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Evaluating learning outcomes: in search of lost knowledge

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This paper examines the concept, pervasive policy and practice of learning outcomes, as increasingly adopted and officially supported in third-level educational institutions. It begins by outlining the context and development of learning outcomes from European and Irish educational policy perspectives. We go on to explore how learning outcomes present and legitimate new knowledge forms through a particular ideological construction. The main theoretical insights that appear to inform the epistemic and pedagogical rationale for learning outcomes are critiqued, revealing hidden assumptions behind their conception, organisation and delivery. Managerialism is shown to act as a significant technology of governance in the ensuing process of cultural change. An authoritative presentation of knowledge remains central to this reconstruction of educational culture, though this is challenged by experiences of third-level teaching and learning. Specifically, critical discussion draws attention to significant gaps in knowledge domain, learning and teaching quality. Engagement with teacher colleagues, and experiences of working with third-level learners, provide a concrete object of study in which to ground our analysis. It is hoped that the theoretical and empirical insights presented will help frame and contest, within a European-wide perspective, current ideological debates on learning outcomes in education. In particular, we wish to highlight what appears to be the central paradox of learning outcomes – the pervasive presence of what we call 'lost knowledge', that is to say, significant epistemological and pedagogical insights that remain hidden and inarticulate in the learning outcomes paradigm. In finding a value and place for such 'lost knowledge', the validity of this paradigm is seriously questioned.

Keywords: learning outcomes; ideological construction; managerialism; authoritative knowledge; lost knowledge

Learning outcomes: context and development

Learning outcomes, as defined by the April 2009 Bologna Process Report, are: 'statements of what the learner will know, understand and be able to demonstrate after completion of a programme of learning (or individual subject/course)' (Rauhvargers, Deane, and Pauwel 2009, 81). According to Bairbre Redmond (2007), one of Ireland's five 'Bologna Experts' appointed by the European Commission, learning outcomes describe an action or outcome which is demonstrable and assessable. In particular, they identify the skills and knowledge a learner can prove to have acquired after successfully completing a learning programme. Such skills include the learner's skills in knowledge and understanding, problem solving, transferable or professional skills (e.g. interviewing), as well as generic skills (e.g.

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teamwork). They are 'officially' thought to benefit both students and teachers alike – signalling to students what is expected of them, while supporting the successful completion of their studies; and aiding teachers in focusing on what they require students to achieve, in terms of knowledge and skills. In addition, learning outcomes are said to benefit employers, proffering them a skills profile of the general knowledge and understanding that graduates attain. Learning outcomes are classified in accordance with Benjamin Bloom's taxonomy (Bloom et al. 1956), specifically his six categories of learning: knowledge, comprehension, application, analysis, synthesis and evaluation. This classification functions as generic criteria for assessment, quantifying levels of students' attainment.

The paradigmatic shift towards outcome-based learning at European and Irish policy levels began in earnest in June 1999, when 30 Ministers of Education met to discuss the future of higher education. This culminated in the production of a document entitled, *The European Higher Education Area*, popularly referred to as The Bologna Declaration. This was a declaration of intent to promote co-operation among member states with respect to quality assurance measures, degree programmes and systems of credits. The drive towards homologation was termed the 'Bologna Process', inspired by the plan to establish a central authority for third-level education, the European Higher Education Authority (EHEA). The Process set in motion a reform of higher education which was negotiated at various ministerial meetings in Prague (2001), Berlin (2003), Bergen (2005), London (2007) and recently Leuven (2009). Here, signatory states set out to design a framework of comparable qualifications for higher education at the national level; one that would serve to frame qualifications in relation to a common system of learning outcomes. The Bergen Conference (2005) initiated the will to develop a European framework of qualifications for the European Higher Education Area and expressed a commitment to elaborate national frameworks of qualifications compatible with a European framework by 2010. Central to this vision was the facilitation of student and worker mobility across Europe (*for Europeans*). This overall objective was to be achieved by agreeing criteria for awarding graduate and post-graduate qualifications, and attempting to simplify the presentation of information about degree programmes.

The follow-up working group to the Ministerial Conference in London (2007) stated that the two main aspects of the Bologna Process were: a focus on learners and a focus on learning outcomes. Yet, by that date, it was noted that learning outcomes had not been endorsed by the signatories, although the working group drafting the document felt that their implementation was 'a precondition for achieving many of the goals of the Bologna Process by 2010' (Stocktaking Report 2007, 3). Specifically, learning outcomes were highlighted as central to the objectives of National Qualifications Frameworks (NQFs), systems for credit transfer and accumulation, recognition of prior learning and the establishment of quality assurance measures. With respect to NQFs, it transpired that only seven countries had one in place, 17 a proposal for one, 23 a development process but no proposal, and only one signatory that had not even started work on establishing an NQF (Stocktaking Report 2007, 16). The Background Paper for the Leuven Ministerial Conference reinforced the view that learning outcomes were of strategic importance for the Bologna Process (Background Paper 2009, 16–7). The role of the learning outcomes' *methodology* (described simply as 'knowledge, skills and competencies descriptors') was noted as underpinning the architecture of the Process (Background Paper 2009, 16–7).

