

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <https://orca.cardiff.ac.uk/id/eprint/81297/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Souto-Otero, Manuel 2012. Learning outcomes: good, irrelevant, bad or none of the above? [Editorial].
Journal of Education and Work 25 (3) , pp. 249-258. 10.1080/13639080.2012.689648

Publishers page: <http://dx.doi.org/10.1080/13639080.2012.689648>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



Learning outcomes: good, irrelevant, bad or none of the above?

Manuel Souto-Otero
Department of Education
University of Bath
Mso21@bath.ac.uk

A version of this paper has been published in the Journal of Education and Work
<http://dx.doi.org/10.1080/13639080.2012.689648>

This issue of the *Journal of Education and Work* is concerned with one of the major global developments in education policy: the shift to learning outcomes. Contributions are based on the results of research projects in Europe and Africa, as well as a large OECD international study on the recognition of learning outcomes in formal, non-formal and informal contexts covering over 20 countries in the five continents. The focus on policy is purposeful: much of the research on 'learning outcomes' over the last fifty years has been on questions of pedagogy. By contrast, only a small proportion of the literature has tackled issues of policy and governance, even though policies regarding the shift to learning outcomes aim to bring about fundamental changes in the ways in which we understand, govern, design, plan and deliver education.

The learning outcomes approach aims to respond to the new realities of frequent changes in job roles and geographical locations as well as greater discontinuity for learners in relation to periods of formal education. It aims to put knowledge generated in different contexts on an equal footing. It asserts the capacity of institutions and sets of practices carried out outside formal education to produce skills and competences that are equivalent to those produced within the education system (Bjornavold 2000). In terms of competence development, much of the difference among and between academic and vocational settings is seen to be based on social constructs; differences are seen as institutional rather than epistemological (Raffe 2009). At the same time, concerns regarding the links between education and the labour market are widespread, not least given the perceived limitations of educational institutions to produce the 'soft skills' that are increasingly valued in the labour market, limitations which are derived from the different logics of the education and labour market fields (Mandl et al. 1996). Both trends raise questions regarding the unique contribution of institution-based education systems in their current forms – a point that is developed further below.

The most popular account today heralds learning outcomes as an instrument for policy reform. Learning outcomes are presented as instruments to solve problems of transparency, quality, accountability and efficiency – as they provide precision and avoid overlaps/ repetition in learning. They also aid equality as they challenge 'artificial' differences between learning settings, replace the traditional emphasis on equality of access with equality of outcomes, enable the take-up of second chances in education, bring about learner-centred education, and help educators to better organize institutions and curricula. The learning outcomes pedagogical literature has, probably

inadvertently, reinforced these views by underlining the relationship between desired learning outcomes (which by definition must be identified somehow in advance of the learning process), assessment (Byrne et al. 2002; Daugherty et al. 2008), learning approaches (Entwistle 1987; Entwistle and Ransdem 1983) and learning strategies (Zimmerman 1990; Fisher and Ford 1998).

Such positions, however, have now become the target of strong criticism and heated debates on the claims, nature and consequences of 'learning outcomes' policies. Most notably learning outcomes have recently been portrayed as a managerial turn that can inhibit useful learning processes, fail to recognize explorative and unintended learning, create a target-lead culture, attack liberal conceptions of education, be technically difficult to introduce, and result in the social de-differentiation of skills (cf. Hussey and Smith 2002; Young and Allais 2011). The risk, this work suggests, is that we have taken the sign (learning outcomes statement) in place of the referent (what we want learners to learn and the educational process itself). An unabated defense of learning outcomes, this body of work argues, is particularly problematic given the stretching of the 'learning outcomes concept', which can denote many different approaches.

