A perspective on learning outcomes in curriculum and assessment

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Introduction

Learning outcomes have become ubiquitous within worldwide curriculum policy in recent years. This move comes with many potential benefits, as it shifts the focus from providers to users of education, and it introduces a common language, addressing issues of progression, transparency and equity (CEDEFOP, 2009). To a large extent, they continue a long tradition of framing curriculum as aims and objectives. One can trace the genesis of the current fashion for defining learning as outcomes in the objectives movement in the United States (c.f. Bobbitt, Tyler, Bloom etc.), with its roots in Taylorist scientific management, and which became extremely popular in the 1960s. There are also clear lines of descent from the development of competency-based vocational education and training in the UK from the 1980s onwards, through the worldwide extension of this model to national academic qualifications (for example the Scottish, New Zealand and South African qualifications frameworks) in the 1990s (for a fuller account of this, see: Kelly, 2004; Biesta & Priestley, 2013). These developments have introduced a plethora of different – and often confusing and ambiguous – terms and concepts into the arena. They manifest a desire to provide preset definitions of what an educated person might know or do as a result of being educated. For example, according to CEDEFOP (2009), 'learning outcomes can best be defined as statements of what a learner knows, understands and is able to do after completion of learning' (p9). This definition clearly illustrates a distinction between outcomes and their predecessors: the shift towards framing education in terms of learners and their development, rather than in terms of what is to be taught. This is not a new distinction, as discussed by Biesta and Priestley (2013). However, it is one that has been given a renewed force by recent developments such as the publication of competency frameworks by organisations such as the OECD and the European Union, as well as by the emergence in the past few years of new approaches to defining national curricula.

The move to defining education through learning outcomes has not been uncontroversial. Issues and questions have been raised in a number of areas. These include:

- *Philosophical questions* relating, for example, to whether it is ethical in a democracy to predefine what people should learn, and even how they should be. While these issues are important, raising questions as to whether we should even be seeking to define education in this way, I do not have the space to discuss them here. Readers interested in more detailed discussion of them should refer to Kelly (2004), and Biesta and Priestley (2013).
- *Conceptual/definitional* issues relating to how outcomes should be framed and in what level of detail, and how they might relate to other curriculum components.

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- *Enactment/implementation* issues relating to how teachers make sense of educational policy, and how they enact practice on the basis of this. It is useful here to bear in mind a caveat that policy can only ever act as a statement of intent; curricular practices emerge from teachers' understandings of these intentions, mediated by their prior knowledge, and the structural and cultural resources and constraints afforded by their professional contexts.

I come to this discussion as a former teacher of History, with experience of working within competency-based vocational education. My current interest is in the work of teachers as they enact curriculum. I broadly support the general directions set by modern curriculum policy such as Scotland's *Curriculum for Excellence*, which sets out clearly what students should become through their education. I advocate approaches to education that focus on developing the capacity of young people to act within the world, and which are characterised by more dialogical and collaborative pedagogies and continuous approaches to assessment. I also welcome approaches which foster teachers' agency as curriculum developers. I see the move towards learning outcomes as one that potentially brings many benefits in achieving such goals, but it is an approach that is also rife with risks, which need careful consideration as policy is developed. As CEDEFOP (2009, p2) remind us,

> more and more stakeholders warn that the learning outcomes perspective can easily be reduced to mere rhetoric having little effect on education, training and learning practises [sic]. Some go even further stating that uncritical use of the learning outcomes perspective may prove harmful and represent a distraction.

The following sections will outline some of these issues in greater detail.

Issues relating to learning outcomes

While learning outcomes have been developed to bring a welcome clarity to a field characterised by multiple understandings of terms such as competence (for a fuller discussion, see CEDEFOP, 2009), there remains considerable ambiguity in a number of areas. A major issue concerns the degree to which outcomes should be specific or generic. For example, outcomes can be framed as high-level, generic statements of intent, such as the Four Capacities of Scotland's *Curriculum for Excellence* (CfE)[2], the Key Competences of *The New Zealand Curriculum Framework* (NZCF)[3] or the Statements of Learning in Ireland's *Junior Cycle Framework*[4]. Or they can be much more specific sets of statements, divided into different subject groupings and often articulated as linear and hierarchical levels of progression (e.g. the Experiences and Outcomes of CfE[5] or the Learning Objectives of the NZQF[6]). Many curricula combine both, which has been claimed to send mixed messages about curriculum development (see Priestley & Humes, 2010).

