Knowledge and ways of knowing

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The recent development of 'truth decay', the diminishing role of facts and analysis in public discourse, makes the turn towards a knowledge-rich National Curriculum seem particularly welcome and well-timed in England. The National Curriculum in 2014 gave a steer towards knowledge but the current development of a revised school inspection framework is really focusing minds because of its opportunities and threats. I propose a framework of 'knowledge and ways of knowing' that may be helpful to colleagues in schools as they review and develop their curriculum to produce a convincing rationale when challenged by school inspectors. This framework is offered as part of a critique of the concept of 'powerful knowledge' (Young, 2013, 2014).

The power struggle over the curriculum needs to be understood within the broader aims of education, and Gert Biesta (2011) identifies three overlapping purposes: qualification (knowledge), socialisation (including family and citizenship as well as employability) and subjectification (freedom to develop as a unique human being). This framework should be critiqued and developed but it helpfully provides us at least with a language for debate. I believe that all pupils need to develop a critical perspective on their everyday knowledge and context, and Biesta's framework seems to allow space for this, even if it does not sufficiently emphasise it (MacAllister, 2016).

I am wary of the influential and seductive concept of 'powerful knowledge' (Young, 2014). In practice, ›

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it seems so often to be interpreted as 'schooling is about acquisition of factual knowledge', an argument proposed by ED Hirsch (2006). Part of the problem is that much writing on powerful knowledge refers to Durkheim's distinction between 'sacred' and 'profane' knowledge, as if it were a separation between bodies of knowledge rather than merely a distinction between inter-related domains of public knowledge and practical wisdom (Boyd and Bloxham, 2014). However, in the spirit of embracing 'powerful knowledge', I will use Basil Bernstein's thinking to consider three key points on the creation of knowledge, on the power struggle to outline the curriculum, and on the 'making of curriculum' by teachers (2000).

First, Bernstein's 'distributive' rules focus on the creation of knowledge, largely by researchers in universities, and on the development of subject disciplines with their distinctive bodies of knowledge, languages and ways of knowing. However, most observers will acknowledge that subject discipline boundaries are frequently blurred, with new disciplines developing from that activity, and that many big societal challenges require a boundary-crossing, transdisciplinary approach. It is important to note that basing the National Curriculum of 2014 around traditional subject disciplines has been criticised both as a general approach and in respect to the rather clumsy way in which it was done.

Second, Bernstein's 'recontextualising' rules govern the official and unofficial power struggle by which the subject disciplines are developed into the school curriculum. This struggle increasingly involves government agencies and the influence of politicians, but publishers, examination boards, subject associations and – yes – schools and teachers are also involved. In England, the involvement of governments in the National Curriculum

and then further incursion into pedagogy – for example, with the numeracy and literacy strategies – has created some resistance. This includes, for example, resistance to textbook schemes that may consider teachers as technicians 'delivering' the curriculum, rather than as autonomous professionals able to contribute through 'curriculum-making' (Lambert and Biddulph, 2014).

Third, and perhaps least well developed in Bernstein's writing, are the 'evaluative' rules, which include the influence of teacher expectations on students, including the powerful influence of tests and examinations in deciding what knowledge is valued in schools. The turn to knowledge may be welcomed as a rejection of over-emphasis on test and exam results and of competence-based impoverished vocational courses for 14- to 16-year-old students. As a geography teacher and head of department, I was involved in the development of vocational courses for 14- to 18-year-olds in 'travel and tourism' in the 1990s. As a departmental team of subject specialists committed to geography, we recognised the specification of this vocational course as being 'empty' and tried to resolve that by borrowing concepts from geography, economics, psychology and sociology to enrich the content. However, the 'competence-based' assessment of the course was a very powerful influence and, on balance, I feel that it undermined our efforts to enrich the content of the course. The weakness of the knowledge element in the specifications for these vocational courses must in part be attributed to an over-emphasis on consulting with employers and arguably giving those with limited expertise in education too much influence on the curriculum. This experience shaped my sympathy towards the social realist perspective on knowledge and the need to ensure that knowledge has a firm place in the curriculum (Wheelahan, 2007).