The contributions to the special issue illustrate just how variant conceptions and evaluations of the consequences of the learning outcomes shift can be. The contribution by Patrick Werquin provides a vivid defense of the learning outcomes approach and its potential to deliver greater system integration, educational equality and transparency and labour market relevance. Learning outcomes clarify what people are supposed to know or be able to do, and have value because they have immediate relevance to end-users, including those who have dropped out the formal education system. They establish a more equal playing field between the different settings in which skills and competences are produced which in turn, and given stark inequalities in formal education, can produce greater equality amongst individuals who follow different, individualized, learning pathways. They provide new routes to achieve qualifications and help mitigate the effects of the educational 'institutional reputation'. Making it clear to students what the results of their learning should be provides them with the means to better organize their efforts. The contribution by Sandra Bohlinger focuses particularly on the link between learning outcomes and qualification frameworks to warn against the lack of sufficient research to back up the claims made by policy-makers regarding its benign consequences. She also investigates the challenge that its acceptance and use presents at the grass-root level: by companies,

education and training institutions, individuals and social partners. Leney et al.'s (2008) landmark report on the shift to learning outcomes, recognizes that the learning outcomes approach has only had a limited impact on the way learning is being assessed, but argues that it is only a matter of time that codified learning outcomes will define and control assessment practices and control the curriculum in Europe. Against this Bolinger argues that it is as of yet unresolved whether the shift to learning outcomes and associated political instruments will create a shift in educational practice and governance.

The issue of governance and its interface with the learning outcomes approach is precisely the question that Lorenz Lassnigg addresses in his contribution. Lassnigg argues for a balanced view, suggesting that most expectations regarding the learning outcomes approach are overstated, as are the critiques. In a number of respects in learning outcomes are simply irrelevant; Lassnigg's main worry is thus not that they will be hugely damaging, but that they have become so prominent and, given the time required for their implementation, distracting. One major concern is the belief that changes in policy will necessarily produce changes in practice, and that learning outcomes divert attention from more pressing issues for educational improvement. Nevertheless, the contribution could be taken to suggest, ironically, that the gap between research and policy may be wide, but that against the perilous consequences of incognizant policies we have the safeguard of an equally large gap between policy and practice. Hussey and Smith (2002) suggest that most educators consider the specification of learning outcomes as a chore, rather than a useful exercise, as they are seen as potentially relevant, applicable and precise in relation to a very limited aspect: specific behaviours, not knowledge, understanding, skills and abilities. Furthermore outcomes can come in all sorts of degrees and are only meaningful in relation to particular areas (high levels of competence in communication skills will be judged differently in journalism and engineering). Yet, if the outcomes are linked to these areas, then their purpose of facilitating movement between areas becomes more challenging. In a similar vein Daugherty et al. (2008) note that in higher education an increasing codification of learning outcomes seemed to be associated with a decreasing ability to reward high quality learning –which is much less amenable to description than individual learning outcomes. In fairness it should be noted that this of course also happens in other areas, and similar concerns have been raised in relation to quality assurance elements: for instance, the increasing codification of assessment objectives that has been

portrayed to hamper effective feedback to students –replaced by formulaic feedback.

In the closing paper of this special issue, Stephanie Allais builds on the experience of South Africa to critically underline firstly the inherent ambiguities imbued in the learning outcomes approach, and secondly the impossibility that these bring about transparency across qualifications and guide the make up of educational programmes. The first objection to learning outcomes is that their clarity is spurious: they give the impression of clarity because we interpret them against a prior understanding of what is required and in this sense they are ‘parasitic upon the very knowledge and understanding that they are supposed to be explicating’ (Hussey and Smith 2002:225). Without that prior understanding and experience (to compare performances amongst learners within a domain) it is not possible to interpret learning outcomes. But ‘users’ of learning outcomes, such as students, for which outcomes are written, will lack that understanding. The South African experience, Allais argues, also illustrates how a ‘learning outcomes’ approach can in fact increase inequalities (lack of specification of content left schools with less well trained and knowledgeable teachers worse off than schools with better trained teachers), does not facilitate judgments on quality, and does not increase transparency as learning outcomes statements cannot capture complex curricula and knowledge satisfactorily.