The Paper indicates that generic descriptors had been defined, agreed, and developed by many signatories, while it was acknowledged that subject-specific knowledge descriptors still needed development. Further, it was claimed that the success of the Bologna Process depends on the comprehensive implementation of a learning outcomes approach in higher education, since their added value consists in making transparency and recognition of qualifications more easily manageable. Moreover,

...learning outcomes encapsulate a learner-centred approach and shift the focus in higher education away from the traditional teacher-centred or institution-centred perspective. (Background Paper 2009, 16–7)

In 2009, a report from working groups appointed by the Bologna follow-up group to the Ministerial Conference in Leuven (2009) noted that: ‘a fully-fledged introduction of a learning outcomes-based culture across the European Higher Education Area still needs a lot of effort, and it will not be completed by 2010’ (Rauhvargers, Deane, and Pauwel 2009, 57). Indeed, only six of the 46 signatory countries had completed their NFQ self-certification within the guidelines set. Furthermore, the Report confirmed that the lack of integration at national level between the qualifications framework, learning outcomes and European Credit Transfer System (ECTS) was still a problem. In fewer than half the signatories to the Bologna Process were some Higher Education Institutions (HEIs) working towards making the link between credits and learning outcomes (Rauhvargers, Deane, and Pauwel 2009, 80–1). One explanation given was confusion between learning outcomes and objectives:

The 2009 national reports demonstrate that learning outcomes are often confused with overall programme goals which are not measurable and therefore cannot be used in student assessment. (Rauhvargers, Deane, and Pauwel 2009, 13)

Specifically, confusion between learning outcomes and learning objectives was proffered as the possible reason why there was slow progress among national HEIs in framing programmes using learning outcomes. If this is so, it suggests that there is a lack of agreement on the implementation of learning outcomes themselves, since at national level, learning objectives have always served to define courses in higher education. Indeed, the Qualifications Frameworks Coordination Group responsible for drafting the 2009 Report harboured the suspicion that: ‘Higher Education Institutions may indeed learn how to provide a technically correct formal description of learning outcomes without actually implementing them in practice’ (Rauhvargers, Deane, and Pauwel 2009, 57).

Ireland was one of the original signatories of the Bologna Declaration and the first to verify its NFQ’s compatibility with the recommendations of the Bologna Framework Working Group in Berlin (2003). Following the establishment of the Institute of Technology Act (2006), Institutes of Technology (ITs) came under the authoritative control of the Higher Education Authority (HEA) and remain subject to the same change forces as so-called ‘traditional’ universities. Ireland has been continually working towards: instituting NFQs; establishing a legal basis for the Irish Universities Quality Board; completing peer reviews; and developing the role of the Higher Education and Training Awards Council (HETAC). However, encouraging

and deepening change at institutional level remains a challenge, both in Ireland and Europe (Stocktaking Report 2007, 67). Learning outcomes remain key to this challenge. In Ireland, the move towards adopting learning outcomes in higher education is driven by the National Qualifications Authority of Ireland (NQAI), set up in 2001 to establish a national qualifications policy and promote coherence, comparability and transparency across educational provision. Its Framework defines an award as: 'a recognition of learning outcomes, not of participation in a programme or in any particular learning process' (Murray 2006, 5). Framework outcomes are currently being adopted but so far only in some module descriptors for major awards by Irish universities. Since 2006 the National Qualifications Authority of Ireland and the Registrars of the Irish universities have agreed a policy to complete the implementation of the National Framework of Qualifications.

Official literature and policy developments continue to address the implementation of learning outcomes. As we argue in this paper, however, the learning outcomes approach is being advanced without due regard for its epistemological and pedagogical validity. We contend that there is a gap between the theoretical validity and application of learning outcomes, between their *conceptual* origins and intended *action*. We argue that there is a need to revisit the concept of learning outcomes in order to renew it, from epistemological and pedagogical perspectives, in a climate of new orthodoxy in which organisations are seen to reflect more critically on their specific *learning* purpose.

Learning outcomes: ideological construction of knowledge

When setting objectives for education and training and in order to describe and define qualifications, as demonstrated above, European countries refer to learning outcomes. The adoption of a European-wide policy of establishing national qualifications based on learning outcomes has been given high status, alongside a shift towards lifelong learning strategies that place research and teaching practice at the forefront of change and new thinking. The expectations placed on learning outcomes are very high, but how are they conceived? Their role in education is crucial. Not only have they become part of the policy-making of education today, the technical vehicle for communicating evolving conceptual frameworks, but they also set the agenda in the classroom and lecture theatre. We can single out two key powerful functions: *defining* (in terms of documenting what a learner should know, understand, and be able to do) and *legislating* (in terms of a quasi-legal contract between manager and teacher, and learner and teacher). Learning outcomes thus form part of a new paradigm of learning and are central to specific pedagogical, curriculum and assessment, and quality assurance arrangements. What a learner 'knows' and is expected to learn to 'do' by the end of a course (the teacher–learner 'contract') pivots on learning outcome practice. Given this core epistemic and pedagogical position, it is important to look at learning outcomes critically.