Teaching is complex and most often, rather than relying on simple rules, the teacher is balancing dilemmas. One such dilemma with particular regard to the knowledge content of lessons is between 'concrete and abstract'. Teachers support learning by generating interplay between a key concept in the curriculum subject and practical knowledge to help pupils see the relevance of the big idea (Boyd et al., 2015). Interpreting Durkheim, Young argues that 'powerful knowledge' is 'differentiated', by which he means separate from everyday knowledge (2013, p. 108). In contrast, quantum physicist Karen Barad points out that 'To theorize is not to leave the material world behind' (Barad, 2007, p. 55), and her perspective may be usefully applied in classroom research (Hetherington and Wegerif, 2018). Teachers may be considered to be 'curriculum-making' when they introduce learners to new propositional knowledge but help them to relate it to everyday knowledge (Lambert and Biddulph, 2014). As an alternative to the concept of powerful knowledge, I propose a framework of 'knowledge and ways of knowing' to provoke teachers and other school leaders to discuss and review their curriculum.

Knowledge
School curriculum subjects
The subjects within the National Curriculum, derived from subject disciplines, provide a useful basis for curriculum development. This has

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> implications for developing teaching teams in relation to content knowledge and pedagogical content knowledge (understanding key concepts within the subject and knowing how best to teach them). Teachers should identify key concepts from within the subject and plan sequences of lessons to engage learners with them and to make progress in their understanding and application. In vocational programmes, teachers will need to draw on key concepts from relevant subject disciplines.

Transdisciplinary learning

Tackling the big societal problems, such as sustainable development, inequality, an ageing population or obesity, arguably requires a transdisciplinary approach, and challenges schools to support learners in understanding across subject discipline boundaries. This helps to prepare them as informed citizens, able to actively participate in democracy. Schools should explicitly map and develop learner engagement with transdisciplinary learning around big societal issues.

We should be ambitious for pupils to experience the joy of learning for its own sake, and the discourse and ways of knowing within subject disciplines and boundary-crossing across the disciplines offers a suitable framework for this to be realised.

Ways of knowing

Subject discipline-specific skills

Learners should engage with ways of knowing within subject disciplines so that they develop evaluative judgment to recognise, for example, 'good history' and gain some insight into research methods, going beyond 'knowing that' to 'knowing how'. In this way, learners should develop critical understanding of the contested and dynamic nature of knowledge within the subject disciplines. The best lessons will have 'epistemic quality', meaning learners explicitly engage with ways of knowing. In addition, learners should be challenged to tackle big societal issues so that they develop 'epistemic insight', meaning that they realise the different ways of knowing across subject boundaries.

Learning to learn – dispositions, beliefs and identities

Learners should develop skills as novice 'researchers' within the subject disciplines as they tackle problems and pursue inquiry collaboratively and individually. Schools and teachers should systematically support pupils to develop as self-regulated learners (setting goals, monitoring and reviewing) and to develop positive beliefs about their capacity for growth. It is not possible to develop meta-cognition without knowledge content. Learners should experience, for example, 'becoming a scientist or historian' and develop as self-regulated learners within subjects and across the curriculum.

This 'knowledge and ways of knowing' framework is intended to balance the decision to focus the National Curriculum around subject disciplines by including the mapping of transdisciplinary learning. It is intended to balance the decision to focus in the National Curriculum on ways of knowing within subject disciplines by including an explicit emphasis on

learning to learn. Overall, it is a modest proposal for a middle way through the more extreme ideological positions that have been adopted by some participants in the curriculum debate. I hope that it might seem like 'common sense' to many teachers, resonating with their professional 'everyday knowledge' as well as their understanding of abstract learning theory. In considering the knowledge and ways of knowing framework, perhaps many primary schools will want to strengthen their provision for knowledge and ways of knowing within the full range of curriculum subjects but will find their transdisciplinary element already rich and relatively easy to map. Meanwhile, secondary schools may find the transdisciplinary element more challenging to embed and map across the curriculum. Bernstein (2000) argued that the knowledge power struggle plays out around the strength of the boundaries between subjects. Perhaps primary schools will look to strengthen those boundaries while secondary schools will look for ways to build across them. In the case of vocational courses, secondary schools might seek to strengthen them by borrowing concepts from traditional subject disciplines.

The debate on curriculum centres on knowledge but crucially is also about social justice, with rival claims being made. It is worth returning to the issue of vocational courses within the curriculum, because they epitomise the frequently highlighted risk of denying working class children access to rich cultural knowledge (Wheelahan, 2007). I feel that this will only be resolved in England when all schools are required to work to the 'national' curriculum and when all students aged from 14 to 19 are required to complete at least one vocational course. At times, I cannot help wondering whether if I had chosen to complete a course in the 'construction industry' alongside my traditional school curriculum subjects, I might now be an early-retired multi-millionaire – I so enjoyed my year of building, plumbing and roofing (in the year of the hurricane) when as a young teacher I temporarily took some time out from my 'career' in education to work with my brother to make some real money and pay off my student debts! ⓘ

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