The practical implications of the above debates upon existing institutional arrangements are manifold. Let us consider just two. Firstly, assuming that the learning outcomes approach is taken seriously, postulating that we can define outcomes and reliably measure performance across settings: shouldn’t competence titles be issued without reference to the setting or educational institution where they have been acquired? The literature on educational inequalities suggests that such information is highly valued and used by employers (Souto-Otero 2010) and that such attempts would face strong resistance not only from educational institutions, which are often portrayed as the recalcitrant defendants of vested interests against a learning outcomes approach, but also from industry and from past learners who invested heavily in gaining a title that could provide them with a positional advantage in the labour market.

Similarly, once it is accepted that we learn all the time and in all contexts, puzzles remain as to whether the learning outcomes approach should lead to a questioning of the very existence of education systems and curricula as we understand them, in favour of alternative arrangements, as well as in relation

to why access to formal education is such a central topic in educational policy debates. The answer to these questions could relate to the extent to which education systems can provide a different kind of set of skills or competences than is available in other contexts: it either can or it cannot. To say it can, is a view that proponents of the learning outcomes approach are reluctant to express, much to the despair of some commentators, such as Young, who argues that educational institutions can and do transmit and create a different type of knowledge to other institutions – what he calls ‘powerful knowledge’ (Young 2008). If, on the other hand, one argues that educational institutions cannot, the existence of formal education systems would be open to questioning.

Education systems could of course still be justified with reference to other arguments, for instance their ‘efficiency’ in the production of the knowledge, skills and competences that can also be created in other settings – at home, at work, etc. However, the discourse about efficiency points to some predefined aims and objectives – as well as the deployment of resources to achieve those. While there is no reason as to why outcomes should only relate to instrumental aspects or for external stakeholders to determine the learning outcomes to be achieved, formal education systems may not be the best placed to achieve some of those objectives that have become the foci of public attention, given the above mentioned incompatibility of logics between the labour market and educational fields. Education systems could also be preserved because nobody else has the time or interest to contribute to daunting educational tasks, except private organizations, if a viable/ profitable market is opened up. The UK presents a case in which employers have not been interested in contributing even modestly to outcomes based education, as least as it has been materialized in National Vocational Qualifications, and a case in which eventually experts in the procedures to interpret learning outcomes took the place of area specialists. In any case, the social foundations for the privileged status of educational institutions in knowledge production and certification would be fundamentally jeopardized. There are also questions as to the relationship between the current approaches to learning outcomes and transparency. While the approach to achieve transparency is often based on the over-specification of outcomes in an attempt to achieve greater clarity, concepts in travel better and apply to a wider range of cases (have a higher ‘extension’) when they have a higher degree of abstraction (Sartori 1984). However, abstract concepts may be better understood by relatively small communities that are in close contact, which becomes a challenge when learning outcomes are to apply to all learning experiences.

A key issue at the core of these discussions concerns the importance of the domain-specific and level-specific aspects of learning versus traditional domain independent learning strategies, a debate that gained prominence in the mid-1980s. Here, again, contributions suggest that things may not be so black or white, and rather than ask whether, we may need to ask to what extent. This links with the early contributions from Gagne (1980) and Glaser (1984), who urged that domain specific knowledge be given a more prominent role, even in the teaching of transferable skills such as problem solving. One cannot solve problems of a mathematical nature without knowing something about mathematics; the ability to observe, deduct and predict is not enough; experts and novices solve problems in fundamentally different ways. Jonassen (1997) amongst others, shows that generic domain-independent problems, or 'puzzle problems' tend to be less useful than domain dependent problems, given that they are very constrained by a set of requirements -for instance, that all elements and processes required for a solution are knowable and known. Situational theorists additionally posited that the physical and social contexts in which learning activities take place are integral parts of those activities (Greeno et al. 1998; Putnam and Borko 2000). How a person learns is a fundamental part of what is learnt. Even earlier curriculum rationalist planners, such as Tyler (1949), argued that in order to be useful for instructional design learning, objectives need to specify the kind of behaviour developed in the student and the content or area of life in which the behaviour would operate. Yet Gagne (1984) also noted that what is learnt may not be always that different, and that we overlook truly important generalities when we refuse to look at the resemblances in learning outcomes between, say, arithmetic and reading, geometry and composition or between procedures in office management and aircraft maintenance. Thus, some have proposed definitions of learning outcomes that are subject-based, personal, transferable and generic -see also the contribution by Werquin in this volume.