According to a recent study by the European Centre for the Development of Vocational Training (CEDEFOP 2008, 9), 'learning outcomes are best understood as a collection of useful processes and tools that can be applied in diverse ways in different policy, teaching and learning settings'. Within a European Qualifications Framework setting, this translates to learning outcomes being viewed 'as a statement of what a learner knows, understands and is able to do on completion of a learning process'

(European Commission 2007, 15). Those engaged in the design and application of learning outcomes follow a similar definition (e.g. Gosling and Moon 2001; Donnelly and Fitzmaurice 2005). This paradigm shift presupposes, as we argue below, not only a *selection process* of knowledge, but also a choice of how we envisage teaching it. In this base/superstructure model, learning outcomes are the decisive control and power mechanism: the tool for describing and prescribing expected learning; informing learners and evaluating them; tangibly acting as a key means for setting curriculum and assessment policy, as well as teaching and learning arrangements.

The 2008 CEDEFOP study is itself critical of a number of aspects of learning outcomes as applied in education. This critique is based on empirical evidence from a comparative survey of pedagogical practice in 32 European countries taking part in the Education and Training 2010 Programme. Results signal a need for discretion in considering the variety of contexts and multiple functions in which learning objectives are applied, such as: recognition of prior learning; quality; learning plans; key competences for life; validation for employers and an ongoing willingness to adjust to education as a lifelong learning process. This means, for instance, taking into account the diversity of students, including increasing numbers of mature students in mainstream education channels, their prior experiences and challenges. Interestingly, this new thinking gives more importance to valuing experiential forms of learning, rather than listing and defining the content of courses which characterise the learning outcomes matrix. Furthermore, the survey highlights a pattern of confusion in several countries between the terms ‘competence’ and ‘learning outcomes’. It emerges that while policy-makers in Europe are adopting the learning outcomes approach in their official documents, these are not being applied and are poorly understood. Moreover, in higher education their use is limited and not holistic (CEDEFOP 2008, 19). In general education, learning outcomes are being promoted to ‘modernise’ European schools by advocating a more learner-centred approach to education. In vocational training and education, they incorporate transferable skills, technical skills and ones for unpredictable careers. In post-compulsory general education, the system is still restrictive and selective and averse to a learner-centred approach, since it mainly functions on the basis of summative assessment. Finally, in higher education, the evidence is that, despite agreement at European policy level, learning outcomes are being adopted more slowly. This situation, which can be likened to what the report calls ‘a slow burning fuse’ (CEDEFOP 2008, 32), suggests that the vision behind adopting the learning outcomes methodology is being curtailed by transmission teaching practice. If third-level institutions have lagged behind compulsory education in focusing upon learner-centred approaches, a commonly known explanation may be given – pedagogical concerns are being subjugated by systemic priorities. Thus, third-level institutions continue to be rewarded with funding for their research, not their learner-centred innovations; large classes prevail, impeding a qualitative focus on learning; and professional development opportunities largely relegate pedagogical skills to a lower status position.

The main theoretical insights that appear to inform the epistemic and pedagogical rationale for learning outcomes reside in *explicit* reference to Benjamin Bloom’s taxonomy (Bloom et al. 1956) and *implicit* reference to the principles of functional analysis. The former considers learner progression from mnemonic learning to comprehension, application, analysis, synthesis and evaluation. In this model, cognitive skills progression emerges through stages – from attention to

participation, from valuing to organising and ultimately internalising knowledge. Functional analysis, 'borrowed' from technical vocational principles, claims to be empirical, abstracting from a learning-needs analysis a curriculum construct with matching outcomes. In addition to Bloom's cognitive study, there have been attempts to include affective (e.g. Bloom, Masia, and Krathwohl 1964) and psychomotor (e.g. Dawson 1998) taxonomies. Modelled on such taxonomy links, learning outcomes are thought to lead to the development and coordination of core transparent skills. This appears logical, but such an ambition belies the complex difficulty involved in connecting learning *descriptions* (often presented in abstract terms) and learning *behaviour*. Considerable difficulty also arises from an inadequate treatment of learning as a discipline in itself. To illustrate, recent constructivist developments in active learning and learner-centred approaches (e.g. the work of David Ausubel; David Perkins) appear ill-considered. The importance attached to socio-cultural insights, particularly situated knowledge and the value of working with others in shared learning communities of practice (e.g. the work of Lev Semenovitch Vygotsky; Ann Brown), is largely unrecognised. Likewise, functional analysis, as applied to education, ignores the important lessons of humanist approaches to learning and runs directly counter to critical/transformational perspectives (e.g. the work of Carl Rogers; Paulo Freire). Crucially, then, the theoretical foundations of a learning outcomes approach fail to adequately consider key 'learning to learn' lessons; in essence, this failure centres on an insubstantial critique of the learning question itself, i.e. 'what it is and how it works' (O'Brien 2006). These two areas (the *what?* and the *how?*) cannot be separated as demonstrated, for example, by Vygotsky's concept of the zone of proximal development (ZPD) which encapsulates the close inter-relationship between learner, teacher and knowledge acquisition (Vygotsky 1978). In such a spatial concept or field, there is a face-to-face dynamic (which nowadays may also occur on-line, in blended or distance learning) in which several bodies of knowledge come into play: the content itself, at the centre of the interaction; its two-way communication and/or construction; the methodological criteria; and the personal, social, lifeworld outlooks of tutor and student. Learning outcomes do not adequately engage with such deeper learning insights. The 2008 CEDEFOP study, we feel, may intuitively (though *not* explicitly) recognise such inherent theoretical limitations. In practice, the *what* and the *how* of learning continue to be overlooked. Moreover, systemic re-thinking, over theoretical re-construction, appears paramount.

