-specified intended learning outcomes, it may convey the idea to them that learning outside the externally specified parameters of others is less valid, or irrelevant. As such, any serendipitous learning is devalued, perhaps ignored, as is the student's future lifelong and sustainable learning.

Difficulties associated with the clarity of learning outcomes

Learning outcomes should provide clarity, consistency and transparency in assessment processes for both student and educator (Ellis, 2004; Otter, 1992). Yet, both Sadler (2007) and Torrance (2007) suggested that they are too frequently overspecified and that the language they are written in does not always help learning. Simply put, students may just not understand what a learning outcomes requires of them. However, this problem may not be the student's fault. Hussey and Smith (2002, p. 30) argued that it is "impossible" to write learning outcomes that are sufficiently precise that learners can understand what is expected of them. They maintain that however carefully they are written, they can *only* be

interpreted in the light of prior understanding of what quality or standard is appropriate in a given subject at a given level (Hussey & Smith, 2002, 2003, 2008). This is an important dimension of assessment. If learning outcomes are not articulated in a way that all students can understand, then they may not be able to produce assessed work that meets them. Therefore, from this perspective, their use may be antithetical to claims (e.g., Ellis, 2004; Otter, 1992) that they provide clarity and transparency in assessment processes for students.

Hussey and Smith (2002, p. 225) argued that learning outcomes "remain ambiguous whatever descriptors are used," articulating a strong argument that outcomes only provide a *general guide* as to what is expected and that students (and educators) require *specific* knowledge in order to be able to correctly interpret them (and learners may not have this knowledge). They identified that, as a result of this, outcomes should only really be used to provide a *general* guide to students about what is expected, not specific outcomes against which they are assessed and graded. They further criticize outcomes because they are insensitive to the requirements of different academic disciplines. For example, outcome sequences such as: "describe," "understand," "analyze" may represent cognitive progression; but could be contradictory to the empirical knowledge of practitioners. Whilst the word "understand," is, they argue, very different when applied to quantum field mechanics compared with Darwinian evolutionary theory. And a student's use of the word "understand" may often be prefaced with an authoritative adjective (Holmes, 2018) which may determine whether or not they believe a surface or deep approach to learning is required of them. The term "understand," as frequently used in outcomes, is open to subjective interpretation, with academics and students interpreting the requirements of understanding quite differently (Holmes, 2018). Hussey and Smith (2002) identified that prescriptive lists of learning outcome indicators are of little use as outcomes have an inherent need to differ for different subjects, as well as for different topics within a single subject. Whatever wording is chosen for an outcome, it can only be interpreted in the light of prior understanding of what quality or standard is appropriate in a given subject at a given level. That prior understanding is a form of "hidden curriculum" (Joughin, 2009, 2010) as students are extremely unlikely to have the same prior understanding that a lecturer who writes an outcome has. Hussey and Smith (2002, p. 220) argued that the assumption that outcomes can be written with a prescribed vocabulary of specific descriptors in order to provide objective measurable assessment devices is "fundamentally mistaken." Effectively there exists a false-rubric of "transparency" where educators must clearly state what they are going to teach, and are then held accountable for their success or failure.

Finally, it is noted that although learning outcomes have facilitated a shift from behaviorist models of teaching to constructivist models of learning, for those academics who embrace a wholly constructivist approach to learning principles the use of outcomes can be problematical. A constructivist approach (von Glaserfeld, 1995) would necessarily argue that predetermined specified outcomes are simply not possible, because knowledge and meaning are individually constructed by, and are unique to, each student. A constructivist approach should allow the outcomes to be changed for different students, and to allow them to negotiate and agree their own outcomes based on their individuated areas of interest – making the learning experience more meaningful and relevant. In practice,

university assessment and administrative procedures do not allow for this, as both the outcomes and methods of assessment have to be specified in advance of the teaching.

Concluding Remarks

It would seem clear that learning outcomes have brought benefits to assessment and teaching processes in higher education. Yet, they may also have a negative impact on learning. It is evident that they are not being used as envisaged or as originally intended by the 1992 UDACE report, because they do not, as currently operationalized, allow students to decide how and by when they will evidence their achievement of an outcome. The improvements that learning outcomes could bring to the pedagogical process have not been fully realized, and an opportunity that has been lost. This leads to the question that must be raised by all university educators, "Are learning outcomes, as currently operationalized, providing all the benefits they were meant to deliver?" The answer is, at present, clearly not.

