

Steadman, Sarah (2018) Defining practice: exploring the meaning of practice in the process of learning to teach. Teacher Education Advancement Network Journal, 10 (1). pp. 3-9.

Downloaded from: http://insight.cumbria.ac.uk/id/eprint/3869/

Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available here) for educational and not-for-profit activities

provided that

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
 - a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

You may not

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

The full policy can be found here.

Alternatively contact the University of Cumbria Repository Editor by emailing insight@cumbria.ac.uk.

STEADMAN: DEFINING PRACTICE: EXPLORING THE MEANING OF PRACTICE IN THE PROCESS OF LEARNING TO TEACH

Defining Practice: Exploring the meaning of practice in the process of learning to teach

Teacher Education Advancement
Network Journal
Copyright © 2018
University of Cumbria
Vol 10(1) pages 3-9

Sarah Steadman

King's College, London

Abstract

This paper explores the meaning of practice in relation to learning to teach. There are many different definitions of practice and it is intended that by reflecting on these teacher educators can come some way to defining what practice means for beginning teachers and in their programmes. Differing definitions of practice in relation to learning to teach are discussed, namely, practice as distinct from theory; practise as a verb; core and high leverage practices and practice as a social construct. Drawing on a range of published research from both the UK and the US, the paper seeks to make delineations between the differing definitions and draws a distinction between teacher training and teacher education. Finally, it is suggested that it is the transformative and inherently social definition of practice that is most helpful and productive for teacher educators, policy makers and beginning teachers in the development of resilient and adaptive teaching professionals.

Key words

Practice; initial teacher education; professional; social; adaptive expertise; transformative.

Introduction

Defining practice is a challenge. The term is loaded with historical, societal, philosophical and cultural connotations and becomes even more complex when related to teacher education. However, the centrality of the definition to the work of teacher educators and the development of teachers makes its exploration both necessary and illuminating. Three approaches to defining practice in initial teacher education are considered here: the separation of theory and practice; the reform of teacher education around core practices, and a social definition of practice that embraces the emotional and transformative nature of teaching and learning to teach. It is suggested that the last of these three definitions is most helpful in the cultivation of resilient and adaptive teaching professionals.

The separation of theory and practice

I shall assume without argument that adequate professional instruction of teachers is not exclusively theoretical, but involves a certain amount of practical work.

The Relation of Theory to Practice in Education by John Dewey (1904:9).

Dewey's words still resonate today and relate with consummate ease to the field of initial teacher education. As he notes, there is a divide between the theory and the practice, what he terms the apprenticeship and the laboratory model. National teacher education policy in the UK has seen an increased emphasis on the practical, from the neoconservative thinking of policies in the 1990s (Furlong and Maynard, 1995) to the reforms of the 2010-15 Coalition Government. The political discourse around initial teacher education has centred on the perceived separation of theoretical instruction in university-led programmes from a more practical application in schools (Gove 2010). Little value has been placed on the role of universities, with preference given to an 'on the job' (Grossman 1990) approach to the training of teachers that prioritises school-led systems. A recent report for Manchester Metropolitan University details the reconfiguration of teacher training in

Citation

Steadman, S. (2018) 'Defining practice: exploring the meaning of practice in the process of learning to teach', *TEAN Journal*, 10(1), pp. 3-9.

England following the introduction of School Direct and looks at the impact on university and school sites, concluding:

The prevailing ideology positions teaching as essentially a craft rather than an intellectual activity, meaning that teacher training is viewed as an apprenticeship, best located in the workplace

(Brown et al., 2016:11).

The emphasis on practical knowledge is also highlighted in a report commissioned by the Cambridge Primary Review Trust which considers research and other evidence in relation to initial Primary teacher education. The report finds that in the move towards schools as key initial teacher training sites, 'academic rigour has been reduced and practical knowledge of how to teach, gained through workplace immersion, has become more dominant.' (McNamara, Murray and Phillips 2017:29) The move towards the acquisition of practical knowledge in the workplace has significance for the development of adaptive expertise. The issue with practical knowledge gained through workplace submission is that it is localised. Its situated nature may lead to problems with transferability of skills, leaving developing teachers adept in local pedagogy but without the necessary theoretical insight and emotional experience to apply their skills in different settings. This has implications for both recruitment and retention, key factors in the UK teacher market.