What seems clear is that we should not want to go back to the 1960s, the decade of educational objectives, educational scientists and technologists charged with the design of teacher-proof materials. Harden (2002) understands learning outcomes as broad statements with much higher potential and notes the difference from the instructional objectives of the 1960s -to start with, outcomes are more tangible than objectives. Yet the outcomes movement emerged directly from the objectives movement in the 1950s, and it is worth reminding that Mager's objectives were meant to describe what the learner is able to do at the end of a course, not specify

content nor teachers' intentions. Thus the concerns of today's critics of the learning outcomes approach, can be better understood when we look back at the episodes in the 1960s when educationalists would purchase instructional objectives in line with Mager's (1962) stringent recommendations on clarity and precision at Popham's 'Instructional Objectives Exchange', a clearing house for behavioural objectives for education based in Los Angeles, to avoid dealing with the complexities of formulating the objectives and in the hope that those would fix instructional problems. Harden (2002) mentions how Guilbert (1981) listed 214 verbs that should be used when specifying a learning objective in medicine –cf. the situation in the UK, New Zealand and South Africa regarding the importance of 'precise wording' for the specification of learning outcomes and differentiation between levels. Educators could not deal with such complexity and turned to item banks of pre-written statements. The effects on the educational process were marginal. Such rational planning was accused of reductionism, curricular incoherence and atomization, also central topics in learning outcomes discussions. The reaction to rational designers in the 1960s came full circle in the 1970s, through a rejection of the 'straight-jacket' imposed by curriculum designers and the reemergence of non-behavioural objectives, such as understanding concepts and appreciating art forms (Eisner 1979; Allan 1996). Eisner and other leading figures in this movement did not reject the notion of learning outcomes. In fact, they embraced it, because it helped them to reject the limits imposed by a narrow focus on educational objectives, which they argued are always less complex and numerous than the outcomes educational experiences can produce. What Eisner rejected was the notion that the precise dimensions of such outcomes could be specified to the level of clarity or specificity rationalists argued for. Creativity, judgment and responsibility must not be dispelled with.

Those who negate the learning outcomes approach completely, on the other hand, may face the puzzle that people from different educational backgrounds are able to perform similar tasks –which in many situations may be more important than having a particular kind of knowledge–, so that some kind of equivalence and 'transparency' should in principle be possible to establish. In this respect, cognitive psychology draws significant differences between behavioural and cognitive conceptions of learning, and yet the connection between cognition and behaviour, between the known and the done, is not disregarded, with significant research having been produced on the mental processes and knowledge structures that can be inferred from behaviour (Shuell 1986). Following 'adaptive character of thought' theories (Anderson 1982), if individuals can have similar procedural knowledge –how

to do things– this is because they have acquired at least some (conscious or not) degree of declarative knowledge –knowledge about facts–, as the first cannot be learnt without the second, even if they relate to highly distinctive learning outcomes. A different matter is to develop the cognitive strategies regarding when and how to use procedural and declarative knowledge and therefore provide the learner with a degree of control over learning, an issue which received much attention in the 1970s, but has now seem to have gone out of fashion.

