World-class Teachers, World-class Education

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Chapter 9: Realistic clinical practice: proposing an enquiry-based pedagogy for teacher education

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There is a broad international consensus that quality of teaching is fundamental for the development of high-quality schools and educational systems. In this chapter I will argue that teacher education as a sector, particularly in England, would be strengthened considerably by adopting an explicit pedagogy. The meaning of the term 'pedagogy' varies considerably between languages and cultures and for the purposes of this chapter and locating my argument primarily within England, I will adopt Alexander's definition:

Pedagogy is the act of teaching together with its attendant discourse. It is what one needs to know, and the skills one needs to command, in order to make and justify the many different kinds of decisions of which teaching is constituted.

Alexander, 2004:11

Working within this definition, it is important to note that Alexander positions 'curriculum' as subsidiary to pedagogy but as one of its central domains.

I propose that providers of teacher education adopt and work towards implementing an explicit pedagogy for initial teacher education (ITE) based on the 'clinical practice' model but that this is adapted to become the 'realistic clinical practice' model. This proposed pedagogy for teacher education resolves some of the misunderstandings that policymakers and other stakeholders have held when applying the 'clinical practice' model to the field of teacher education.

Context

In recent times in England, the structures for ITE have been changed considerably with a shift towards a school-led system. To some varying extent, this shift is also occurring internationally, but

sometimes the claims to rapid and radical policy change say more about the fragile egos and career development ambitions of superficial and careless policymakers than they do about change in practice. Considering recent changes in England from the perspective of student teachers, then to some extent perhaps the changes might seem superficial. In this chapter, I will argue that it is more important to focus on the pedagogy for teacher education than to imagine that a change in the structure of ITE will provide a 'magic bullet' that recruits, educates and prepares new teachers to become high-quality professionals who are retained within the state school system to become lifelong professional learners and educational leaders.

One of the political reasons why the English system for ITE has been vulnerable to radical change in structure by policymakers, particularly since 2010, is that despite strong evidence from research and even from government inspectors in favour of the existing university–school partnership programmes, there was no explicit and widely held pedagogy for teacher education. This lack of an explicit pedagogy allowed a simplistic view, expressed by the then Secretary of State for Education, that teaching is simply learned by 'doing' (Gove, 2010), so that increasing the time spent by student teachers on work-based learning, observing and teaching in school, will be sufficient to increase the quality of teacher preparation. An additional issue was that the existing partnerships seemed unbalanced, at least to school-based participants, in terms of the share of resources, the share of control and the share of professional learning outcomes (Boyd, 2002). In this chapter, I am proposing adoption of an explicit pedagogy for teacher education that will help us to refocus away from concerns about changes in structure towards the primary shared purpose of all those involved in ITE, which is to develop a sufficient supply of beginners who are able to provide high-quality lessons and become professional career teachers.

Most student teachers, often currently referred to as 'trainees' in England to reflect the emphasis on work-based learning, still experience a mixture of two broad learning activities. First, they experience work-based learning through observing and supporting learning and teaching in classrooms and schools, and

second they experience formal professional development workshop sessions that introduce elements of learning theory, research evidence and professional guidance. The move towards a school-led system mainly appears to have shifted the balance of time spent on these two kinds of learning activity towards more work-based learning, although most one-year postgraduate partnership programmes already involved at least 50% of time on work-based learning. The shift to a school-led system also appears to have reduced the amount of contact time that some student teachers spend with university-based teacher educators, as they now have more of their formal sessions facilitated by school-based practitioners. A third key characteristic of teacher education within the school-led system is that it has fragmented provision into smaller local units based in schools or alliances of schools, which makes it more difficult to generalise about the nature of provision.

Having provided some context and established that adopting some kind of explicit pedagogy for teacher education would be politically useful in the future, there are four further steps in the argument presented here. First, that adopting 'clinical practice' as an explicit pedagogical approach is an ambitious but pragmatic choice for teacher education. Second, that there are weaknesses in the clinical practice model and in its interpretation by some stakeholders so that it requires some modification. Third, that it is possible to specify these required modifications and capture them by adopting the title of 'realistic clinical practice' for a proposed pedagogical approach. Fourth and finally, the practical implications are outlined for further development of school-led ITE that adopts 'realistic clinical practice' as a pedagogy, in terms of the teacher educator team, the organisation of programmes and the issue of partnership between schools and a university department.