Defending the universities

The case for teacher education to be housed in the university setting is made with passion by Hodgson (2014) in his analysis of the online survey of professional opinion conducted by NATE (National Association for the Teaching of English) in 2012-13. Although the research here is relatively small and self-selecting, it is indicative of the attitudes towards school-led provision at a point in time. The survey's request for comments to be provided alongside the quantitative data leads to a plethora of responses from practitioners, including frequent references to schools' lack of capacity' and the loss of the 'space to reflect' that the universities provide for trainees. The conclusions drawn from the survey regarding the impact that school-led provision would have on the quality of teacher education are damning, ending with a historical analogy, 'It is hard to resist the conclusion that the trainee will in fact be a 21st century version of the Victorian pupil teacher.' (Hodgson, 2014:24). It should be noted that only 14.7% of respondents identified as students or NQTs in their first year, and perhaps a more negative response from experienced teacher educators and practitioners faced with a challenge to the status quo is not wholly surprising. The survey is useful in capturing the mood of the profession at a moment in time and it cannot be dismissed that 665 of the 730 respondents (91.5%) believed that the quality of teacher education would suffer as a result of the substantial movement to a schoolbased system. However, Gorard's quantitative analysis of student satisfaction based on the survey of NQTs conducted by the DfE in 2015 did not reveal a fundamental difference: 'In the two main routes of school-led and HEI-led there is almost as much variability within each route as between them' (Gorard, 2016:16).

Seeing the perspectives of Higher Education Institutions and schools as 'fundamentally different', Furlong (2000) asserts that the university tutor is vital in offering an alternative perspective to the school-based setting. This view is supported by McIntyre and Jones (2014), whose study of beginning English teachers on PGCE courses found that the role of the visiting university tutor aided students in the engagement with 'lived space', as an alternative to the conceived spaces of placements which are viewed as more prescriptive. The university becomes a place of reflection where students can explore their ideologies about English teaching and the visiting tutor becomes the link back to that space. Space, like time, is an essential element in the development of teachers. Drawing on the conceptualisation of 'third space' by Gutierrez, Norton-Meier and Drake's (2010) project sought to understand the interactions of preservice teachers in the overlapping spaces provided by homes, universities, schools and communities. Their findings point to an understanding of space that

transcends the physicality of the library and seeks to address issues around the formation of a professional identity. This view is supported by Zeichner et al. (2015:124) who describe a 'critical time' for teacher education, with a need for the utilisation of 'hybrid' spaces, where schools, universities and communities can work together to support teacher learning outside of traditional hierarchies. Although conducted in the US, these findings resonate in the UK setting where utilisation of the overlapping spaces of school and university could be exploited further.

Although the American context is different from the UK, there are similarities in the move towards school-based practice and the subsequent impact on teacher experience. The differing contexts serve to highlight the global nature of the debate around the practice of learning to teach. In their discussion of current US education, Zeichner and Bier (2015) found school-based programmes to be lacking in the vision to conceptualise the profession as a whole. Citing Ellis (2010), they bemoan the marginalisation of the universities in favour of a move towards school-based teacher education that can offer a restricted view of experience, a view shared by Gatti (2016:82) who comments: '...more immersion in schools and more time with students and colleagues do not automatically translate to productive teacher learning.' Recognising the inevitable variation in school experiences in the UK, Ellis addresses the nature of that experience through a cultural-historical lens, emphasising the agency of the initial teacher and questioning a view of experience that limits their role: '...the individual beginning teacher seems to pass through the school setting (being influenced by it) rather than being constituted by acting on it, and, indeed, in part shaping it' (Ellis, 2010:108). Rejecting the 'self-evident' advantages of school-based experience described by Hagger and McIntyre (1996), Ellis's call for experience to become the 'object of inquiry' by schools, universities and prospective teachers addresses both the nature of experience and the agency of the beginning teachers themselves.