It is interesting to note that Allan's (1996) paper concludes with the following statement:

> The challenge to designers of curricula in higher education is now to harness the use of learning outcomes to view learning from the perspective of the student, rather than the lecturer, and thereby to enrich the quality of learning experienced by undergraduate students. (p. 105)

Just over 20 years later, with learning outcomes wholly embedded throughout university education, this statement is still very apposite. Allan's challenge to designers of university curricula is still to be taken up. Perhaps now is the time for educators to rise to this challenge? For if we do not, then the promised benefits of learning outcomes will never be fully realized.

References

Adam, S. (2004). *A consideration of the nature, role, application and implications for European education of employing learning outcomes at the local, national and international levels.* Edinburgh, United Kingdom: Scottish Executive.

Ainley, P., & Allen, M. (2012). Hard times for education in England. *Educational Futures e-Journal of the British Education Studies Association, 5*(1), 15-28.

Allan, J. (1996). Learning Outcomes in Higher Education. *Studies in Higher Education 21*(1), 93-108.

Attard, A. (2010). *Student Centred learning; an insight into theory and practice.* Brussels, Belgium: European Students Union EU Lifelong Learning Programme imprint.

Bengu, S. M. E. (1997). *A Programme for the Transformation of Higher Education.* Education White Paper 3. Pretoria, South Africa: South Africa Department of Education.

Bloom, B. S. (1984). *Taxonomy of Educational Objectives: The Classification of Educational Goals: Handbook 1: Cognitive domain* (2nd ed.). New York, NY: Addison Wesley.

Bloom, B. S., Krathwohl, D. R., & Masia, B. R. (1999). *Taxonomy of Educational Objectives Book 2 - Affective Domain* (2nd ed.). New York, NY: Longman.

Brown, R., & Carasso, H. (2013). *Everything For Sale? The Marketization of UK Higher Education*. London: Routledge.

Boud, D. (2000). *Sustainable Assessment: rethinking assessment for the learning society*. *Studies in Continuing Education, 22*(2), 151-167.

Boud, D., & Falchikov, N. (2006). Aligning assessment with long-term learning. *Assessment and Evaluation in Higher Education, 31*(4), 399-413.

Carrol, J. (2001). Writing learning outcomes: some suggestions. 2014.

Carter, R. (1985). A taxonomy of objectives for professional education. *Studies in Higher Education, 10*(2), 135-149.

Cohen, L., & Manion, L. (1977). *A Guide to Teaching Practice*. London: Routledge.

Dearing, R. (1997). *Higher Education in the learning society*. London: National Committee of Inquiry into Higher Education (NCIHE).

Dillon, C., Reuben, C., Coats, M., & Hodgkinson, L. (2005, July). *Learning outcomes and their assessment: putting open university pedagogical practices under the microscope.* Paper presented at the First International Conference on Enhancing Teaching and Learning through Assessment. Hong Kong.

Ecclestone, K. (1999). Empowering or Ensnaring?: The Implications of Outcomes-based Assessment in Higher Education. *Higher Education Quarterly, 53*(1), 29-48.

Ecclestone, K. (2010). *Transforming Formative Assessment in Lifelong Learning*. Buckingham, United Kingdom: Open University Press.

Eisner, E. (1979). *The Educational Imagination.* New York, NY: Macmillan.

Ellis, G. (2004). *Rough Guide to Learning Outcomes.* Teesside, The University of Teesside - Centre for Learning and Quality Enhancement: 24.

Field, S. (2012, June). *Understanding attendance and non-attendance motivation amongst first year undergraduate students*. Paper presented at the SOLSTICE and CLTR conference on Enhancing Learning, Teaching and Student Success. Edge Hill University, Ormskirk, United Kingdom.

Forehand, M. (2010). Bloom's Taxonomy. In M. Orey (Ed.), *Emerging Perspectives on Learning, Teaching and Technology* (pp. 41-47). Zurich, Switzerland: Jacobs Foundation.

Freire, P. (1968). *Pedagogy of the Oppressed*. London: Penguin

http://www.timeshighereducation.co.uk/the-unhappiness-principle/421958.article.

Gibbs, G. (1995). *Assessing student centred courses.* Oxford, United Kingdom: Oxford Centre for Staff Learning and Development (OCSLD).

Heywood, J. (2000). *Assessment in Higher Education Student Learning, Teaching, Programmes and Institutions*. London: Kingsley.

Holford, J. (2014). The lost honour of the Social Dimension: Bologna, exports and the idea of the university. *International Journal of Lifelong Education, 33*(1), 7-25.

Holmes, A. G. (2018). The Role of Interest and Enjoyment in Determining Students' Approach to Learning. *Education Process International Journal, 7*(2), 140-150.

Hussey, T., & Smith, P. (2002). The trouble with learning outcomes. *Active Learning in Higher Education, 3*(3), 220-233.

Hussey, T., & Smith, P. (2003). The Uses of Learning Outcomes. *Teaching in Higher Education, 8*(3), 357-368.