Characteristics and weaknesses of the clinical practice model

The clinical practice model highlights clinical reasoning based on 'research evidence' (Kriewaldt & Turnidge, 2013). A clinical practice pedagogical approach recognises schools and classrooms as key sites for work-based learning through 'enactment' of the core

practices of a teacher, meaning that student teachers need to teach in order to learn to teach (Grossman, Hammerness & McDonald, 2009). A clinical practice approach therefore places high value on teacher judgement and practical wisdom and this means that as a pedagogy for teacher education, it respects the knowledge of practitioners. Such an approach focuses on the core practices of teachers; these are the high-leverage practices that are proposed as the central spine of the teacher education curriculum. High-leverage practices are those that are essential for effective teaching. Focusing on high-leverage practices means judgement and action become central: 'Such a curriculum would not settle for developing teachers' beliefs and commitments. Because the knowledge that matters most is that which is used in practice' (Ball & Forzani, 2011:19).

Student teachers are likely to value this approach because they are understandably focused on practical advice and how to survive in the classroom. A clinical practice approach, however, goes beyond 'tips for teachers' and creates a focus on children's learning by requiring student teachers to

question these core practices in depth, in order to understand 'why' they lead to learning. Enactment, in a clinical practice model, is judged by impact on learning (Hattie, 2012) and on learners (Boyd, Hymer & Lockney, 2015). This in-depth enquiry provides the depth of knowledge and professional enquiry skills required so that student teachers can judge new situations and strategies in the future and in different schools, make sound professional choices and be able to evaluate their classroom experimentation. Such professional enquiry involves critical engagement with learning theory and educational research evidence. Student teachers need to experience coherent sequences of professional enquiry built around enactment.

The clinical practice model positions teachers as researchers and it is worth noting that this proposition was articulated by Lawrence Stenhouse, based on his work with teachers leading curriculum development in UK schools more than 40 years ago (Stenhouse, 1975). In their comprehensive review of clinical practice models in teacher education, Katharine Burn and Trevor Mutton position

the Oxford Internship Scheme as an early example of a clinical practice model (McIntyre, 1980, 1997). Unfortunately some of the key principles and practical arrangements identified within this small-scale university–schools partnership were not embedded more widely in the development of the systems for teacher education across the UK, although recent developments in Scotland have adopted the model explicitly (Livingston & Shiach, 2010; Conroy, Hulme & Menter, 2013). Internationally there are well-established examples of teacher education based on a clinical practice model, although arguably the only example of a national system of teacher education and development aligned to a clinical practice model with 'teachers as researchers' is in Finland (Sahlberg, 2011). Development of teacher education in the Netherlands has contributed significantly to wider international understanding of clinical-practice-based teacher education (Hammerness van Tartwijk & Snoek, 2012) and recent developments in Australia also provide strong examples (McLean Davies et al., 2013). Development

of a range of innovative schemes in the USA led eventually to the publication of a national strategy for teacher education based on a clinical practice model (NCATE, 2010; Darling-Hammond, 2010). It is perhaps the strategic scaling up of clinical practice models across national teacher education systems that has proved a challenging next step following its establishment in innovative individual university–school partnerships.

