Towards Powerful Educational Knowledge? Addressing the challenges facing educational foundations, curriculum theory and Didaktik

Jim Hordern Johan Muller Zongyi Deng

University of Bath University of Cape Town University College London

j.hordern@bath.ac.uk johan.muller@uct.ac.za zongyi.deng@ucl.ac.uk

This paper introduces a symposium which aims to address the challenges facing the 'deliberative' educational knowledge traditions of educational foundations, curriculum theory and Didaktik as a consequence of the rising tide of empiricism in educational research, the 'what works' agenda in global educational reform and internal fragmentation within the traditions themselves. By examining the potential for the reconfiguration or reconstruction of these traditions, we ask whether it is possible to reinvigorate a 'powerful' educational knowledge that could provide a meaningful basis for educators to conceptualise their practice, and a robust response to policies that seek to narrow educational activity to a focus solely on learning outcomes and technical efficiency.

Keywords: Curriculum, Educational Theory, Teacher Knowledge, Disciplines of Education, Comparative Studies, Professional Knowledge

Authors copy of : Jim Hordern, Johan Muller & Zongyi Deng (2021) Towards powerful educational knowledge? Addressing the challenges facing educational foundations, curriculum theory and Didaktik, *Journal of Curriculum Studies*, 53:2, 143-152.

DOI: 10.1080/00220272.2021.1891575

Educational theorising and the preparation of educational practitioners have been heavily influenced in the Anglosphere by the educational foundations (otherwise known as foundation disciplines in the UK) and curriculum theory, and in continental European countries by deliberative and hermeneutically-inclined traditions such as Bildung-centred Didaktik (Furlong and Whitty 2017; Deng 2018), as well as various contemporary hybrids of these core traditions. While these traditions are distinctive and conceptualise educational practice differently, comparative studies have identified opportunities for ongoing dialogue between them (Westbury, Hopmann and Riquarts 2000), with the potential for further enhancing all related forms of educational theorising. It could be argued that these traditions have certain characteristics that can offer professional educators and policy makers a 'powerful' educational knowledge base steeped in reflective consideration of educational purposes and processes, but yet meaningful and relevant to the practical work of educators. From a sociological perspective, this knowledge can be powerful in the sense that it provides practitioners with a more realistic and penetrating understanding of educational practice, allow them to move beyond their particular experience, and envisage alternatives (Young and Muller 2016). It can be powerful in the sense that it could lead to a 'coherent unitary discipline' (Hordern 2018, 793) that would provide a basis for professional activity and judgement. It can also be powerful if it is able to offer policy makers a robust and stable knowledge base for accountable and informed decision-making, in other words it can provide powerful knowledge for educational policy.

However, these traditions of educational knowledge have been under attack, ignored or marginalized by policy makers in many European countries, Australia, the United States and elsewhere, who instead are in favour of alternative approaches to educational knowledge based upon narrow forms of empiricism and supposed best practices or 'what works' approaches (Schriewer 2017; Biesta 2011). There are consequences to these developments, not least the side-lining of important questions about educational purposes, knowledge and content, curricula and pedagogic relations, but also increasing limitations on the intellectual resources available to educational practitioners, leading to constraints on their abilities to make well-reasoned judgements in practice contexts. The result is that new teachers are increasingly starting work in many nations with limited exposure to longstanding educational ideas and debates, leaving them bereft of the capacity to present counterarguments that can explain the rationale for their practice in the face of an onslaught of policy directives and performance measures. In the words of Barrett and Hordern (this issue) a situation has developed (in the United States and in the UK) in which 'an entire generation of teachers is entering classrooms without recognising who John Dewey was, never mind the importance of philosophy of education for pedagogic practice'.