Hussey, T., & Smith, P. (2008). Learning Outcomes: a conceptual analysis. *Teaching in Higher Education, 13*(1), 107-115.

Joughin, G. (2009). Assessment, Learning and Judgement: Emerging Directions. In G. Joughin (Ed.), *Assessment, Learning and Judgement in Higher Education* (pp. 13-27). Dordrecht, Netherlands: Springer.

Joughin, G. (2010). The hidden curriculum revisited: a critical review of research into the influence of summative assessment on learning. *Assessment and Evaluation in Higher Education, 35*(3), 335-345.

Kennedy, D., Hyland, A., & Ryan, N. (2006). Writing and Using Learning Outcomes: a Practical Guide. Implementing Bologna in your institution. In E. Froment, J. Kohler, L. Purser & L. Wilson (Eds.), *EUA Bologna Handbook.* C 3.4-1. Planning and implementing key Bologna features. Retrieved from https://www.fibaa.org/fileadmin/uploads/content_uploads/Writing_and_Using_Learning_Outcomes_01.pdf.

Krathwohl, D. (2002). A revision of Bloom's Taxonomy: An overview. *Theory into Practice, 41*(4), 212-218.

MacDonald-Ross, M. (1973). Behavioural Objectives - a critical review. *Instructional Science, 2*(1), 1-52.

Mann, S. J. (2004). *Guidelines for Writing Aims and Intended Learning Outcomes at the Programme and Course level*. Glasgow, http://www.gla.ac.uk/media/media_105307_en.pdf .

Melton, R. (1996). Learning Outcomes for Higher Education: Some Key Issues. *British Journal of Educational Studies, 44*(4), 409-425.

Nusche, D. (2008). Assessment of Learning Outcomes in Higher Education; a comparative review of selected practices. *OECD Education Working Papers No 15: 50.* https://doi.org/10.1787/244257272573.

O'Neill, G., & McMahon, T. (2005). Student-Centered Learning: What does it mean for students and lecturers? In O. Holmes, T. McMahon & G. McCulloch (Eds.),. *Emerging Issues in the practice of university learning and teaching* (pp. 27-36). Dublin, Republic of Ireland: HEA Academy AISHE.

Otter, S. (1992). *Learning Outcomes in Higher Education. A Development Project Report.* London: Department for Education, Unit for the Development of Adult Continuing Education (UDACE). ERIC Number: ED354397.

Popham, J., Eisener, E., Sullivan, H., & Tyler, L. (1969). *Instructional Objectives*. Washington D.C.: American Educational Research Association.

Postareff, L., Virtanen, V., Katajavuori, N., & Lindblom-Ylanne, S. (2012). Academics' conceptions of assessment and their practices. *Studies in Educational Evaluation, 38*(3-4), 84-92.

Quality Assurance Agency for Higher Education. (2000). *Code of practice for the assurance of academic quality and standards in higher education. Assessment of students*. Gloucester, United Kingdom: The Quality Assurance Agency for Higher Education.

Quality Assurance Agency for Higher Education. (2007). *Outcomes from institutional audit. The adoption and use of learning outcomes*. Gloucester, United Kingdom: The Quality Assurance Agency for Higher Education.

Quality Assurance Agency for Higher Education. (2011). UK Quality Code for Higher Education. *Part A: Setting and maintaining threshold academic standards. Chapter A6: Assessment of intended learning outcomes.* Gloucester, United Kingdom: The Quality Assurance Agency for Higher Education.

Sadler, D. R. (2007). Perils in the meticulous specification of goals and assessment criteria. *Assessment in Education: Principles, Policy & Practice, 14*(3), 387-392.

Torrance, H. (2007). Assessment as learning? How the use of explicit learning objectives, assessment criteria and feedback in post-secondary education and training can come to dominate learning. *Assessment in Education: Principles, Policy & Practice, 14*(3), 281-294.

Torrance, H. (2012). Formative assessment at the crossroads: conformative, deformative and transformative assessment. *Oxford Review of Education, 38*(3),323-342.

Tyler, R. (1949). *Basic Principles of Curriculum Instruction.* Chicago, IL: Chicago University.

von Glaserfield, E. (1995). A constructivist approach to teaching. In L. P. Steffe & J. Gale (Eds.), *Constructivism in Education* (pp. 3-16). Hillsdale, NJ: Erlbaum.

Wiggins, G. (1998). *Educative Assessment*. San Francisco, CA: Wiley.

Williams, J. (2012). *Consuming Higher Education: why learning can't be bought*. London: Bloomsbury.

Williams, P. (2014). Squaring the Circle: a new alternative to alternative assessment. *Teaching in Higher Education, 19*(5), 565-577.