Learning outcomes, as conceived, utilised and officially supported at third-level educational institutions, remain under-developed. Specifically, how knowledge is conceptualised, described, given meaning and value, and ultimately enacted, remains obscure. O'Sullivan (2005) reminds us of the crucial importance of recognising *policy paradigms* as socio-cultural frameworks that govern policy process. In terms of learning outcomes, policy paradigms mediate the conception, organisation and delivery of a particular educational response. In effect, they can set boundaries to the possibilities of intervention in conjunction with prevailing cultural and social norms. If presented in a sufficiently inflexible, positivist manner, learning outcomes can limit serious question or challenge. In effect, they can describe 'normality', 'common sense' – 'their rhetorical dimension being a necessary feature of theoretical formulation, intended to influence public discussion and policy-making' (Strain and Field 1997, 141). Moreover, from a governance perspective, learning outcomes

reveal an exercise of 'reason' that disciplines and produces the principles that legitimate transparent, higher status knowledge forms (Popkewitz and Lindblad 2000). Presiding over this governance perspective are those charged with their state of *becoming*, their ultimate enactment within the system. Thus, underpinning the dominant discourse of learning outcomes are governance structures, a bedrock of self-regulating epistemes or seeds of language. In problematising the structures of education, Michel Foucault (1997) has been particularly insightful in identifying the self-justification of the system, what he refers to as a 'will to truth'. Legitimation (what counts as 'true') relies on institutional support: education, publishing, libraries, learned societies, scientific laboratories. Foucault's legacy is to consider the question of what type of knowledge is constructed, applied, exploited and fragmented in society. For him, there is but an apparent gap between empirical (or non-formal) knowledge and that which appears at the conceptual level, since the former is organised by a system and 'obeys the laws of a certain code' (Foucault 1997). This insight enables us to scrutinise *applied* forms of knowledge in critical conceptual terms. For the purpose of engaging learning outcome discourse, then, it is vital to develop such a critical investigative approach (what Foucault calls 'archaeology').

Increasingly, knowledge is discussed in terms of efficiency, how we exploit it, measure it, claim ownership over it, test it for inadequacies (as if it were ever adequate); in short, in terms of means production, by conceiving it primarily as a product of exchange value. Managerialism (Clarke and Newman 1997) acts as a significant technology of governance that not only legitimates such knowledge construction, but also energises it in the process of cultural change.¹ Educational change presides over a pervasive regulatory system that embodies structural arrangements evident in, for example: funding arrangements; accountability mechanisms; legislated agreements on teachers' working conditions; and 'official' administrative and pedagogical practices. Such regulation can be seen as a process of 'deregulation', where individual institutions are engaged in delivering a centrally planned programme of reform. 'Re-regulation' (Robertson 1999) occurs when the institution (particularly professional groups therein) reorientate practices and begin to operate within a system of 'self-organising networks' (Rose 1999). We may look here to the burgeoning influence of quality assurance, teaching and learning, and staff development units in higher education. As a structural process, managerialism consists of a body of practical knowledge that imposes a new technical-rational culture upon institutions which shapes patterns of power and relationships within the organisation through its commitment to productive 'efficiency'. From functional analysis, and more particularly Taylorist principles, 'the right to manage' is upheld.² These control mechanisms may be subtle, since power can be made invisible 'by incorporating it into the very structure of the work itself' (Apple 1982, 251). In addition to structural regulation, managerialism characterises an ideological enterprise aimed at conceiving, meaning-making, legitimating and delivering desired states of change. Thus, 'unseen' practices in the classroom/lecture hall, in addition to teachers' working routines, may be governed, leading to a reshaping of knowledge, skill and procedures employed in the learning process. This is made all the more 'real', while direct channels of communication between teacher-managers and teachers become more entrenched and individualised (Clarke and Newman 1997, 72). Consequently, teachers are increasingly obliged to rethink their practice in line

with managerial objectives and demands and may become compelled to compete for new reward systems. Such dispersal of 'managerial consciousness' (Clarke and Newman 1997) might lead to a reconstruction of workers' personal/professional identity. Perhaps the greatest expression of this power is the alignment of teacher identity with new consumer demands. Significantly, the manner in which teachers regulate their consumer 'self' is also construed in terms of how they relate to each other (du Gay 1996).