This symposium contends that there is an urgent need to address the challenges facing educational knowledge in terms of the traditions of educational foundations, curriculum theory, and Didaktik for the sake of the knowledge offered to educational practitioners in teacher education and for the future of education itself. We therefore explore some of the challenges facing these educational knowledge traditions in this context, aiming to address these with consideration of potential ways forward towards a 'powerful' educational knowledge that is in the interests of educators and all those who value education. In this symposium we seek to engage with the following questions, often drawing on comparative examples of the tension between educational knowledge and other traditions of thought:

- (i) What are the issues facing the foundational and deliberative educational knowledge traditions in the current context of educational policy and practice?
- (ii) Could reconstructing, consolidating or reconfiguring educational knowledge traditions in whatever way be a route towards a more 'powerful' educational studies?
- (iii) What contributions could a reconfigured or reconstructed powerful educational knowledge offer to current debates on educational policy and teacher education?

The contest for educational knowledge

The above questions take on greater urgency and significance in view of global moves towards producing educational research that take an empiricist approach to identifying 'what works' in education, fuelling uncertainty about the future shape of professional educational knowledge and the professional authority of teachers. Longstanding traditions of educational thought are deemed redundant if apparently conclusive answers are produced by seemingly infallible empiricist research using favoured methodologies such as Randomised Controlled Trials (Furlong and Whitty 2017), or by economic models shaped by 'homo economicus' assumptions about human motivation. Some governments have questioned the role of higher education in teacher education, with craft and technical conceptions of teaching foregrounded in some national contexts, at the expense of more scholarly or professionally autonomous ideals (Hordern and Tatto 2018). If educational theories that open up curriculum questions become moribund then policy-makers may increasingly see no alternative to 'teacher-proof' curricula and scripted lesson plans, with closely stipulated lists of propositional knowledge accompanied by mandated teaching techniques (Shalem 2017).

Furlong and Whitty draw attention to what they term the New Science of Education which promises 'significant improvements in educational outcomes....through the application of 'rigorous research' – typically defined as RCTs and/or systematic reviews', noting how this New Science has been supported through 'powerful regulatory frameworks' (2017, 28-29). This New Science has caught the eye of policy-makers and school leaders looking to make tangible 'impacts' on educational performance. For example, the 2016 UK Government schools white paper for England seeks to embed this New Science by pledging to reform the education system on the basis of 'evidence of what works' (DfE 2016, 73), and by championing the role of the Educational Endowment Foundation (EEF) as 'the designated What Works Centre for education' (DfE 2016, 39). There are pledges to provide answers to problems of low attainment and educational disengagement, but the New Science provides no substantive educational theory that can guide educational practice itself. The focus is often on 'causal explanation and a concern for outcomes' (Paine 2017, 164) in a manner that avoids the complexity, nuance and deeper purposes of educational processes.

In England we have seen the rise of government-sponsored and mandated resources, such as the Teaching and Learning Toolkit developed by the EEF, which is accompanied by 'reports for teachers summarising the best available evidence', and the findings from over 100 randomised controlled trials encompassing 'more than 10 per cent of all known trials in education in the world' (Francis 2020). In the United States, meanwhile, the What Works Clearinghouse claims to 'review the existing research' and 'provide educators with the information they need to make evidence based decisions' (IES, n.d.). The risk of such state-

sponsored categorisation of educational knowledge is twofold. Firstly, that such toolkits mandate a specific form of educational knowledge based upon a narrow interpretation of which research methodologies count as 'gold standard' (Goldacre 2013), often drawing upon assumptions that research methodologies developed in the physical or biological sciences can be easily applied in educational contexts. Secondly, prominent educational research increasingly tends to reflect the priorities of sponsor organisations or governments, using their favoured methodologies and answering to restricted views of the purpose of educational activities, often to the exclusion of alternative visions and critical commentary. The databases and toolkits of the EEF and the Clearinghouse present their findings as objective and authoritative, but provide no audit of the educational ideas and philosophical traditions that they neglect, sideline and undermine (for example curriculum theory or Didaktik). The cumulative potential longer term effect of such activity could be to warp the educational knowledge base towards a notion of education that assumes that achieving improvements in measurable learning outcomes is the sole objective of educational work, and to technicise the work of teachers, who are left without the powerful educational knowledge to make critically engaged judgements about their practice.