Paradoxically, learning outcomes may be much more useful when understood as a process than as an outcome. Moreover, they can be a useful element but may not be the only consideration in curriculum and assessment design. The debate should move from thinking about whether learning outcomes help in those tasks, to the ways in which they can help and under what conditions, as implied by some of the contributions to this issue and to the recent special issue of the JEW on qualifications frameworks (Young 2011). Learning outcomes approaches have worked well and delivered greater flexibility (for the better or worse), movement and (more modestly) equality in education when they are loosely interpreted (without rigid detailed criteria for the specification of content or assessment), refer to broad conceptions of learning outcome (which give some indication of what is expected), are connected to appropriate teaching and learning approaches but leave discretion to teachers on how flesh out content, are based on swift but substantial work by working groups that include the relevant stakeholders, implementation decisions have not ignored the institutional setting and power relations prevalent in the context where outcomes are to be applied and aims have been kept realistic (Raffe 2009). As Lauder (2009) notes in a previous JEW issue on knowledge and work, fundamental questions remain as to how some of the critiques to learning outcomes approaches could be translated into pedagogies, curricula and modes of assessment that would enable working class youth to access disciplinary knowledge –and indeed address other challenges to which learning outcomes tried to respond.

This leads us to discussions about common ground; and with such different takes on the value of learning outcomes, it is surprising that there are also clear commonalities in the four articles that make up this volume. The critiques and defenses of the learning outcomes approach in this volume all suggest that levels of analysis are –as always– important when making judgments. The usefulness of the learning outcomes approach may differ depending on whether the focus is put upon the learning outcomes models

themselves, their applications in different geographies at different times or the expectations and rhetoric accompanying both. They will also be more useful for some stakeholders than others, depending on the level of engagement of discussion upon learning outcomes themselves. Second, the effects of the learning outcomes approach depend on how they are formulated and implemented and the surrounding institutional and cultural setting: the learning outcomes approach in Scotland looks very different to the South African experience. Some learning outcomes aim to be precise, others are open, some are measured against standard performances, others are not, some are assessed in bundles, others are not. Their consequences will be very different. Third, claims regarding benefits of the learning outcomes approach tend to be overstated: learning outcomes can be neutral or damaging as well as positive. As Raffe (2009) has noted, when the Scottish Qualifications Framework, based on learning outcomes, was introduced over two decades ago, it was compared to the invention of penicillin and putting the man on the moon. Learning outcomes are not the panacea some supporters argue, although they are not as pernicious as some critiques postulate. Fourth, the fact that benefits are overstated does not necessarily mean that alternatives are always better. Indeed, the problems faced by learning outcomes approaches regarding interpretation and failure to lead to similar standards is something that they share with alternative approaches based on the specification of content. It is only that, by now, those working within approaches that have been around for long seem to be more prudent –or less energizing depending on how one looks at it– about their potential.

Given the importance of context and of understanding what the learning outcomes approach can and cannot do per se, it may present practitioners with an imperative for ‘allegro non troppo’ for slowing down and thinking before acting, if at least some of desired results are to materialize. The contributions, on the whole, show that there is a risk that rhetoric is accepted uncritically, that formal change takes over the agenda, that institutional (r)evolutions do not lead to behavioral changes and that learning outcomes are considered as an end in themselves, ‘the end’.