This issue raises an important question: whether outcomes should be seen as long term goals of education – as broad statements of what young people should be able to know and do at the end of

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[2] http://www.educationscotland.gov.uk/thecurriculum/whatiscurriculumforexcellence/
[3] http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum/Key-competencies
[4] https://www.education.ie/en/Publications/Policy-Reports/A-Framework-for-Junior-Cycle-Full-Report.pdf
[5] http://www.educationscotland.gov.uk/thecurriculum/howisthecurriculumorganised/experiencesandoutcomes/index.asp
[6] http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum/Learning-areas

a stage of education; or whether they should they be seen as more proximal goals, set out as detailed grids of statements. My firm view is that they should be the former. The latter conception is associated with a range of problems, well-documented in the literature.

- Detailed statements of outcome have a tendency to become assessment standards, even where this was not intended originally. According to CEDEFOP (2009, p38) 'recently, there has been considerable emphasis on performance and bureaucratic models of learning which focus on measurable skills and attainment targets'. Early thinking behind CfE in Scotland clearly recognised this danger, which blighted the former 5-14 Curriculum, leading to excessive teaching to the test. However, CfE has been subject to mission creep and is now seen in many quarters as assessment-driven[7] (see: Priestley, 2013; Priestley, Biesta & Robinson, 2015).

- There is a tendency for outcomes to become subject to what Wolf (1995) termed a spiral of specification. This has been evident in CfE: at an early stage in policy, through the translation of the generic Four Capacities into the more detailed grid of learning outcomes (the E's and O's), which have subsequently come to be used as assessment standards; and in practice, as teachers used to the more detailed and specific outcomes of the 5-14 curriculum devised levels within levels (developing, consolidating and secure. See Priestley & Minty, 2012; Priestley, 2013).

- Detailed specification can lead to a growth of bureaucracy, as schools develop methods to assess, record and report against outcomes. This has been a particular problem in Scotland, leading to the establishment of a government task force to tackle the issue[8]. Such bureaucracy tends to be a by-product of the cultures of performativity (Wilkins, 2011) that can develop when outcomes-steering (Biesta, 2004) is used for accountability purposes. Bureaucracy (often evidence gathering to mitigate risk) is only one of the many documented effects of performativity; others include fabrication of image, transmissive teaching to the test, and even cheating (Sahlberg, 2010). This is ironic, as learning outcomes are often associated, in policy rhetoric at least, with more divergent, developmental approaches to education; and yet the effect can be to close down practices to comply with what are seen as external demands on schools, and reduce curriculum development to a process of evidencing outcomes.

- There is a related tendency for detailed learning outcomes to become statements of content to be mastered – what Kelly (2004) refers to as a mastery curriculum. As suggested by CEDEFOP (2009, p89), 'in this case subject content steers the intended outcomes for the learner, often supported by traditional, 'pencil-and-paper' types of tests'. In Scotland, this has led to some schools, especially in the secondary sector, engaging in strategic curriculum change, as they audit existing content and methods against the outcomes of the new curriculum, making minimal changes where necessary (see Priestley & Minty, 2013; Priestley, Minty & Eager, 2014). It usually means the assessment of outcomes, within competency-based exam syllabi, by written tests rather than more suitable methods, such as portfolio assessment. This is a good example of existing, institutional logics being applied

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[7] This view was expressed candidly at a national conference in June 2014 by a prominent secondary Headteacher, who described CfE as an 'attainment-driven curriculum' (see http://www.scotlandpolicyconferences.co.uk/forums/showpublications.php?pid=810).
[8] For example, see: http://www.gov.scot/Resource/0047/00473538.pdf

uncritically to new policy designed to reform schooling. According to CEDEFOP (2009, p10), there should be an emphasis, when framing outcomes, 'on defining learning outcomes to shape the learner's experience, rather than giving primacy to the content of the subjects that make up the curriculum.'

- Such an approach, a performance mode of pedagogic practice (Bernstein, 1996), potentially leads to atomised and fragmented provision, which loses sight of the wider aims of education and reduces schooling to the digestion of 'bite-sized' chunks of content and the dominance of the metaphor 'delivery to describe educational practice (Kelly, 2004)

The former conception – of learning outcomes as broad generic statements – is also not unproblematic. A particular issue lies in the charge that such outcomes are vague and woolly, and thus do not provide a detailed enough specification of what is expected of teachers as they engage in curriculum development (for a discussion of this in relation to CfE, see: Priestley & Minty, 2012; Priestley & Minty, 2013). However, to follow this logic takes us back into the territory explored above, with its attendant problems. A more productive line of inquiry is to explore how learning outcomes might relate to other curriculum components, such as statements of content, guidance on pedagogy and processes for engagement with policy). In particular, we need to view them as part of a systematic curriculum planning approach, which entails some consideration of which curriculum planning model is most appropriate to enact them into practice in particular contexts.

Learning outcomes and curriculum development

The development of a systematic approach to curriculum planning in tandem with learning outcomes has clear implications for the framing of policy at a macro-level, the role of meso-level policy development agencies, and practitioners engaging in school-based curriculum development at a micro-level. Before outlining these implications, it is worth making several points. Framing a curriculum purely as outcomes implies that it does not matter how teachers develop the curriculum, so long as the outcomes are achieved. There are two problems with taking this view.