The empiricist tide in educational research is encouraged by a global educational reform movement that maintains a view of humanity populated by rationally self-interested individuals who seek to use education simply to advantage themselves in the labour market. This view of humanity is directly at odds with the underlying philosophy of the deliberative and foundational traditions, and marginalises opportunities for more holistic educational practice. As Wheelahan and Moodie discuss (this issue) such views are influencing reforms in higher education, where there are pressures to re-orientate curriculum structures towards offering microcredentials due to the assumed demand for employability skills in the labour market. The thinking behind such reforms to educational provision is closely coupled with a turn towards ideas from neoclassical economics and various forms of management theory as sources of possible answers to the perceived problems of an education system that seemingly refuses to innovate and change fast enough to produce the desired outcomes of policy makers (Foray and Hargreaves 2003; Allais 2012). As Allais and Shalem (this issue) demonstrate, there are substantive consequences of these developments in the politics of educational research for those traditions of educational knowledge that seek to foreground and illuminate social disadvantage through lenses based in 'classical' sociological traditions. For Allais and Shalem (this issue) the foundation discipline of the sociology of education is becoming marginalised through fragmentation into 'topic-based silos', while its collective contribution is ignored 'in large-scale research that is dominated by a data-driven 'what works' agenda'.

Within the context of these reforms, educational foundations, curriculum theory and didaktik have been criticised for their lack of contribution to what are deemed the overriding purposes of educational activity, which for many governments centre increasingly around measurable educational outcomes. Germany, for example, suffered something of a PISA shock of the early years of the twenty-first century, caused by the surprising finding that many German young people were not found to have achieved particularly high levels of Maths and English in the PISA tests in comparison with other nations (Ertl 2006). This resulted in an increasing emphasis on the 'importance of principles such as outcome control, competence orientation and external assessment' (Ertl 2006, 619), but also considerable criticism of the educational traditions of Bildung and Didaktik that were said to have led to a decline in standards and a

lack of focus on attainment (Schriewer 2017, and see Deng, this issue). Didaktik has had mixed success in withstanding the empiricist tide (Schriewer 2017; Terhart 2017), and some have viewed Didaktik as stagnant and atrophying – vulnerable to criticisms of a lack of 'effectiveness', 'usability' and 'practicability' (Zierer and Seel 2012). But there have been differences in the fate of 'general' Didaktik, which has found itself increasingly marginalised in German education, and subject-matter didactics (Fachdidaktik) which has continued to grow, as Helmut Vollmer (this issue) sets out. In England and the United States meanwhile, the foundation disciplines have been chided by politicians for their irrelevance and potential subversiveness, and teacher education reforms have attempted to narrow down the educational knowledge offered to newly preparing teachers to a barebones of content that neglects the development of educational understanding and professional judgement (as Barrett and Hordern discuss in this issue).

However, it could also be argued that the more 'deliberative' educational knowledge traditions have not equipped themselves well to handle this onslaught. There is little doubt that the educational foundations have become somewhat separated from the professional knowledge of teachers in much of the Anglosphere (Lawn and Furlong 2009; Furlong and Whitty 2017; McCulloch 2017). In some schools of education that have accentuated their 'academic' character rather than their professional role in preparing educational practitioners there has been a tendency to re-orientate the foundations towards the various new theoretical languages that have reshaped cultural and literary theory (e.g. post-structuralism; postmodernism; new materialism), allowing these traditions to absorb increasing amounts of intellectual space in schools of education in the United States and the United Kingdom (Whitty 2014; Furlong and Whitty 2017). While these traditions undeniably have interesting arguments about the exercise of power, dominance and exclusion within institutions and society, there may be limits to what they can offer in terms of educational theory for educational practitioners, in terms of providing a meaningful and practically applicable theory of educating that offers some guidance to teachers in navigating the central educational questions of curriculum, pedagogy and assessment, as both Deng and Barrett and Hordern argue in this issue.