The introduction of learning outcomes exemplifies the implementation of such structural and ideological regulatory systems. Their authoritative position promotes the belief that learning is unambiguous, capable of capture in descriptors (even specific action verbs). *Prior* to the learning process itself (thereby, disregarding enactment), learning outcomes are assumed to provide clarity in terms of expectations. The learning act is assumed to occur via the accretion of small ordered steps – proffering hope of 'a correspondence between the bigger more complex picture and the aggregation of these finite steps' (Long 2008, 125). Further, learning outcomes are not only assumed to exhibit *effectiveness* in terms of knowledge production, but are presented as a key means of *improving* learning institutions. There is real danger here that learning outcomes become elevated to the point where they serve as fundamental criteria for determining institutional measures of effectiveness. The assumption that such criteria can be readily identified, in turn, presupposes that knowledge can be objectified, narrowly measured and transferred in line with what Ball (1998, 74) calls 'the commodification of education'. Moreover, the assumption that 'all learning outcomes should be assessable' (Moon 2002, 75) depicts learning evaluation as a 'testing bed' for desired learning outcomes. Such assumptions raise fundamental questions about the nature of knowledge and the role of education. One can legitimately ask if there exists an identifiable *a priori* body of scientific knowledge to be 'received' by learners. Further, it is legitimate to question whether, as highlighted earlier in the paper, there is sufficient engagement with learning methodologies – to question, for example, whether teachers' primary function is to deliver 'technical knowledge'. By definition, this type of knowledge ranges 'between an identifiable point [...] and an identifiable terminal point, where it is complete' (Oakshott 1967, 11). One may ask if this is tantamount to what Freire (1996) termed the 'banking concept of education'. One may also enquire if, indeed, knowledge outcomes are best represented as measures of intellectual attainment through acquisition of predefined learning objectives. Finally, one may enquire if teachers are experiencing challenges with learning outcome practice and whether aspects of their identity are being shaped by demands to engage with 'decontextualised knowledge' (Wells 1998; Meadows 1998). Given that teachers, in terms of who they are and what they do, are central to any proposed reconstruction of educational culture, this would appear to be an important source of enquiry.

In light of this contemporary authoritative knowledge construction, one struggles to 'find a place' for the lessons of post-structuralism/postmodernism. In the wake of this movement, Lyotard (1979) challenged the very notion of 'truth', circumscribing its validity. The 'grand narratives' or 'meta-narratives', the story of progression (or teleology), of Christianity, Marxism or history were seen as false conceptual frameworks. For Lyotard, the problem with them was the gap between the object of representation (what we call 'reality') and its representation (in art, history, science), between the world and our inadequate judgements of it. Lyotard was the

spokesperson of a post-structuralist, anti-universalist, anti-metaphysical turn in philosophy that extended to the arts. Postmodernism is considered, not by all, to be very fruitful for what it produced in terms of: critical theory; thinking difference (including, 'the Other'); post-colonialism; and a politics of particularity (including particular social identities) in opposition to universality. Thirty years on, this philosophical outlook has found an audience, produced a set of discursive practices, and is generally viewed as epistemologically valid or 'scientific'. In those intervening years, however, its development and its inconsistencies are largely relegated to history. In Foucauldian terms, its historical account is reduced to an 'archive', where the formation and transformation of ideas, and the multiplicity of statements, are all situated within one body of knowledge bordered by time (Foucault 1969, 147). It would be superficial to argue, as some do, that postmodernism has simply gone out of fashion (López and Potter 2001). Not all positive lessons may be lost,³ though the degree to which these are genuinely understood and put into practice, particularly within an educational context, remains in serious doubt. What is important here is that postmodernism's emphasis on the subjective, contextualised, multiplicitous, undecided nature of knowledge appears lost in the authoritative presentation of learning outcomes.

We may point also to the less positive lessons of postmodernism because they too appear lost in the authoritative presentation of learning outcomes. To illustrate, Terry Eagleton (2003) draws attention to postmodernism's own unconfessed grand narrative. 'At a time when postmodern thought has grave thoughts about truth and reality', he writes, we are now forced to reflect on the reality of our existence in the wake of the destructive reaction to 'the grand narrative of capitalist globalisation' (Eagleton 2003, 73). We have, he adds, 'become used to living with the loss of absolute value' (2003, 73). This postmodern ambiguity, indeed indifference, finds correspondence in Zygmunt Bauman's (2007) concept of 'liquid modernity' while Martin Jay (1993) warns of a society without an ethos or historical bearing. Thirty years on from Lyotard's (1979) *The Postmodern Condition*, contemporary philosophers such as Alain Badiou, Slavoj Žižek and Ernesto Laclau, have returned to speculate about history, the event, reality, and the politics of truth. They are leading the intellectual community beyond postmodernism, by re-thinking truth and representing emancipation as part of political thought with consequences for all areas of knowledge, including education and research. In particular, they are placing emancipation versus marketisation firmly back on the educational agenda, while at the same time benefiting from the critical lessons of postmodernism. Thus, emancipatory education, not of a 'redemptionist' nature (O'Sullivan 2008), may continue to have legitimate, ethical, epistemic functions. These emerge through conviction, a desire and will to escape 'encyclopedic' knowledge (Badiou 2004) or the status quo in terms of 'what we know now'. While it may be argued that postmodernism has become a grand narrative itself, this critique 'from within' re-presents, in a Gramscian or Laclauian sense, a counter-hegemonic force.

Thus, at two critical levels, the authoritative presentation of learning outcomes appears blind to these essential postmodern lessons. Firstly, while postmodernism is characterised (from the movement's foundation) by rational insecurity and scientific uncertainty, learning outcomes remain organised around scientific norms of truth. This approach lends itself to the direction of regulatory, marketised conduct, thus revealing an unconfessed grand narrative – the steering power of managerialism.