Lampert (2010) questions the relevance to the educational landscape of a definition of practice as separate from theory and, indeed, its dichotomous simplicity is not that helpful when looking at how initial teacher education can develop. However, it cannot be denied that a separation of theory and practice has been present in the rhetoric and policies of initial teacher education in England. The 'major expansion' of school-centred initial teacher training promised in the White Paper 'Educational Excellence Everywhere' (DfE, 2016) points to an emphasis on the practical and an affinity with an apprentice model of learning. There has been a recent softening of the political rhetoric around school-led versus university-led teacher education. Speaking in March 2017, Ben Ramm, then Head of Supply Policy and System Reform rebutted the suggestion that the DfE focused exclusively on school-led teacher training in favour of university programmes, speaking instead of a 'pragmatic' approach (Ward and Hazell, 2017). This need for pragmatism was recognised by Dewey over 100 years ago and it is important that teacher education embraces the best of both theoretical reflection and practical application in findings ways for universities and schools to work together in mutually supportive spaces.

Reforming practice – the doing of education

In contrast to a theoretical or reflective approach to teacher education, Deborah Loewenberg Ball defines education practice as, 'the doing of education.' (Jesse 2016). This definition turns practice into practise, emphasising action. This thinking is prevalent in the research and work of some teacher educators in the US, but also has relevance for the UK environment. The dominance of practical skills is increasingly part of the educational debate, demonstrated in the blogs from Harry Fletcher-Wood, Associate Dean at the Institute for Teaching:

Teachers can discuss student learning until the cows come home, with insight and erudition, but it's a waste of time unless they practise behaving differently in the classroom: insight without action is indulgence...All teacher training should be practise-based

(Fletcher-Wood, 2017).

Ball joins Grossman et al (2009) in advocating the reform of the organisation of initial teacher education around a core set of practices for teaching. To effectively identify and master these core practices, it is suggested that it is necessary to 'decompose' teaching into its constituent elements. This decomposition of practice allows teacher educators to identify the essential tasks, or 'high leverage practices', for beginning teachers. (Ball and Forzani, 2009). Once identified, the skills are rehearsed in non-complex environments or approximations of practice, where advice and guidance can be offered in 'laboratory-like settings' Grossman et al. (2009: 284). Taken to its furthest extreme, the laboratory setting could become a virtual one, a model that is being explored in the US through the use of online interactions with avatars. Various platforms exist, including SimSchool and Teach Live. SimSchool claims that students can create and practice teach any type of learning profile they might encounter in the classroom. However, these approximations of practice cannot address such variables as prior relationships with the teacher and peer interaction (Marquis 2012), and exclude the relational and social elements of the classroom. Ball claims that rehearsal away from the classroom allows student teachers to 'develop or improve basic instructional skill without putting actual children at risk.' (Arbaugh et al. 2015:442). This emphasis on safety denies the essentially relational nature of teaching and the need for context specific knowledge. Ultimately, approximations of practice support a superficial definition of practice that focuses on the acquisition of skills rather than on the development of resilience and adaptive expertise.

Alongside the implementation of core practices, Grossman (in Arbaugh et al. 2015) advocates a longer teacher training period over 3-5 years, a view that has also been voiced in the UK by Orchard and Winch (2015). However, Grossman situates this training period entirely in the practice-based environment. This suggested movement to a wholly practice-based setting offers a different vision to that explored by Grossman in her earlier work 'The Making of a Teacher' (1990), where the importance of the acquisition of instructional strategies is also combined with the development of concepts about the purpose of teaching and a theoretical understanding of the curriculum through subject-specific coursework. In the case of Vanessa, one of the student teachers presented as a case study, collegial interaction proved to be very important, 'She felt strongly that much of her learning occurred through her interactions with peers during her teacher education program, in which sharing and collegiality were encouraged.' (Grossman, 1990:75). There is an emphasis here on reflection and internalised learning, reminiscent of Dewey's distinction between the inner and external attention of children (Dewey, 1904:44). Hasty movement to the practical application of classroom skills could lead to a focus on behaviour management by necessity, hindering the developing understanding of how and why children learn.