Curriculum Theory, which can be considered an educational knowledge tradition in its own right, is perhaps emblematic of the trends outlined above. In the anglosphere, it has been accused of losing sight of its purpose and rationale, fragmenting into a multiplicity of competing perspectives that obscure the central problematic of what Deng (2018) calls 'the inner work of schooling'. In Deng's view (2018 and see this issue) curriculum theory has become 'moribund', focused on 'theoretical discourse' and an 'upward flight towards variegated contemporary discourses' and therefore has 'literally nothing to contribute to the advancement of education in today's context' (Deng, this issue). Not only are trends in the development of both curriculum theory and Didaktik seen to be potentially failing classroom teachers and curriculum specialists, but they are also 'marginalised and ignored by policymakers' (Deng, this issue), and many educational researchers. Thus these educational knowledge traditions may face increasing challenges from those who seek to foreground the science of 'learning' with promises of empirically-grounded impact on student assessment outcomes, at the expense of more humanistic educational objectives.

It is our view that genuinely powerful educational knowledge comes not through advanced technical research methodology borrowed from the natural sciences, but through the pursuit

of research and inquiry using a range of methodologies answerable to an *idea of educational practice* as normative and purposeful, with its multiple purposes including the formation of individuals who can contribute to and participate within ever-changing societies as much as the achievement of qualifications or socialisation (see Hordern 2020 for a discussion). A central issue here is how educational purposes are perceived and portrayed, and the extent to which certain purposes receive much greater attention than others. If educational research questions were to be reflective of a normative idea of educational practice, then they would be better able to provide educational knowledge that can guide educational practitioners in the multiple purposes of their work. This does not preclude empirical work (and in fact many of the papers in this issue argue that more careful empirical studies are needed), but asks that such work is conducted as part of a process of generating educational knowledge that is mindful of the range of interrelated *educational* concerns and purposes, rather than (non-educational) objectives inspired by current political whims, economic reform or management science.

Reconstructing educational knowledge

In the face of the fragmentation of educational knowledge, brought about by internal challenges within the broader study of education and the external pressure on educational institutions and schools of education (Furlong and Whitty 2017; Labaree 2008), it is important to ask what possibilities there may be for reconstructing or reconfiguring the more deliberative or foundational educational traditions into a coherent body of knowledge. In the words of Muller and Hoadley (this issue), could it be possible to develop a 'pedagogic compact' or 'strategic entente cordiale' between educational traditions that somehow combines their sources of power? Such a reconfigured 'powerful' educational knowledge could serve teacher education, the ongoing professional development of teachers and provide a basis for educational research and inquiry that speaks to authentically educational concerns and thus offers an alternative trajectory to that which is currently prevalent, at least in Anglophone countries.

From the perspective of the sociological studies of professional work, at least in Anglo-American contexts, there are also arguments for why a reconstruction of the educational knowledge base would advance the professional autonomy, discretion and capacity of teachers to make well-reasoned professional judgments that will be accorded with trust by the public. The work of Abbott (1988) suggests that authoritative educational knowledge would enable educators to maintain their jurisdiction over educational work and for all professionals to recognise the boundaries of the educational field. Freidson (2001) argues that a professional 'logic', which is a necessary basis for professional activity in contemporary society, relies on a degree of earned autonomy and control over the knowledge base by the professional community. A more cohesive knowledge base for educational roles would also help to sustain a teacher professionalism with a primarily occupational rather than organisational hue (Evetts 2011), and this may be particularly important in education systems that are undertaking structural reforms based around school-based accountability where 'branded' or more corporate forms of professionalism are on the rise (Whitty 2014; Hordern 2014).