Secondly, as noted above, evolved postmodern insights proffer the opportunity to question established knowledge truths 'from within' – this represents a type of homeopathic evaluation. The authoritative presentation of learning outcomes, by definition, precludes such critique and cannot readily free itself from its own claims. In this way, it lacks an emancipatory quality – a desire and will to escape the status quo of 'what we know now'. Accordingly, 'a counterfeit type of knowledge is rewarded at the expense of genuine complexity' (Long 2008, 124). Managerialism, and the 'right to manage', is upheld.

Lost knowledge

Learning outcomes, managerially constructed, thus present and legitimate 'new' knowledge forms. As valued and applied in education, knowledge production constitutes at least two discursive fields: the content and study of subject-specific disciplines; and the meta-language of teaching and learning. These discursive fields are governed by a set of unspoken rules that come into use even in day-to-day experience. Such rules inhabit and shape our 'lifeworld', the inter-subjective space into which other 'provinces of meaning', each with its own cognitive style, come to fruition (Schutz 1974, 3). In the lifeworld, we use what Schutz calls 'routine', 'recipe' or habitual knowledge. Although routine knowledge relies to some degree on predictions and hypotheses, it is, by its very nature and conditions, characterised by action, not reflection. The busyness of delivering courses, teaching expanded contact hours to a greater diversity of classes, are situations in which, inevitably, critical reflection and analysis contend with routine and recipes for success. Accordingly, significant *epistemological* insights (such as those highlighted in the last section) remain hidden, obscure, in tacit daily conventions. We refer to this phenomenon as 'lost knowledge'. This concept extends to pedagogical conduct. In what follows, we highlight three key areas where learning outcomes obscure in terms of *pedagogical* substance and where a value and place may, yet again, be sought for 'lost knowledge' therein. Specifically, we examine the critical impact of learning outcomes on knowledge domain, learning and teaching quality. In view of such epistemic and pedagogical critique, the validity of learning outcomes is seriously questioned.

Knowledge domain

There are those for whom the very idea of a knowledge domain (or 'body of knowledge') is questionable. There may be no such thing, perhaps only critical debate. Certainly, the curriculum, as a body of knowledge, is characterised by constant change. As a sociological, acculturated construct, the curriculum mirrors and produces approved 'scientific' norms and perspectives at any historical juncture. In extraordinary circumstances, accepted norms and perspectives are disrupted – leading to redirection, renewal. To illustrate, we may look to the scientific revolutions and the recent advance of thermodynamics and quantum mechanics; or to economics, where chaos theory continues to perturb classical foundations; or to broader paradigm shifts, such as post-structuralism, that enable new ways of constructing and deconstructing knowledge. In ordinary circumstances, we may also look to the lowliest encounters to reveal, as Aristotle observes, something natural, new and beautiful. This highlights the substance of *ongoing* experiential learning and

the development of theory–practice relationships. Often, such relationships are not made adequately explicit. Learning outcome designs may undervalue such candour and concomitantly (sometimes, unwittingly) promote instrumental and definitive use of theory, as well as indiscriminate application of hidden assumptions. Further to the implicit assumptions embedded in bodies of knowledge, there is often a temporal-boundedness to their substance, i.e. ‘a beginning and end point’ that is phrased as ‘clarity of expectation’, ‘universal transparency’, ‘assessable outcomes’. This belies the ‘messy’ fact that knowledge cannot readily be ‘captured’ and is in a state of constant construction/reconstruction.⁴

To illustrate, experience shows that, as a body of knowledge is taught over time, understanding evolves for both teacher and learner. This indicates the personal, co-constructed, mutable, undecided, and situated nature of knowledge. The *personal* is demonstrated, for example, by individual biographies, interests and levels of motivation; distinctive teacher–learner engagement is indicative of the *co-constructed*, socio-cultural nature of knowledge; the *mutable* character is demonstrated by constant updating of facts and levels of understanding; the *undecided* quality is demonstrated by the reality of diverse, ambiguous outcomes at personal, affective, cognitive, and spiritual dimensions; and the *situated* nature of knowledge is manifest in discrete, contextualised (individual-environment) ways of knowing. The problematic of incorporating bodies of knowledge in curricula has wider implications too for what and how teachers teach. In particular, teachers need to consider the ‘bigger picture’, extending beyond discipline-specific skills. This involves, *inter alia*, making use of theoretical knowledge to develop meta-cognition (a study of the ‘science of science’, to paraphrase Bourdieu), as well as updating and contextualising content. This knowledge standpoint inevitably challenges teachers to abandon implicit academic habits, particularly those pertaining to the alliance of certain content and methodologies with traditional bodies of knowledge. Viewing a body of knowledge more critically thus demands considered thought and planning, particularly in relation to the criteria for knowledge and skill selection. At the very least, this behoves teachers (and learners) to question if transferable skills are to be considered paramount.