The identification of core practices for teaching also relates to the concept of deliberate practice, a principle expounded by Ericsson (1993). This model has found favour in England with some providers. Chief Executive of the Institute for Teaching and former Teach First director Matt Hood has described teaching as a performance profession where techniques are honed in rehearsal rather than tried out 'live' in front of a class. Using the analogy of coached fitness training, he describes moving through deliberate practice to strategy to final performance (*Four Thought*, 2016). This mirrors the thinking of US educator Doug Lemov who is clear in his definition of practice, 'In using the word "practice", I am referring to the word in a limited and (to some) mundane sense. Practice is a time when colleagues meet together and participate in exercises that encode core skills.' (Lemov, 2013:52). The same issues of relational and social paucity apply as exercises replace interactions with students in specific contexts.

A linear journey?

A definition of practice that focuses on action can place the learning of beginning teachers on a linear pathway, moving from novice to expert as they accumulate practical knowledge. Linear progression

has been explored by Furlong and Maynard (1995), whose research into PGCE primary students considers the nature of professional knowledge. They map the trajectory of the beginning teacher through five stages, calling them in turn: early idealism; personal survival; dealing with difficulties; hitting a plateau and moving on. Burn et al. (2015) saw evidence of these stages in their research project studying Developing Expertise of Beginning Teachers (the DEBT project), which saw the tracking of 24 teachers over a three-year period, all drawn from PGCE courses jointly planned with universities and schools. Although they did recognise these stages in the development of their trainees, they sound a note of caution around the linear trajectory, noting that 'few trainees actually work though them in this neatly ordered sequence'. Furlong and Maynard (1996) also recognise that progress will not necessarily be smooth, but there is a mapping of a journey that accords with an emphasis on practise as a verb and a belief that progression is at least partly achieved by the amount of teaching a student undertakes. This staged model is scrutinised by Ellis (2010) in his analysis of the Oxford Internship Scheme, which includes a questioning of the linear models of progression through the training year, models that do not sufficiently address the recursive nature of learning.

Research conducted in the US is illuminating to issues of teacher development. Exploring the experience of two novice teachers from different US programmes that have similarities with the school-based and university-based approaches in the UK, Gatti (2016) found the pathway of learning to teach to be 'a non-linear, recursive, and messy process' with students accessing the learning resources at different points in their development. In the case of one of her participants, Sam, it is engagement with the relational aspects of teaching that prompts a deeper understanding of her own practice as she observes her interactions with students on video. Her learning to teach process is inextricably linked to her learning to know her students and developing the confidence to 'make herself be known by and vulnerable with her students.' (Gatti 2016:78). It is not Sam's movement through a series of practised encounters over time that impacts on her development, nor her passage through a linear process, but her engagement with the relational aspects of her teaching in order to centre her own identity as a teacher.

Britzman (2003) found that concepts of time did little to clarify the meaning of learning to teach. In charting the developmental journeys of beginning teachers, Jack August and Jamie Owl, she found that 'a linear and literal sense of time could not account for the ways in which student teachers produce their identities.' (2003:249). Both the learning and the emergence of identities are non-linear and, significantly, subject to change. This thinking is also present in Ellis's exploration of complex chronologies in the development of three English beginning teachers in the UK, where 'the past is remade and reinterpreted through the present with a view towards a future identity (becoming an English teacher).' (Ellis, 2009:151). Inherent in the linear pathway or staged progression is an assumption of fixed identity and views with learning consolidated at each stage. However, as Britzman advocates, the very act of teaching affects and changes those who become teachers and the 'reshaping' is ongoing, '...once student teachers actually begin teaching, the visions of practice with which they entered are continually being reworked and reinvented.' (Britzman, 2003:73). Teaching, like learning, is transformative.

The need for uncertainty

Defining the practice of learning to teach through identified core practices or instructional products is problematic. This is not new; Dewey recognised the problem of approximations of practice that don't directly involve children:

Most "practice schools" are a compromise. In theory they approximate ordinary conditions. As a matter of fact, the "best interests of the children" are so safeguarded and supervised that the situation approaches learning to swim without going *too* near the water

(Dewey, 1904:12).