There are some weaknesses in the way that a clinical practice model for teacher education has been understood by some observers and policymakers. A very useful overview and critique is provided by Philpott (2014), who identifies some key challenges to the adoption of the model. I am perhaps more optimistic about the possibilities for resolving the key issues. To some extent the term 'clinical practice' itself is now somewhat unhelpful because it is associated with naive assumptions about 'evidence-based' practice both in the field of medicine itself, as well as, more importantly, for our purposes in the field of teaching. A helpful way to understand the key issue is to distinguish between the field of 'medicine', in
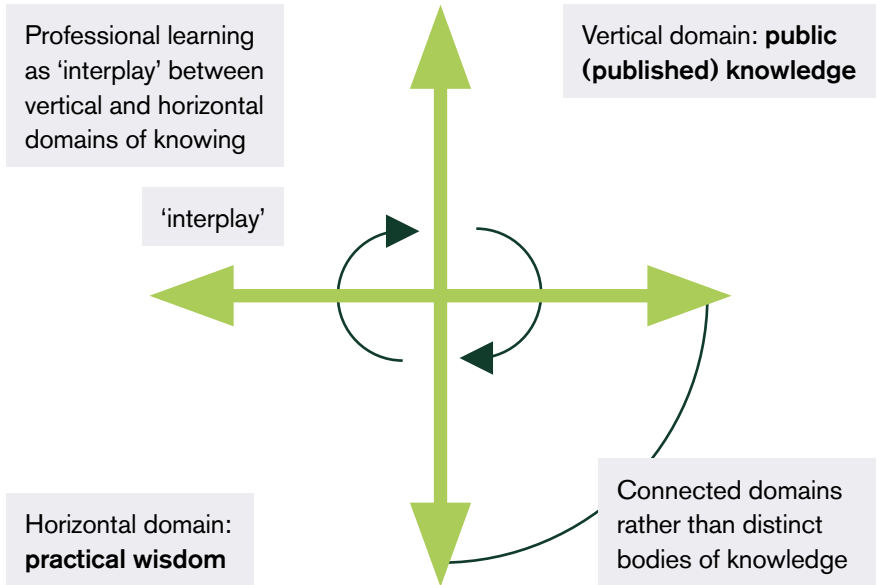
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which evidence-based practice based on good science seems a reasonable ambition, and the field of 'healthcare', which is a complex, multi-paradigm professional field in which striving towards research-informed practice is a more realistic aim. A clinical practice approach in teacher education places value on theory and research evidence, but has previously been too strongly associated with a simplistic, top-down 'evidence-based' understanding of educational research and of change in practice. This view of clinical practice places too much weight on large-scale, quasi-experimental intervention studies, and underestimates the complexity, varied contexts and relationships involved in effective education and the interdisciplinary and multi-paradigm nature of educational research. It does not capture the significance of workplace learning and teachers' practical wisdom and neglects the possibility for knowledge creation by teacher researchers in schools. In the next section I propose that a more 'realistic' clinical practice model is appropriate for the field of teaching, and by extension perhaps also for the field of healthcare.

Realistic views of teachers' professional knowledge

A strong and explicit drive to develop 'research-informed' practice is required to counter the 'evidence-based' bias within clinical practice discourses. All participants need to critically engage with this debate and have a reasonable understanding of different ways of knowing in education.

Traditional conceptualisations of top-down views of professional learning (learn theory then apply it) and bottom-up views (socialisation and apprenticeship) may both suffer from positioning themselves solely on a vertical dimension of professional knowledge (Engestrom, Engestrom & Karkkainen, 1995). This ignores the significance of the horizontal dimension of practical wisdom, the situated, socially held knowledge of practitioners about 'ways of working' within their particular workplace. The conception of 'interplay' between these two vertical and horizontal dimensions of knowledge provides a useful metaphor for teachers' professional learning and is illustrated in Figure 8.1 (Boyd, 2014; Boyd & Bloxham, 2014; Boyd, Hymer & Lockney, 2015).

Figure 8.1: Dimensions of knowledge

Professional learning as 'interplay' between vertical and horizontal domains of knowing

Vertical domain: **public (published) knowledge**

'interplay'

Horizontal domain: **practical wisdom**

Connected domains rather than distinct bodies of knowledge

Source: Boyd, Hymer & Lockney, 2015; Boyd, 2014; Boyd & Bloxham, 2014

The adoption of professional learning as 'interplay' between vertical and horizontal domains challenges teacher education programmes to devise learning activities that provide space and support for student teacher enquiry that goes beyond the scope of much current practice that emphasises 'reflection on practice'. Interplay requires student teachers to identify and critically evaluate relevant public knowledge (i.e., theoretical frameworks and bodies of research evidence) as

part of their analysis of classroom evidence of children's learning and of the impact they are having as a teacher both on learning and on learners.

In addition to consideration of the horizontal domain of teacher knowledge, it is also important that a 'realistic' clinical practice approach acknowledges the complexity of the vertical knowledge domain in the field of teaching (and for that matter in the field of medicine). Education

as a field is interdisciplinary (involving elements of philosophy, history, psychology and sociology) but it is also multi-paradigmatic. The term 'multi-paradigm' applied to the professional field of teaching or education is in contrast for example to the natural sciences, which are much easier to consider as single-paradigm disciplines. A student teacher might consider a typical classroom problem that she/he encounters, such as frequent low-level off-task 'misbehaviour' of children, from a range of different perspectives, all with their own supporting research 'evidence-base'. Also within the evidence-base there will be quantitative and qualitative research to be considered, as well as the possibility of co-creation of knowledge through practitioner research. This complex context means that for teachers or other school leaders to depend too heavily on randomised control trial evidence alone is a naive and very limiting engagement with public knowledge – and yet this is sometimes the impression that advocates of a 'clinical practice model' seem to imply. Adopting the term 'realistic' is in part a reminder of this need to move from the assumptions

suggesting that teachers might 'deliver evidence-based practice' to the approach that teachers are expected to 'develop research-informed practice'.