- First, learning outcomes constitute output regulation of teaching, in that they provide potentially measurable outputs from the process of education. Framing a curriculum purely as outcomes/outputs runs the risk of ignoring other curriculum components. These include input regulation (e.g. statements of content), the processes of learning (pedagogies), the organisation of learning (provision), as well as consideration of the cultural and structural contexts within which curriculum is contextualised, recontextualised and enacted.
- Second, consideration needs to be given to the curriculum planning model adopted. Kelly (2004) has identified three discrete and distinctive models. These are the content, objectives and process approaches. Many modern curricula hybridise and conflate these models (e.g. see Priestley & Humes, 2010), but this is highly problematic: the models are not mix-and-match approaches but in fact represent different starting points for curriculum planning; and different starting points have clear implications for the sorts of emerging practices that occur as schools develop the curriculum. In particular, the type of learning outcomes specified will impact upon the manner in which – and the starting point from which – schools engage in curriculum development.

For example, as mentioned above in the case of Scotland, many schools have started with the detailed E's and O's and conducted an audit of current practice. In many such cases, there has been performative approach to curriculum development– based upon a need to tick boxes and evidence outcomes. This approach typifies what Kelly (2004) would class as an objectives curriculum planning model. In other cases, schools have started with a consideration of the broader, generic outcomes under the headings of the Four Capacities, adopting a process curriculum planning model. In such schools, the process has involved sense-making (what do the outcomes mean?), the development of fit-for-purpose practices (content and methods), and the institution of a systematic collaborative professional enquiry process to enact the practices. In the former approach, emergent practice often lacks coherence and is disconnected from big-picture ideas. In the latter approach, research suggests that more holistic and coherent practice emerges from teachers' engagement with learning outcomes (Drew & Priestley, 2014).

As stated above, there are clear implications here for policy and practice at the macro-, meso- and micro-levels of curriculum development.

- At a macro-level, we need policy which is coherent, which makes the connection between outcomes, content and processes. Careful consideration needs to be given to how aspects of policy enable rather than constrain teacher agency and professionalism, for example ensuring that there are not tensions within policy which can encourage the development of performative cultures in schools.
- At a meso-level, policy development activity and materials need to be carefully formulated so that they support direct engagement with the big ideas and messages in high macro-level policy. A particular problem in Scotland has been the proliferation of mid-level guidance, by national agencies and local authorities, which dilutes and distorts these messages through successive reinterpretation of policy. This can create an implementation gap between policy and practice (Supovitz, 2009).
- At a local, micro-level, teachers need to be supported and resourced to engage in meaningful curriculum development processes. Where possible, detailed decisions about content and methods should be made at this local level, rather than prescribed from above, but they need to be clearly related to curricular purposes and learning outcomes.

Thus, learning outcomes are best framed in a generic fashion, supported by additional broad specification of appropriate content and methods, and clear identification of meaningful processes to facilitate engagement with policy. I would suggest the following approach, which takes account of both the benefits and risks associated with adopting a learning outcomes model, as described above.

First, we should avoid the detailed specification of multiple levels of statements of outcome, which can quickly become, as described above, bureaucratic standards for assessment. Instead, I see the following layers of specification as being useful.

1. There should be set of broad and generic learning outcomes which effectively set out the purposes of school education, stating clearly what skills, capacities and dispositions one might expect young people to have developed by the end of each stage of education
2. These should be accompanied a limited set of complementary generic outcomes for each subject domain.

Second, I do not see the need for detailed grids of subject outcomes, set out in hierarchical and linear levels. Nor should there be specification of either content or pedagogy at the level of individual detailed subject outcomes, as has been the case in other countries (for example the attempt to link experiences and outcomes in Scotland and more recently in Wales[9]). Research (e.g. Priestley & Minty, 2012) suggests that such specification encourages the strategic, box-ticking approaches described above. Instead, questions of content and pedagogy should derive from consideration of the high-level purposes of education set out in the generic outcomes (both high-level and subject specific); in other words, content and pedagogy should be developed to be fit-for-purpose. This would not preclude central guidance from government agencies on content and pedagogy. Indeed, I see such guidance as necessary, provided that it does not become highly detailed specification. Instead broad, indicative statements of content associated with generic subject level outcomes can provide a scaffolding for professional decision-making on these matters, allowing for both local needs to be met and a degree of standardisation across the system. Advice on pedagogy can be linked to the provision of high quality professional development, which can provide teachers with an eclectic toolkit of pedagogical approaches to be applied and adapted as necessary to meet curricular purposes.