Learning involves risks and the management of that risk is the responsibility of teachers who respond to the specific social context and needs of their students. The separation of practice from context is, therefore, reductive. Zeichner (2012) warns of the danger of 'narrowing the role of teachers to that of technicians', a view shared by Orchard and Winch (2015) in their definition of teachers as professionals rather than 'craftworkers' or 'executive technicians'. A definition of practice that is built around core practices and rehearsal also brings with it an implication of certainty, where any uncertainty undermines the teacher's authority (Britzman, 2003). This was observed by Hinchion and Hall (2015) in their ethnography of 4-year education student, Ciara. Her experience of 'pangs of unease' before commencing her course highlight her preconceived ideas of teaching based on a set of practices:

I had thought that my teacher training would consist of learning the English Course and been given lesson plans. I don't know where this perception of teacher training involving a sort of teacher handbook came from but it was a concept I remember I felt quite strongly about. I started to question my ability to become a teacher

(Hinchion and Hall, 2015: 425).

Ciara's comment highlights both the relevance of her personal biography and her initial belief in the cultural myth that the teacher is the expert (Britzman, 2003), tasked with the transmission of knowledge to the students in her care. What Ciara does not recognise at the start of her programme is the impact that emotion and relationships will have on her development as a teacher. Part of the problem with habitual practice is that much of what happens in classrooms and staffrooms is based on interactions and social engagement which, by its very nature, will not be habitual.

The education of lifelong professionals

There is an important distinction to be made between teacher training and teacher education. There is a finite simplicity to the notion of training, with the suggestion of an endpoint. As Crawford (2017) comments, 'the training route is very seductive; it offers a common-sense argument that points to what populist rhetoric assumes are the skills that teachers need.' This training model has affinity with the view of the teacher as craftworker. There is a neatness in its focus on skills acquisition but it does little to address the emotional and social nature of teaching. Teacher education, in contrast, suggests the development of theory embedded practice and the ongoing process of learning both about teaching and self-identity as a teacher.

Successful teaching and learning is, by definition, transformative with the intention of enacting change. Students are impacted by education, as are those who are doing the teaching. Hinchion and Hall (2015) highlight the emotionality, seeing the learning of teaching, like teaching itself, as a collaborative and social process, with beginning teachers engaging with students, mentors, lecturers, parents and with themselves as they construct their teaching identities. Beginning teachers are 'part learner, part teacher' (Stevens et al. 2006), a vulnerable position but one that by necessity involves interaction with actual students in actual classrooms. Britzman (2003) terms the phrase *student teacher* oxymoronic and the tension between learner and teacher is apparent as she charts Jack August's move from an initial rejection of educational theory to a contradictory desire for theoretical guidance. August's reflection on his own learning is a source of struggle throughout his story, fuelled by his ongoing belief in the cultural myth that "real" teachers are self-made.' As Britzman comments, 'This myth shut out the social basis of teaching as well as thwarted his understanding of how personal development is an effect of social forces and interactions.' (Britzman, 2003:173).

The beginning teacher is often presented as a lone figure, taking on the tumultuous task of learning to teach as an individual. Entry into the teaching practice school is solitary and full of unanswered questions. However, in concluding her exploration of definitions of practice, Lampert (2010) returns to the relational aspects of classroom teaching, a view shared by Grossman and McDonald (2008:187) who supplement their assertion of core practices with the caveat, 'both researchers and teacher educators need to take the relational aspects of teaching practice more seriously'. Relations are not limited to between teacher and student, but are also inherent in the social professionalism of teachers. In their exploration of the acquisition of pedagogical content knowledge (PCK) in two science departments, McNicholl et al. (2013) consider the significance of the departmental team room as 'shared congregational space', utilised by both beginning and experienced teachers. They found that PCK was not just acquired and held by the individual beginning teacher but was the 'product of a social process and as such was shared, distributed and held across people, material artefacts and social settings' (McNicholl et al., 2013:168). There is a nod here towards communities of practice and a recognition that the development of knowledge emerges from social interaction in a shared professional space.