There are at least two additional complexities around teacher knowledge and expertise that require us to adapt a basic clinical practice model to become 'realistic' teacher education pedagogy. Teachers need to develop curriculum subject knowledge as part of their initial teacher education and of their continuing professional development. They need to develop pedagogical content knowledge, meaning how best to teach key concepts and skills within a curriculum subject discipline (Shulman, 1986). We know that enthusiasm and commitment to a curriculum subject discipline form an important element of the identity, commitment and resilience of many successful career teachers (Day & Gu, 2014). A more contested area of teacher knowledge development is that beginning teachers should develop some understanding of the wider social context in which they are working, including the community, their workplace and the relevant policy framework. Beginning

teachers need to critically consider and articulate the purposes of education (Biesta, 2010).

And so we should briefly consider the implications of this discussion of teacher knowledge. A realistic clinical practice approach to teacher education requires teacher educators who have ongoing involvement and credibility in both practical wisdom (school and classroom competence and contribution to curriculum development) and public knowledge development (scholarly and research contribution to publication). All teacher educators would need to be boundary-crossing agents between the overlapping fields of school teaching and educational research and be able to produce boundary-crossing objects (such as a professional guidance session or learning resource for student teachers that includes elements of practical wisdom and public knowledge). A realistic clinical practice approach requires a teacher educator who is an effective school classroom teacher and is able to provide classroom coaching of student teachers informed by practical wisdom within a particular school context. It also requires a teacher educator who is able to support student teacher investigation of their enactment using enquiry approaches that include critical engagement with theory, research evidence, professional guidance and policy. A few teacher educators currently manage to sustain identities and work as both expert school teacher and research-active academic, but this is rare and extremely challenging. An alternative is for student teachers to be supported by a *team* of teacher educators with varying areas and levels of expertise. This team approach is also useful because it allows for teacher educators to follow a trajectory of professional development with more or less emphasis on practical wisdom and public knowledge at different stages of their career. For school-based teacher educators, the challenges include time, access to resources and access to a research mentor. For university-based teacher educators, the challenges include time, the value placed by research audit on published outputs of collaborative practitioner research projects and access to expert school-based teachers and their classroom practice.

In this section, I have argued for the adoption of the term 'realistic' clinical practice from the perspective of current understanding of the complexity of teacher knowledge and identified the implications for teacher educator teams. The next section will support the adoption of realistic clinical practice from the related perspective of teacher education programme design.

Realistic views of professional learning sequences

There are some well-established examples of teacher education programmes informed by a clinical practice model and some important lessons have been learned, primarily that school-based and university-based teacher educators need to cooperate closely to plan and facilitate the experience of student teachers. There needs to be a carefully planned sequence of enquiry-based learning activities for beginning teachers so that they are not overwhelmed by the complexity of the role. The student teachers need a regular sequence of opportunities for enactment in the classroom but also for stepping back to analyse their experiences

and develop their practice in relation to public knowledge (Burn & Mutton, 2013; McIntyre, 1997; Brouwer & Korthagen, 2005). Each professional enquiry sequence might involve negotiation of a focus, planning (informed by critical engagement), enactment (supported by coaching), collection of evidence, analysis (informed by critical engagement), and action-planning for further enactment. Professional enquiry sequences will often overlap or run in parallel, but the student must experience them as distinctive but interrelated. Such a programme should build around the agreed core practices of a teacher, which would need to be agreed by teacher educators across a teacher training partnership (Grossman, Hammerness & McDonald, 2009; Ball & Forzani, 2009, 2010). It is important that these core practices are learned through enactment within specific curriculum subject areas. 'It may be that sequencing the study of disciplinary knowledge with the study of learning and teaching may be more fruitful than treating these subjects separately' (Ball & Forzani, 2010:11). Within the framework of core practices, however, a programme needs to be

sufficiently flexible to allow beginning teachers to bring their own experiences of enactment to the table. One element of the rationale for adopting the term 'realistic' clinical practice is to also allow some element of student teacher choice of focus at different times on the programme (Korthagen, 2011).