There are, nevertheless, considerable potential difficulties with a strategy of reconstruction. As Muller and Hoadley (this issue) highlight, potential contributors to such a strategy are

often constrained by the internal conceptual and linguistic architecture of their respective educational traditions. Despite progress in the comparative study of curriculum theory and Didaktik (Hopmann 2015), for example, there remain obstacles to anything that might be construed as a 'third way' or a more universal curricula metatheory. This could be attributed to a tendency for educational ideas to be refracted through the specific socio-cultural lens embedded within each national context (Schriewer 2012), but also to those aspects of educational thought and practice which emphasise the situated and contextual, sometimes at all costs. If there is no international consensus on the purpose of education this may also be something to do with the different ways in which the relationship between individual and society are constructed in different nations. As Alexander (2001) demonstrated, how the relation between the individuality and the collectivity is constructed in different societies shapes pedagogical considerations and the practice of education. The problem of the reconstruction of educational knowledge is both 'constitutive' and 'epistemological' (Muller and Hoadley, this issue).

But what are these educational concerns around which educational knowledge could be reconstructed? And which traditions speak to those concerns? What would be the internal structure of educational knowledge? And how would it progress and develop its knowledge base? And what does this mean practically for teachers and teacher educators in terms of supporting their capacities for making professional judgements. For Vollmer (this issue) one route forward is to distil the essence of the various forms of subject-matter didactics, arriving at a 'Generalised Subject Didactics' which can guide new teachers across all subjects from a 'higher point'. For Muller and Hoadley (this issue) powerful educational knowledge could be defined by 'possibilities for knowledge growth, conceptual extension and curricular coherence'. According to Muller and Hoadley (this issue) it should be 'sequentially systematic' but also have a 'cumulative conceptual knowledge structure', and possibly a 'robust empirical reservoir at its disposal'. They point to the potential for further dialogue between social realism and Didaktik, drawing attention to the potential of Bernstein's notion of 'recontextualisation' as an area of joint interest and focus. Could such a vision conjoin with Deng's call for a revitalised focus on 'the inner work of schooling' that prioritises the 'cultivation of a set of human powers'? And could generalised subject didactics contribute to such a reconstructed educational knowledge? What further work would need to be done? And, if the undergirdings of Young and Muller's (2013, 2016) powerful knowledge are to be acknowledged, then there needs to be consideration of issues of systematic revisability and the responsibilities for the production, validation and revision of the knowledge base. In a professional or practical discipline how should this be organised?

And how could the efficacy of the reconstruction of educational knowledge be tested? Arguably the ultimate test of the knowledge is whether it has the 'power to resist hostile or predatory take over by upstart contenders' (Muller and Hoadley, this issue). There appear to be two principal strategies that a reconstructed educational knowledge could take in order to do this. The first would be to seek to follow the suggestions of Muller and Hoadley (this issue) and progress an 'entente cordiale' that strengthens the 'robust empirical reservoir' of the deliberative traditions, possibly through greater integration between social realism and the Didaktik traditions, and this might draw on Vollmer's generalised subject didactics too. The advantage of such a strategy would be to provide a set of theoretically-informed findings that could be cumulative and verifiable, by which educational theory could be judged, if a suitable

conceptual language for educational inquiry can be found (Hordern 2017). Some excellent examples of such work can be found in the Bernstein tradition (Barrett 2017; Hoadley 2018; Morais and Neves 2011), as both Barrett and Hordern (this issue) and Muller and Hoadley (this issue) point out. This could provide some ballast with which to challenge the empiricist wave of approaches derived from methodological positivism.

A second strategy might be to double-down on a 'philosophical-cum-hermeneutic approach' (Schriewer 2017) to educational inquiry, maintaining that the study of 'the inner work of schooling' remains a resolutely 'practical discipline centrally concerned with practice for the advancement of education' (Deng, this issue), perhaps resembling ethics or a forms of practical or case-based reflective philosophy most closely. In such a vision there could be room for 'empirical illuminations or groundings' (Deng, this issue), but these are likely to be refracted through the lens of the knowledge tradition. While this strategy might initially have greater difficulty in convincing social scientific disciplines of the 'robustness' of educational inquiry, it has the advantage of greater distinctiveness – it emphasises that educational knowledge is different. A central issue that remains, however, is the contested definition of what constitutes educational practice and the relationship between its purposes, with policy-makers and researchers alike often not revealing or critically reflecting on their assumptions about the role of education for individuals and society. This remains a substantive issue if education is to be re-invigorated as a practical and professional discipline with a coherent educational knowledge base.