In the making of the teacher, there is no endpoint of perfection at the end of a linear pathway or on completion of an apprenticeship. The practice of learning to teach is an uneven and incomplete process, 'practice does not make perfect; practice makes practice.' (Hinchion and Hall, 2015:421). But practice is also personal and impossible to define within a set of core practices or instructional tips that can be applied by every teacher in any context. There is a need to address the institutional biography of beginning teachers as their practice is influenced by their own experiences and prior knowledge. As Furlong (2000) notes, 'No student teacher...enters the classroom as a complete novice.' Prospective teachers have experience of teachers and teaching but not of the emotional journey of becoming a teacher (Britzman, 1986) and recognition of the need to support this emotional transformation is important for teacher educators. Beginning teachers also have a role in contributing to and reshaping the settings in which they are working. As Ellis (2010:112) comments, 'school-based teacher education also needs to recognise and plan for the agency of beginning teachers in engaging with the social systems within which they are working'. Definitions of practice that are not focused on the individual student teacher within the social context of their learning may be seen to have a neatness that does not encompass the 'messiness' (Britzman, 2003, Gatti, 2016) of learning to teach. Equally, definitions that reduce teaching to a set of core practices that can be rehearsed away from the classroom detract both from the central relational aspects of the profession and the role beginning teachers have in contributing to and reshaping the settings in which they learn. Embracing a social and transformative definition of practice also means embracing the need to do things differently. The movement away from the binary of school-led and university-led provision brings opportunities for providers to adopt new and innovative models of teacher education which, in the words of Ellis and McNicholl (2015:152) focus on 'transforming not reforming or defending teacher education as it is.' Initiatives such as the establishment of The Chartered College for Teaching and the call for a profession-led approach to teacher education from the Teacher Education Exchange highlight the significance of teachers as part of an educated and educating professional body and invite new models for teacher education of new teachers.

Conclusion

Grappling with the definitions of practice is directly relevant to initial teacher education, with teacher educators identifying and reflecting on both the content and methodology of their programmes as they prepare future professionals. The market is crowded, with new providers such as The Institute for Teaching setting up stall. There is, however, an urgency. Latest figures show a 6% rise in the number of postgraduate trainees needed to meet demand (DfE, 2017). Couple this with issues of

retention and resilience and we have a potential crisis in teacher supply. The development of the lifelong professional is central to the retention of teachers. There is a danger that the reduction of practice to rehearsal and approximations of practice will lead to a lack of adaptive professionalism among teachers, with graduates entering the field as expert technicians without the necessary transferable knowledge and skills to cope in a variety of contexts. The Teacher Education Exchange pamphlet Teacher Development 3.0 (2017) warns against the quick fix approach: 'Some of the more 'reform'-minded schools and school leaders take an approach to teacher development that can be characterised as 'recruit – burn out – replace'. This model detracts from the view of teaching as a lifelong profession and there is certainly statistical evidence to suggest that not all teachers are staying for the long haul. NFER research shows the proportion of teachers leaving for reasons other than retirement increased from 6% in 2011 to 8% in 2015 with 10% of the most engaged teachers considering leaving each year. (Willis, 2016). Many schools are seeing the demographic of teaching staff skewed towards younger and less experienced teachers, who are also cheaper – significant in these times of budget constraints.

Ultimately, if we are to make teaching an attractive profession that does not inevitably lead to burnout, we need to look beyond narrow definitions of practice and a quick fix approach to skills acquisition. As Dewey warned in 1904, 'Immediate skill may be got at the cost of power to go on growing' (1904:15). His words are just as relevant today in the development of lifelong professionals. For teacher education, the status quo is changing. Traditional university-led models of practice are no longer the default position, exemplified by the recently published Good Teacher Training Guide (Smithers and Bungey, 2017), which placed only two universities in its 'top ten' providers on a league table dominated by school-centred training. Equally, the instructional 'top tips' agenda in which the definition of practice is reduced to the technical process of teaching threatens the development of socially and culturally aware professionals equipped with the adaptive expertise to survive within a demanding profession. There is a need, therefore, to explore new and innovative models of teacher education that recognise the transformative nature of teaching and embrace an expansive notion of practice that acknowledges the centrality of social relationships, the individuality of the learning process and the ongoing nature of learning. In the making of teachers, the focus should be on the practice of educating professionals rather than the training of practitioners.