Learning quality

A technical model of teaching and learning promotes atomistic and mechanistic meanings of knowledge. Technical ‘know-how’ is epitomised by the possession of ‘transferable’ skills, espoused by learning outcome objectives. In line with Bloom’s taxonomy logic, such skills exhibit different gradation levels; in line with principles of functional analysis, such skills are stage-constructed in curricular form with matching learning outcomes. The more the knowledge domain becomes atomised (progressively by means of modularisation), the more the divide between *skills* and *enquiry* is likely to increase. Thus, in ‘official’ curricula, ‘problem-solving’ is increasingly sublimated over ‘critical engagement’, demonstrating favour for more instrumental, ‘can do’ forms of knowledge. Certainly, many ‘action verbs’ associated with learning outcomes exhibit such bias. There may be nothing wrong, *per se*, with encouraging instrumental, ‘can do’ forms of knowledge, but it is legitimate to question the extent to which critical and conceptual ways of ‘coming to know’ are also valued and promoted. Moreover, it is legitimate to question whether the former can ever be realised without the latter. Such methodological enquiry goes

unanswered, however, as learning outcome approaches preoccupy with achievement and what students ought to demonstrate upon completion of a learning activity. These approaches 'officially' claim to promote student-centred learning. Yet such a claim is predicated on managerialist understandings of student-centred learning, centring on 'transparency' of learning content, skills, expectations and product.⁵ Little attention is afforded to, what Wells and Claxton (2002) call, 'epistemic mentality' (how to think like a learner) and 'epistemic identity' (how to act like one). Both appear central to any professed student-centred approach to learning. In particular, conceptual and critical skills, and personal/learner identity development, remain key aspects of student learning. Yet, they are largely excluded by *a priori* attention to template formats that do not include such teaching and learning criteria and tend to be goal-orientated and quantitatively appraised. Moreover, diversity, including students' different ways of 'coming to know', is dismissed by (oft cited as 'equal') universal learner management.

Finding out what kind of learners and people students are is often restricted by this rigidity. A more holistic learning vision attempts to redress this concern, bringing students' prior experiences and knowledge to bear on contemporary learning practices. Knowledge is viewed in terms of its dialectic construction and formal education as a shared medium or co-constructed act. Emphasis here is on the performative value of education – a 'lived' process that is not, and could never be, predetermined. Further, knowledge is only *partly* represented by measures of intellectual attainment in tests and examinations. Formal assessment (grounded in learning outcome objectives) could never capture the myriad of teaching and learning moments a student experiences. Consequently, belying their student-centred image, learning outcomes can, in reality, disempower learners. Furthermore, in fulfilling learning outcome requirements, students risk losing the essential learning characteristic of third-level education – criticality. This skill may be enhanced precisely by *not* spelling everything out in course documents and requirements.⁶ Such a holistic model is at dissonance with a new paradigm of learning that locates outcome approaches at the heart of its epistemic and pedagogical purpose. Being aware of this discord, and searching for possible resolutions, remain essential teacher functions.

Teaching quality

The complexity of universities as loosely-coupled organisations belies the simple technical-rational image promoted by the authoritative use of learning outcomes. The act of teaching as a 'notoriously elusive' craft (Jackson 1968) is likewise not consistent with the projected image of a professional set of engineering or technical skills. Further, measures of teacher effectiveness are, in reality, messy and significantly engage the teaching performance itself, not just its construct or perceived (consumerist) product. To improve the quality of teaching, then, requires a move beyond the promotion and attainment of learning outcomes, but for this to happen it will be necessary to overcome narrow, technical definitions of teaching that conceal more than they reveal, in terms of epistemological and pedagogical substance. In essence, this viewpoint acknowledges the reality of other teacher qualities that hitherto appear as 'lost knowledge'.

Whilst learning outcomes ‘officially’ promote student-centred over and above teacher-centred approaches (as discussed above), the latter appear more manifest. In practice, teachers ‘officially’ set the learning agenda, determining knowledge content, objectives and outcomes. Students’ role in their own learning is limited to accessing ‘transparent’ information on: ‘what gets covered’; ‘what is expected of them’; ‘how they will be assessed’; and ‘how they can transfer learned skills’. Power is thus invested in students’ exchange value of knowledge, without regard for the dynamics and quality of their learning experience. Indeed, despite exercising ‘official’ power in setting the learning agenda, teachers too have limited opportunity for qualitative development. In particular, teachers’ critical engagement with learning purpose and design, including their capacity to challenge and resist new learning directions, appears constrained. This may seriously affect personal/professional identity. As educators are increasingly being pressurised to conform to managerialist imperatives of professionalism, alternative perspectives appear ‘lost’. For Stuart Hall (1992), educators, as public intellectuals, have the political and ethical imperative to understand and transform consensus practices. Their learning purpose is to see prevailing situations as contingent, not inevitable; as organised, not natural; as concealed, not apparent; as reversible, not stagnant. In essence, public intellectuals are concerned with critiquing canonical ideas and *their* own role as ‘authoritative’ experts. Facilitating critical independent thought amongst students demands teachers’ personal and professional commitment to same. Thus, criticality amongst teachers may likewise be enhanced precisely by *not* fulfilling learning outcome requirements. Indeed, to avoid such commitment may lead to ‘deskilling’.⁷