The six papers and afterword

The 6 papers written for this symposium make considerable advances in the quest for a reconstructed educational knowledge base drawing on the traditions of educational foundations, curriculum theory and Didaktik, by identifying some of the underlying tensions found within these fields and the broader landscape of educational knowledge, and by raising questions regarding possible resolutions.

The first paper, by Brian Barrett and Jim Hordern, aims to rethink the educational foundations in the United States and the UK, acknowledging the challenges foundation disciplines often experience with coherence and integration in terms of both their relation to each other and to broader (e.g. philosophical or sociological) thought. A way forward can be found using Bernstein's work, involving a rethinking of educational foundations as a professionally-orientated discipline geared toward producing knowledge for educators, broadly defined. The second paper, by Johan Muller and Ursula Hoadley, provides a comparative analysis of the character of Anglo curriculum studies and Didaktik in South African universities, arguing that a form of reconstructive synthesis between the two could lead to a form of powerful educational knowledge. The authors argue that such knowledge is particularly important in the face of the instrumentalism of the educational sciences that inform global educational assessment. The third paper, by Zongyi Deng, asserts the potential for constructing 'powerful' curriculum theory via the perspective of the German Didaktik tradition, which is, Deng suggests highly compatible with Schwab's the Practical. Through an engagement with Schwab and Klafki's model of lesson preparation, he unpacks the theories of content underpinning these models, and illuminates the distinctive form of theorising signifying these deliberative traditions.

These first three papers all tackle the challenges facing deliberative educational theory, asking what educational knowledge could gain from reconfigured versions of the educational foundations (or disciplines of education), a closer engagement between the Anglo and Didakitk traditions, and a reconstruction of curriculum theory drawing on Schwab's 'the practical' and Bildung-centred Didaktik. These papers identify ways forward for the development of powerful educational knowledge for educational practice and the professional knowledge of teachers. Whether via a 'pedagogic compact' and an 'entente cordiale' (Muller and Hoadley), a ''practical' discipline pertaining to practice and the world of schooling' (Deng) or a professionally-orientated discipline with a 'distinctly educational modus operandi' (Barratt and Hordern), these three papers all conjecture a future structure for powerful professional educational knowledge that acknowledges the manifold challenges facing educational theorising in the domains of practice and policy.

The latter three papers (Allais and Shalem, Wheelahan and Moodie, and Vollmer) tackle various aspects of the contestation and reconfiguration of educational knowledge in further depth, illustrating tensions within educational research, higher education curricula and between the various forms of Didaktik. The fourth paper, by Stephanie Allais and Yael Shalem, discusses the tension between the sub-disciplines of the sociology of education and the economics of education, exploring how the struggle between the two impacts on the state of knowledge production in these sub-disciplines. The authors identify how the influence of economics is gaining ground in framing 'what works', and how the sociology of education is increasingly segmented into silos of topic-based research, thus 'reducing its explanatory and political power'. The fifth paper, by Leesa Wheelahan and Gavin Moodie, provides critical scrutiny of the emergence of micro-credentials in higher education, arguing that these have arisen in response to the prioritisation of employability skills for the workforce in educational reform. The authors use the sociology of Bernstein (2000) as a basis for the critique, and identify the person envisaged within such curriculum reforms as the 'homo economicus' of human capital theory, a person assumed to desire above all to 'invest in this or that set of skills in anticipating labour market requirements'. Curricula reformed on the basis of microcredentials are thus pushed far away from the varied and holistic purposes of education articulated in more deliberative traditions. In the sixth paper, Helmut Vollmer examines the relationship between the notions of Didaktik and Fachdidaktik in the context of the challenges brought to educational theorising in Germany. He demonstrates that there has been an institutional weakening of general Didaktik and a concomitant strengthening of subject based didactical inquiry, which nevertheless results in a fragmentation of educational knowledge. He argues that this can be remedied through a generalised subject didactics, 'which observes, compares and analyses the different subject didactics from a higher point of view'. In so doing, he sets out a route towards a coherent powerful educational knowledge that can help teachers make sense of their own educational practice.