References

- Arbaugh, F., Ball, D. L., Grossman, P., Heller, D. E. and Monk, D. (2015) 'Deans' Corner: Views on the State of Teacher Education in 2015', *Journal of Teacher Education*, 66(5), pp.435-445.
- Ball, L. D. and Forzani, F. M. (2009) 'The Work of Teaching and the Challenge for Teacher Education', Journal of Teacher Education, 60(5), pp. 497-511.
- Brown, T., Rowley, H. and Smith, K. (2016) The beginnings of school led teacher training: New challenges for university teacher education: School Direct Research Report. Manchester, UK: Manchester Metropolitan University.
- Britzman, D. P. (1986) 'Cultural Myths in the Making of a Teacher: Biography and Social Structure in Teacher Education,' *Harvard Educational Review*, 56(4), pp. 442-456.
- Britzman, D. P. (2003) Practice makes practice a critical study of learning to teach (revised edition). Albany State: University of New York.
- Burn, K., Hagger, H. and Mutton, T. (2015) *Beginning Teachers' Learning Making experience count.*Plymouth: Critical Publishing.
- Crawford, K. (2017) Conclusion, In Bamber, P. M. and Moore, J. C. *Teacher Education in Challenging Times: Lessons for professionalism, partnership and practice.* Oxon, Routledge.
- Dewey, J. (1904) The relation of theory to practice in the education of teachers, in Third Year book of the National Society for the Scientific Study of Education. Chicago: University of Chicago Press. pp. 09-30.
- DfE (2016) Educational Excellence Everywhere. London: DfE.

- DfE (2017) Postgraduate Initial Teacher Training (ITT) places and the Teacher Supply Model (TSM). London: DfE.
- Ellis, V. (2009) Subject Knowledge and Teacher Education. London: Continuum.
- Ellis, V. (2010) 'Impoverishing experience: the problem of teacher education in England', *Journal of Education for Teaching*, 36(1), pp.105-120.
- Ellis, V. and McNicholl, J. (2015) *Transforming teacher education: reconfiguring the academic work.*London: Bloomsbury Academic, an imprint of Bloomsbury Publishing Plc.
- Ericsson, K. A., Krampe, T.H. and Tesch-Romer, C. (1993) 'The Role of Deliberate Practice in the Acquisition of Expert Performance', *Psychological Review*, 100(3), pp.363-406.
- Fletcher-Wood, H. (2017) Why good professional development still fails. Available at: https://improvingteaching.co.uk/2017/03/12/why-good-professional-development-still-fails/ (Accessed: 12 July 2017)
- Four Thought (2016) BBC Radio 4, 21 December.
 - Available at: http://www.bbc.co.uk/programmes/b0858qyh (Accessed: 12.7.17)
- Furlong, J. (2000) 'School Mentors and University Tutors: Lesson form the English Experiment', *Theory into Practice*, 39(1), pp. 12-19.
- Furlong, J. and Maynard, T. (1995) *Mentoring Student Teachers: The Growth of Professional Knowledge*. London: Routledge.
- Gatti, L. (2016) Towards a Framework of Resources for Learning to Teach: Rethinking US Teacher Preparation. New York: Palgrave McMillan.
- Gorard, S. (2016) 'How prepared do newly-qualified teachers feel? Differences between routes and settings', *Journal of Education for Teaching*, 43(1), pp.1-17.
- Gove, M. (2010) Michael Gove Speech to Westminster Academy, 6th September 2010. http://www.education.gov.uk/inthenews/speeches/a0064281/michael-gove-to-westminster-academy (Accessed: 15 May 2017).
- Grossman, P. (1990). The Making of a Teacher. New York: Teachers College Press.
- Grossman, P., Hammerness, K. and McDonald, M. (2009) 'Redefining teaching, re-imagining teacher education', *Teachers and Teaching, Theory and Practice*, 15(2), pp.273-289.
- Hinchion, C. and Hall, K. (2015) 'The uncertainty and fragility of learning to teach: a Britzmanian lens on a student teacher story', *Cambridge Journal of Education*, 46(4), pp.417-433.
- Hodgson, J. (2014) 'Surveying the wreckage: the professional response to changes to initial teacher training in the UK', *English in Education*, 48(1), pp. 7-25.
- Jesse, D. (2016) 'University of Michigan education school dean stepping down', *Detroit Free Press*, 19
 June. Available at: http://www.freep.com/story/news/local/michigan/2016/06/18/deborah-loewenberg-ball-michigan/86034340/ (Accessed: 15.5.17)
- Lampert, M. (2010) 'Learning Teaching in, from, and for Practice: What Do We Mean?' *Journal of Teacher Education*, 61(1-2), pp.21-34.
- Lemov, D. (2013) From 'Professional' to 'Practice': Getting Better at Getting Better. Pathway to Success: The Wisconsin Policy Research Institute
- Marquis, J. (2012) No Children Were Harmed in the Making of This Teacher. Available at: http://www.onlineuniversities.com/blog/2012/01/no-children-were-harmed-in-the-making-of-this-teacher/ (Accessed: 15.5.17)
- McIntyre, J. and Jones, S. (2014) 'Possibility in impossibility? Working with beginning teachers of English in times of change', *English in Education*, 48(1), pp26-40
- McNamara, O., Murray, J. and Phillips, R. (2017) *Policy and Research Evidence in the 'Reform' of Primary Initial Teacher Education in England*. York: Cambridge Primary Review Trust.
- McNicholl, J., Childs, A. and Burn, K. (2013) School subject departments as sites for science teachers learning pedagogical content knowledge. *Teacher Development*, 17(2), pp155-175.
- Norton-Meier, L. and Drake, C. (2010) 'When third space is more than the library' in Ellis, V., Edwards.