A point of departure in the journey towards criticality may be willingness to name and question established beliefs that govern the ‘will to truth’. This means taking risks; destabilising accepted beliefs; exposing them to critique; and constructing new arrangements. Learning outcomes, for example, attempt to make the student experience ‘teacher proof’. The curriculum is designed in advance of learning; educators apply this design and are evaluated by the product of their actions. This accountability measure is often a demand for justification, a means of regulating practice. Many interest groups (not least students) expect teachers to deliver on this model. In response, teachers need to be confidently equipped (‘reskilled’) in their own critical capacity. Thus, belying consumerist pressures, it may *not* be appropriate to: ‘teach as expected’; ‘follow predefined objectives’; and ‘give students what they want’. Resistance here is based on informed action, the ability to reflect and act upon *other ways* of viewing knowledge, learning, professional identity and accountability. Bourdieu’s concept of ‘habitus’ is helpful in this regard. In essence, the habitus concept serves to explain how social and cultural messages (both actual and symbolic) shape individuals’ thoughts and actions. Thus, teachers’ own ‘durable, transposable dispositions’ (Bourdieu 1977, 72) form a body of knowledge, indicative of their approach to education and the world.⁸ Habitus is not a static concept, since it allows for individuals to mediate these messages, even to the point of resisting embodied beliefs. This is, however, difficult to achieve. In the wake of intense managerialist change and pragmatic discourse, teachers are increasingly compelled to adapt to the facts of ‘reality’. Nevertheless, as this paper has argued, ‘reality’ may conceal more than it reveals and teachers’ critical capacity can begin to expose illusory knowledge claims.

Conclusion

This paper has engaged with turning theory on itself (O'Sullivan 2008) – specifically, by evaluating the learning outcome movement in terms of its own substantial claims (including its 'product'). At epistemological and pedagogical levels, its validity is seriously questioned, thus belying its authoritative position. The emergent presence of 'lost knowledge' challenges all those in education to search for creative alternatives and question managerialist orthodoxy. *Inter alia*, educators are challenged to: go beyond unquestioned givens of daily routines; consider the key role educational institutions play in expressing values and beliefs; articulate criticality through choice of discourse, pedagogical approach, knowledge selection; and elaborate criteria based on a range of assessment types. There are challenges too for institutions. We ask: are institutions prepared to question their *learning* purpose – in particular, their role in mirroring and transmitting instrumental knowledge? Specifically, are those individuals representing the institution, including those invested in the outcome-based paradigm, willing to address discontinuities, ruptures, omissions, internal contradictions, overlaps – in short, 'lost knowledge' – pervasive in learning outcomes? The absence of well-informed debate amongst educationalists and policy-makers is matched by the absence of a well-informed public understanding of education. Learning outcomes are being increasingly normalised, shaping students' own views on 'effective' forms of learning. Perhaps the greatest impact of the learning outcomes movement (in terms of its own 'product'), then, is the degree to which a learning society is ever more 'valued'. Such value outcome, in our view, makes the search for 'lost knowledge' all the more pertinent.

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Notes

1. As a concept, managerialism was first developed in relation to the impact of marketisation (notably, Thatcherism) on formal post-primary schooling. We see its relevance extending to third-level education and broader social arenas, particularly health provision.
2. Taylorism remains open to contestation, with post-Taylorists claiming a break from (and rejection of) the past and others supporting a neo-Taylorist interpretation. The former claims new management models that emphasise positive effects on worker skills, autonomy and status relations. The latter argues that the predicted break is no more than superficial change with automated production, fragmentation of tasks and control of workers at its core. We see the learning outcomes approach, in its present form, as closer to this neo-Taylorist position and acknowledge that Taylorism (and the 'right to manage') remains both enduring and resilient (for further discussion see: Pruijt 2000; Lomba 2005).
3. By way of illustration, we point to positive knowledge contributions, such as: the rejection of logocentrism through the practice of deconstructing texts and ensuing undecidability (Derrida); contextualising discourse, 'genealogy', in terms of knowledge and power relations (Foucault); identifying 'catastrophic consumption' and 'the simulacrum', or the destruction of reality at the hands of consumer society (Baudrillard); and highlighting problems with metanarratives, of messianic history, of truth, emancipation, and human agency necessary to produce it, with the introduction of Lyotard's concept of *différend*.

4. Reflecting on this point, we question what happens to learning outcomes once they are written and collated – if, when and how they are to be reviewed. Their ‘fitness of purpose’ is questioned not only in their own right, but also in the context of the overall development of an educational institution.
5. Such ‘transparency’ is epitomised by the common use of the learning outcome phrase, ‘On successful completion of this module, students should be able to . . .’. This phrase dismisses important curriculum theory insights, particularly difference between *planned* and *received* notions of the curriculum.
6. Teachers handing out assessment guidelines to students will be familiar with the kinds of enquiry that centre on such concerns as: ‘what is the right way to argue such a point?’ and ‘what do *you* expect by way of an answer?’. This insight into criticality behoves teachers to look beyond curricular substance and learning outcome objectives to engage in continuous conversations about ‘good learning’.
7. The term ‘deskilling’ is associated with the ‘proletarianization’ concept adapted for education from Marxism. It is specifically used to refer to: the increased division of labour; the separation of conception from the execution of tasks; the proliferation of workload demands; and, despite ‘official’ devolved powers, the reduction of teachers’ autonomy and use of skills in the workplace. It is claimed that the resultant combination of these factors serves to ‘deskill’ teachers’ work, thus rendering teachers *less* professional, not more. For a more extensive treatise of the origins and development of this concept, see: Ozga and Lawn (1981, 1988); Apple and Weis (1983); Apple (1986); Densmore (1987); and Ozga (1987).
8. Freire (1998) refers to this phenomenon as the ‘witness potential’.

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