The final word in this symposium goes to Michael Young, who provides some commentary on the ideas raised in the various papers. Young suggests that there are strengths and weaknesses in both the 'sociological' (e.g. Bernstein and social realism) and the more 'idealist' and 'philosophical' (e.g. German Bildung-informed Didaktik) traditions of educational knowledge, while both provide some resistance to the tendency for educational knowledge to 'degenerate into scientism'. He implies that contrasting views of the relation between the individual, culture and society underpin the Anglophone and German traditions,

and notes how the 'looser ties' that Nordic researchers have with 'idealist philosophy' have opened up a space for engagement between colleagues in Sweden, Finland and the UK around subject specialist knowledge and teaching. Young highlights the difficulties with reconciling the 'analytical' and the 'normative', and suggests that each educational knowledge tradition should be permitted to 'grow within its own terms and be a kind of mirror to the other'. This reflection thus leaves us with cautious optimism for continued deeper engagement between educational foundations, curriculum theory and Didaktik in order to provide counterarguments to the empiricism, 'what works' initiatives and restricted notions of 'homo economicus' that inform much global educational reform.

References

Abbott, A. (1988). The system of professions: an essay on the division of expert labour. Chicago: University of Chicago.

Alexander, R.J. (2001). *Culture and Pedagogy: international comparisons in primary education*. Oxford: Blackwell.

Allais, S. (2012). 'Economics imperialism', education policy and educational theory. *Journal of Education Policy*, 27 (2), 253-274.

Barrett, B. (2017). Bernstein in the urban classroom: a case study. *British Journal of Sociology of Education*, 38 (8), 1258-1272

Bernstein, B. (2000). *Pedagogy, Symbolic Control and Identity* (Rev. edn.). New York: Rowman and Littlefield)

Biesta, G.J.J. (2011). Disciplines and Theory in the Academic Study of Education: a comparative analysis of the Anglo-American and Continental construction of the field. *Pedagogy, Culture and Society*, 19(2), 175-192.

Deng, Z. (2018). Contemporary curriculum theorizing: crisis and resolution, *Journal of Curriculum Studies*, 50 (6), 691-710.

Department for Education (DfE) (2016) Educational Excellence Everywhere. London: DfE.

Ertl, H. (2006). Educational standards and the changing discourse on education: the reception and consequences of the PISA study in Germany. *Oxford Review of Education*, 32 (5), 619-634

Evetts J. (2011). A new professionalism? Challenges and opportunities. *Current Sociology*, 59(4), 406-422.

Francis, B. (2020). *Chief Executive's Letter: 10 ways the EEF supported teachers and disadvantaged pupils in 2020.* London: EEF.

https://educationendowmentfoundation.org.uk/news/chief-executives-letter-10-ways-the-eef-supported-teachers-and-disadvantaged-pupils-in-2020/

Foray, D. and D. Hargreaves. (2003). The production of knowledge in different sectors. *London Review of Education*, 1 (1), 7-19.

Freidson, E. (2001). Professionalism: The third logic. Cambridge: Polity Press

Furlong, J. & Whitty, G. (2017). Knowledge traditions in the study of education. In Whitty, G. & J. Furlong (eds.) *Knowledge and the study of education: an international exploration* (pp. 13-57). Didcot: Symposium.

Goldacre, B. (2013). Building evidence into education. London: DfE.

Hoadley, U. (2018). *Pedagogy in Poverty: Lessons from twenty years of curriculum reform in South Africa*. London: Routledge

Hopmann, S. (2015). 'Didaktik meets Curriculum' revisited: historical encounters, systematic experience, empirical limits. *Nordic Journal of Studies in Educational Policy*, 2015 (1), 14-21.