Third, experience from Scotland suggests that the development of clearly articulated processes for curriculum development can obviate many of the problems associated with introducing a curriculum based around learning outcomes. For instance, pilot studies in two Scottish local authorities (e.g. see Drew & Priestley, 2014) suggest that a process model of curriculum planning is effective at enabling teachers to make holistic judgements and develop fit-for-purpose practices. As previously mentioned, the process involves sense-making, the subsequent development of practices, and their implementation through a collaborative professional enquiry. Early findings from the research suggest that participating teachers have developed greater understandings of curricular purposes, higher degrees of confidence in their application, a wider repertoire for developing the curriculum in their classrooms, and often significant changes to their practices. Significantly, where their schools have been inspected, there is emerging evidence that the reaction has been very positive. I note here that this systematic approach to curriculum development focused on the generic outcomes of CfE, rather than the more detailed statements enshrined in the Experiences and Outcomes, as had previously been the case in many of the schools.

Such an approach has been described by CEDEFOP (2009, p144). It is an approach which:

> identifies holistically the learning outcomes that the learner should typically achieve by the end of a phase, or the whole of school education. These are associated with the agreed aims and objectives of the education system. Only then are appropriate subjects and groupings of subjects identified or brought into play. In this case, new possibilities open up to include new ways of thinking about the learning process in the overall planning of learning programmes. We can expect these approaches to open up new challenges for pedagogy and for school organisation.

This is an approach which I would endorse. Learning outcomes have great potential to facilitate better learning and teaching. But they also have the potential, if inappropriately framed, over-

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[9] See http://www.educationscotland.gov.uk/myexperiencesandoutcomes/index.asp and
http://gov.wales/topics/educationandskills/schoolshome/curriculuminwales/curriculum-for-wales/?lang=en)

prescriptive and/or inadequately conceptualised (as part of a process for curriculum development) to deform, distort and reduce the process of education.

References

Bernstein, B. (1996). *Pedagogy, Symbolic Control and Identity: Theory, research, critique*. London: Taylor and Francis.

Biesta, G.J.J. (2004). Education, accountability and the ethical demand. Can the democratic potential of accountability be regained? *Educational Theory*, 54, 233-250.

Biesta, G.J.J. & Priestley, M. (2013). Capacities and the curriculum. In M. Priestley & G.J.J. Biesta (Eds.), *Reinventing the curriculum: new trends in curriculum policy and practice*. London: Bloomsbury.

CEDEFOP (2009). *The shift to learning outcomes: policies and practices in Europe*. Luxembourg: Office for Official Publications of the European Communities.

Drew, V. & Priestley, M., (2014). *School-based Curriculum Development Through Collaborative Professional Enquiry*. A paper presented at the European Conference for Educational Research, 3 September 2014, Porto.

Kelly, A.V. (2004). *The Curriculum: theory and practice, 5th edition*. London: Sage.

Kuiper, W., & Berkvens, J. (eds.)(2013). *Balancing curriculum regulation and freedom across Europe. CIDREE Yearbook 2013*. Enschede, the Netherlands: SLO.

Priestley, M. (2013). The 3-18 Curriculum in Scottish Education. In T.G.K. Bryce, W.M. Humes, D. Gillies & A. Kennedy (eds.), *Scottish Education, 4th edition, Referendum*, Edinburgh: Edinburgh University Press.

Priestley, M., Biesta, G.J.J. & Robinson, S. (2015). *Teacher Agency: An Ecological Approach*. London: Bloomsbury Academic.

Priestley, M. & Humes, W. (2010). The Development of Scotland's Curriculum for Excellence: amnesia and déjà vu. *Oxford Review of Education*, 36[3], 345-361.

Priestley, M. & Minty, S. (2012). *Developing Curriculum for Excellence: Summary of findings from research undertaken in a Scottish local authority*. Stirling: University of Stirling.

Priestley, M. & Minty, S. (2013). Curriculum for Excellence: 'A brilliant idea, but..', *Scottish Educational Review*, 45[1], 39-52.

Priestley, M., Minty, S. & Eager, M. (2014). School-based curriculum development in Scotland: Curriculum policy and enactment. *Pedagogy, Culture and Society*, 22[2], 189-211.

Sahlberg, P. (2010). Rethinking accountability in a knowledge society. *Journal of Educational Change*, 11, 45-61.

Supovitz, J.A. (2008). Implementation as Iterative Refraction. In J.A. Supovitz & E.H. Weinbaum (eds.), The Implementation Gap: understanding reform in high schools. New York: Teachers College Press.)

Wilkins, C. (2011). Professionalism and the post-performative teacher: new teachers reflect on autonomy and accountability in the English school system. *Professional Development in Education*, 37, 389-409.

Wolf, A. (1995). *Competence-Based Assessment*. Buckingham: Open University Press.