References

- Allan, J. (1996) 'Learning outcomes in higher education' *Studies in Higher Education*, vol.21(1), pp. 93–108.
- Anderson, J. R. (1982) 'Acquisition of cognitive skill' *Psychological Review*, vol.89, pp. 369–403.
- Bjornavold, J. (2000) *Making learning visible: identification, assessment and recognition of non-formal and informal learning in Europe*. CEDEFOP, Office for Official Publications of the European Communities.
- Byrne, M., Flood, B. and Willis, P. (2002) 'The relationship between learning approaches and learning outcomes: a study of Irish accounting students' *Accounting Education*, vol.11(1), pp. 27–42.
- Daugherty, R., Black, P., Ecclestone, K., James, M., and Newton, P. (2008) 'Alternative perspectives on learning outcomes: challenges for assessment' *Curriculum Studies*, vol.19(4), pp. 243–254.
- Eisner, E. (1979) *The educational imagination*. New York, McMillan.
- Enwistle, N. (1987) 'A model of teaching learning process' in J. Richardson, M. Eysenck and D. Warren Piper (eds) *Student Learning: Research in Education and Cognitive Psychology*, pp. 13–28. Milton Keynes: The Society for Research into Higher Education and Open University Press.
- Entwistle, N. and Ramsden, P. (1983) *Understanding Student Learning*. London: Croom Helm.
- Fisher, S. L. and Ford, J. K. (1998) 'Differential effects of learner effort and goal orientation on two learning outcomes' *Personnel Psychology*, vol.51(2), pp. 397–420.
- Gagne, R. M. (1980) 'Learnable aspects of problem solving' *Educational Psychologist*, vol.15(2), pp. 84–92.
–(1984) 'Learning outcomes and their effects. Useful categories of human performance' *American Psychologist*, vol.39(4), pp. 377–385.
–(1985) *The conditions of learning and theories of instruction*. Belmont, Wadsworth.
- Glaser R. (1984) 'Education and thinking: the role of knowledge' *American Psychologist*, vol.39(2), pp. 93–104.
- Greeno, J. G. and the Middle School Mathematics through applications projects group (1998) 'The situativity of knowing, learning and research' *American Psychologist*, vol.53(1), pp. 5–26.
- Guilbert, J. J. (1981) *Educational handbook for health personnel*. Geneva, World Health Organisation.
- Harden (2002) 'Learning outcomes and instructional objectives: is there a difference?' *Medical Teacher*, vol.24(2), pp. 151–155.
- Hussey, T. and Smith, P. (2002) 'The trouble with learning outcomes' *Active Learning in Higher Education*, vol.3(3), pp. 220–233.
- Jonassen, D. H. (1997) 'Instructional design models for well-structured and ill-structured problem-solving learning outcomes' *ETR&D*, vol.45(1), pp.65–94.
- Lauder, H. (2009) 'On knowledge and work' *Journal of Education and Work*, vol.22(3), pp. 157–162.
- Leney, T., Gordon, J. and Adam, S. (2008) *The shift to learning outcomes: policies and practices across Europe*. Thessaloniki, European Centre for the Development of Vocational Training.
- Mager, R. (1962) *Preparing instructional objectives*. Belmont, David Lake Publishers.

Mandl, H., Gruber, H. and Renk, A. (1996) 'Communities of practice towards expertise: social foundation of university instruction' in P. B. Baltes and U. M. Staudinger (eds.) *Interactive mind. Life-span perspectives on the social foundation of cognition*. Cambridge, Cambridge University Press. pp. 394-411.

Putnam, R. T. and Broko, H. (2000) 'What do new views of knowledge and thinking have to say about research on teacher learning?' *Educational Researcher*, vol.29(1), pp. 4-15.

Raffe, D. (2009) 'The Action Plan, Scotland and the Making of the Modern Educational World: The First Quarter Century' *Scottish Educational Review*, vol.41(1), pp. 22-35.

Sartori, G. (ed.) (1984) *Social science concepts: a systematic analysis*. London, Sage.

Shuel, T. J. (1986) 'Cognitive conceptions of learning' *Review of Educational Research*, vol.56(4), pp. 411-436.

Souto-Otero, M. (2010) 'Education, meritocracy and redistribution' *Journal of Education Policy*, vol.25(3), pp. 397-413.

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

Young, M. (2011) 'National Vocational Qualifications in the United Kingdom: their origins and legacy' *Journal of Education and Work*, vol.24(3-4), pp. 259-282.

- (2008) *Bringing knowledge back in: from social constructivism to social realism in the sociology of education*. London, Routledge.

Young, M. and Allais, S. (2011) 'The shift to outcomes based frameworks: key problems from a critical perspective' *Austrian Open Access Journal of Adult Education*, vol.14.

Zimmerman, B. J. (1990) 'Self-regulated learning and academic achievement: an overview' *Educational Psychologist*, vol.25(1), pp. 3-17.