Hordern, J. (2014). The Logic and Implications of School-based Teacher Formation. *British Journal of Educational Studies*. 62 (3), 231-248.

Hordern, J. (2018). Is powerful educational knowledge possible? *Cambridge Journal of Education*, 48 (6), 787-802.

Hordern, J. (2020). Why close to practice is not enough: neglecting practice in educational research. *British Educational Research Journal*. https://doi.org/10.1002/berj.3622

Hordern, J. & Tatto, M.T. (2018). Conceptions of teaching and educational knowledge requirements. *Oxford Review of Education*, 44 (6), 686-701.

Institute of Educational Sciences (IES). (n.d.) Welcome to the What Works Clearinghouse https://ies.ed.gov/ncee/wwc/

Labaree, D. (2008). An Uneasy Relationship: The History of Teacher Education in the University. In Cochran-Smith, M., Feiman Nemser, S., & McIntyre, J. (Eds.), *Handbook of Research on Teacher Education: Enduring Issues in Changing Contexts* (3rd ed.) (pp.290-305). Washington, DC: Association of Teacher Educators.

Lawn, M. and Furlong, J. (2009). The disciplines of education in the UK: between the ghost and the shadow, *Oxford Review of Education*, 35 (5), 541-552.

McCulloch, G. (2017) Education: an applied multidisciplinary field? The English experience. In Whitty, G. and Furlong (eds.) *Knowledge and the study of education: an international exploration* (pp.211-229). Didcot: Symposium.

Morais, A.M. & Neves, I.P. (2011). Educational texts and contexts that work: Discussing the optimization of a model of pedagogic practice. In D. Frandji & P. Vitale (Eds.), *Knowledge*, pedagogy and society: International perspectives on Basil Bernstein's sociology of education (pp. 191-211). London: Routledge

Paine, L. (2017). Framing education: cautionary tales from the USA of the relationship between education studies and teacher education. In Whitty, G. and Furlong (eds.) *Knowledge and the study of education: an international exploration* (pp. 161-187). Didcot: Symposium.

Schriewer, J. (2012). Deweyan Thought Refracted Through Time and Space: Studies on the Trans-Continental Dissemination and Culture-Specific Re-Contextualization of Educational Knowledge. In Schriewer, J. & Bruno-Jofré, R. C. (Eds.). *The global reception of John Dewey's thought: Multiple refraction through time and space* (pp. 1-21). New York, USA: Routledge.

Schriewer, J. (2017). Between the philosophy of self-cultivation and empirical research: educational studies in Germany. In Whitty, G. and J. Furlong (eds.), *Knowledge and the study of education: an international exploration* (pp. 75-99). Didcot: Symposium.

Shalem, Y. (2017). Scripted lesson plans - What is visible and invisible in visible pedagogy. In Barrett, B., Hoadley, U., and Morgan, J. (Eds.) *Knowledge, Curriculum and Equity: Social realist perspectives*. London: Routledge.

Terhart, E. (2017). Interdisciplinary research on education and its disciplines: Processes of change and lines of conflict in unstable academic expert cultures: Germany as an example, *European Educational Research Journal*, 16 (6), 921-936.

Westbury, S. Hopmann, & K. Riquarts (Eds.) (2000). *Teaching as a reflective practice: The German Didaktik tradition*. Mahwah, NJ: Erlbaum.

Whitty, G. (2014) Recent developments in teacher training and their consequences for the 'University Project' in education. *Oxford Review of Education*, 40 (4), 466–481.

Young, M. and Muller, J. (2013). On the powers of powerful knowledge. *Review of Education*, 1 (3), 229-250.

Young, M. and Muller, J. (2016) *Curriculum and the Specialization of Knowledge*. Abingdon: Routledge.

Zierer, K. and Seel, N.M. (2012). General didactics and instructional design: Eyes like twins :A transatlantic dialogue about similarities and differences. about the past and the future of two sciences of learning and teaching. *SpringerPlus*, 1 (15), 2-22.