A programme using realistic clinical practice as a pedagogy for teacher education needs to provide graded sequences of learning activity involving student teachers in enactment in their school and classroom with associated time for collaborative enquiry work within a 'third space' that allows explicit and critical consideration of tensions between practical wisdom and public knowledge (Jackson & Burch, 2016). The development across the teacher educator team and student teachers of a common language for discussion of issues and a shared understanding of a realistic clinical practice approach need to be developed. It is important to note that within such a programme, the teacher educator team and the student teachers should not expect any kind of easy consensus to be reached and that all ideas will be evaluated against criteria valued in both school and university contexts (McIntyre, 1990:32). School-based programmes offer considerable opportunities for such learning sequences to be constructed, excepting that the busy and child-focused intensity of work means that other priorities may take precedence (Boyd & Tibke, 2012). There is limited research evidence at this early stage of policy implementation, but the fragmentation of school-led teacher education in England (small numbers in student groups, multiple providers and multiple geographical sites) appears to create considerable practical and perhaps funding challenges that need to be resolved.

An advantage of school-led ITE is that it more clearly locates student teachers within a particular school setting so that their informal work-based learning is more likely to include becoming a recognised member of a teaching team and of a professional learning community. This has advantages for schools because they more clearly experience the continuity of gaining a member of staff as a resource, even if the student teacher carries an entitlement to support and training. The common university-

based programme approach of sending student teachers on block placements of several weeks is potentially more disruptive for schools and may be experienced by them more as a cost rather than as any kind of benefit. Block placements in school do not lend themselves to a realistic clinical practice approach because the student teacher does not experience coherent sequences of enactment with built-in time for enquiry. Perhaps a compromise would be for students to be paired as a job-share, with students A and B based in a school. On a one-year programme, they would start in school on day one of the school year as a job-share with the position of untrained teaching assistant. As they progress through the programme, their status would become trained teaching assistant, and subsequently that of unqualified teacher. Student A would be working in school on Mondays, Tuesdays and Wednesdays, with Thursdays and Fridays as time for their formal sessions in a third space. Student B would also work in school on Wednesdays, allowing paired collaborative working and handover, and would then work in the school on Thursdays and Fridays. An arrangement of this kind

allows the school to experience an additional trainee member of staff and for student teachers to experience the sequences of enactment and enquiry required by a realistic clinical practice pedagogical approach. This kind of arrangement aligns with thinking around higher level apprenticeships.

The reality of work-based learning for student teachers is that the culture and routines of workplaces vary considerably and schools responsible for teacher education need to develop expansive workplace learning environments in which the everyday informal learning of teachers is valued and nurtured alongside the learning of pupils (Hodkinson & Hodkinson, 2005). Whatever a programme offers in terms of sophisticated planned sequences of learning activity, it will also need to respond to the individual and collective experiences of the student teachers as adult learners and to the variation in schools as workplaces. This need for flexibility, recognised by Korthagen (2011), is an additional justification for adopting the term 'realistic' clinical practice to capture a pedagogical approach that acknowledges the variation

in workplace experiences and individual needs of student teachers.

No matter what solution to timing and the creation of third space is adopted by an initial teacher education programme, the key issue is for the student teacher to experience supported learning activity sequences of enactment and enquiry, with some allowance for the inclusion of student teacher selected focus, leading to overall progression.

Conclusion

The adoption of a 'realistic clinical practice' approach offers an explicit pedagogy for teacher education that focuses on the interplay between practical wisdom and public knowledge, that recognises the value of workplace learning, but prepares student teachers to contribute to that during their career through the development of research-informed practice. A 'realistic clinical practice' approach offers a feasible strategic direction for school-led initial teacher education. The practical implications of such an approach suggest that continued forms of equitable partnership by schools with university departments are likely to be essential if teacher educators

are to be supported in their own continuing professional development and if programmes are to achieve sustained high quality.

In making this proposal for explicit adoption of 'realistic clinical practice', I would argue that the next time a 'wannabe radical' minister for education decides to rearrange the deckchairs in teacher education, the sector will be in a stronger political position to steer the enthusiasm of the minister in more useful and meaningful directions by having a widely accepted and clearly labelled, through still dynamic and contested, pedagogy for teacher education. Meanwhile, in England as elsewhere, those of us with a long-term commitment to the sector will focus on strengthening the school-led system to ensure that it is not part of a dumbing-down of teacher education and avoids contributing to the reduction of the crucial and challenging role of professional school teacher to become a technician who merely 'delivers' the curriculum in compliance with centrally controlled 'evidence-based' guidance.

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