 A. and Smagorinsky, P. (Eds) *Cultural-Historical Perspectives on Teacher Education and Development*. Oxon: Routledge

- Orchard, J. and Winch, C. (2015) 'What training do teachers need? Why theory is necessary to good teaching', *IMPACT Philosophical Perspectives on Education Policy*, Volume 2015, 22 (November), pp. 1–43
- Smithers, A. and Bungey, M.D. (2017) *The Good Teacher Training Guide, University of Buckingham.*Available at: https://www.buckingham.ac.uk/wp-content/uploads/2017/04/GTTG17fin.pdf
 (Accessed: 22.12.17)
- Stevens, D., Hodges, G. C., Gibbons, S., Hunt, P. and Turvey, A. (2006) 'Transformations in Learning and Teaching through Initial Teacher Education' *Literacy*, 40(2), pp97-105.
- Teacher Education Exchange (2017) *Teacher Development 3.0 Transforming the Professional Education of Teachers.* Available at: https://teachereducationexchange.com/2017/01/ (Accessed: 22.12.17.)
- Ward, H and Hazell, W. (2017) 'Ceasefire declared in lengthy war against "so-called progressive" university teacher-training departments', *Times educational supplement online*, 10 March. Available at: https://www.tes.com/news/tes-magazine/tes-magazine/has-dfe-learned-stop-worrying-and-love-blob
 - (Accessed: 22.12.17)
- Willis, C. (2016) *Is there a crisis in Teacher Supply in England?* [Keynote speech, UCET conference, November 8th]
- Zeichner, K. (2012) 'The Turn Once Again Toward Practice-Based Teacher Education', *Journal of Teacher Education*, 63(5), pp376-382.
- Zeichner, K., and Bier, M. (2015) 'Opportunities and Pitfalls in the Turn Towards Clinical Experience in US Teacher Education' in E. R. Hollins (Ed.), Rethinking field experiences in [preservice] preparation: meeting new challenges for accountability. New York: Routledge.
- Zeichner, K., Payne, K.A. and Brayko, K. (2015) 'Democratizing Teacher Education', *Journal of Teacher Education*, 66 (2) pp122-135.