Lesson Study in Initial Teacher Education

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Lesson Study in Initial Teacher Education: Principles and Practices

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Phil Wood is Reader in Education at Bishop Grosseteste University, Lincoln where he is the Programme Leader for doctoral studies. His research focusses on pedagogic and organisational change using complexity theory, process and time. He has focussed on the use of lesson study in higher education and initial teacher education.

Preface

This book results from an ongoing dialogue between three universities, each of which is dedicated to initial teacher education. They share a mission and a passion for an inquiry focus to initial teacher education, not just a standards or competency-driven view of what student-teachers should be engaged in during their preparation programme, be this undergraduate and typically four years long, or a postgraduate programme of one year. We believe that learning to teach involves much more than learning to use a repertoire of strategies and that teaching requires much more complex, context responsive and flexible expertise than can be represented in a list of discrete competences. The development of teachers' research literacy needs to be embedded in initial teacher education, with opportunities that allow student-teachers to explore the complexity of the classroom and get true glimpses of what it means to be a teacher who can respond to the needs of learners in diverse settings.

Our dialogue began over a conference meal in Gothenburg where a number of the contributors were attending the world conference of the World Association of Lesson Study (WALS) in 2013. This chance meeting has led to a number of exchange visits, collaborative projects and publication of academic work. Eventually, at the 2016 WALS conference in Exeter, the idea for this book was born. After three years of interaction and sharing of experience, this seemed like a natural next step, given our common use of lesson study in the context of initial teacher education.

Lesson study has seen a rapid growth in popularity across the world over the past two decades, since the publication in 1999 of Stigler and Hiebert's *The Teaching Gap*, leading to an expanding research base, publications and interest from educators beyond the lesson study community. This is no less true of the use of lesson study in initial teacher education. However, whilst there is an expanding literature focussing on the use of lesson study in this context, we could not identify a publication in an English medium which attempted to engage with, and discuss, the process of lesson study in initial teacher education, including some of the possible challenges involved. We accept that a possible limitation of the book is that it engages predominantly with research written in English, and that we therefore have not utilised research written in Japanese or other Asian languages; this is a limitation we are very much aware of and for which we can only apologise.

Initial teacher education is becoming an ever more complex sector, with demands on student-teachers relating to the need to become reflective practitioners, engage critically with research evidence, develop their own research literacy,

and demonstrate a growing expertise in the classroom. At the same time, in many jurisdictions, there is a desire for ever closer working between schools and universities to improve the quality of new teacher preparation. These changes have led to the need to build structures and processes which support student-teachers and school-based mentors in gaining the most from the limited time they have together, often in placements that may last from 4 to 10 weeks, depending on the programme. If becoming confident, research-literate and reflective practitioners is the aim of initial teacher education programmes that involve more time in schools, then some consideration needs to be given to how inquiry into practice is built into student-teachers' formative experiences. Lesson study is one way in which those involved in initial teacher education can meet these challenges and can help begin to point to further areas for development as young teachers begin their careers. It is with this in mind that we hope you find this book useful in helping you to develop lesson study further within your own teacher education contexts.

The book offers a theoretical overview on the characteristics of lesson study, exploring both principles and practice. It is not directly a how-to book, of which there are a growing number in Europe and North America, and not just in English (Dudley, 2011/2014; Lewis, 2002; Munthe, Helgevold, & Bjuland, 2015; Rauscher, 2019). However, we include discussion of examples of how lesson study has been applied in initial teacher education contexts and consider what has been learned from our experience and that of others. The book is informed by research carried out by the growing lesson study community, to whom we owe a debt of gratitude. In addition, it is informed by our own initiatives to use lesson study in initial teacher education, each of which we have mutually evaluated during our six years of collaboration. We believe that these exchanges of information, expertise and experience have enriched our programmes, leading to our conviction that lesson study is a powerful vehicle for practice development in teacher education.

Thus, the book's purpose is to raise awareness of the power of lesson study to contribute to the preparation and development of new teachers and to consider how related challenges can be addressed.

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Chapter 1

International Changes and Approaches in Initial Teacher Education

Nina Helgevold and Chris Wilkins

Abstract

Recent decades have seen a growing consensus that as the demands on teachers becomes increasingly complex, improving the effectiveness of both initial teacher education (ITE) and career-long professional development is key to school improvement. ITE in particular has been for too long polarised at policy level, between 'theory-led' and 'practice-led' approaches. This chapter discusses how this polarisation is simplistic and unhelpful and highlights the benefits of the more constructive orientation towards a synergistic relationship between theory and practice that can occur, particularly when schools and universities collaborate closely in bringing new teachers into the profession. This chapter sets the scene for subsequent chapters in this book by signalling the potential for the collaborative inquiry-based lesson study model into ITE to enhance partnerships between schools and universities and contribute to a smooth transition from ITE into lifelong professional learning.

Keywords: Collaborative partnership; lesson study; initial teacher education; professional learning; reflective practice; theory–practice synergy

Introduction

The demands on schools and teachers are becoming more complex. Schools, and teachers working within these schools, are expected to deal effectively with student diversity, to promote tolerance and social cohesion, to support students from disadvantaged backgrounds, to use new technology and to prepare students to be active, engaged citizens, through a lifelong learning process that contributes

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to the democratic and economic development of societies. Quality of teaching has increasingly been viewed as the most significant factor determining the quality of students' learning in school, with numerous studies revealing the significant difference in learning gain achieved by students according to the teachers they worked with (Hanushek & Rivkin, 2010). As a consequence, efforts to attract high-quality individuals into the profession, then to provide them with the most effective teacher preparation and ongoing professional development, has been central to school improvement efforts (Barber & Mourshed, 2007; OECD, 2011).

In order to fully reflect the complexity in today's classrooms, there is a need to see teaching as a knowledge-rich profession, in which teachers have a strong subject matter knowledge, and depth of pedagogical understanding sufficient for them to be genuinely reflective practitioners; that is, active agents in analysing both their own practice (with regard to relevant professional standards) and their own students' progress (with regard to appropriate standards for student learning) (OECD, 2005). Against this background, initial teacher education (ITE[1]) has become a key policy area for attention. Governments are increasingly focussing on developing policies that firstly aim to guarantee an increase in the quality of ITE provision, and secondly attract high-quality entrants to the profession. This reflects the prevailing view that just as teacher quality is the most important determinant of school/education system quality, this teacher quality is largely dependent on the quality of people entering the profession and the quality of the preparation they receive in doing so (European Commission, 2015). In reality, whilst the case for linking teacher quality to student outcomes is strongly supported by numerous studies over many years (Darling-Hammond, 2000; Hanushek & Rivkin, 2010; Jacob, Lefgren, & Sims, 2010; Wayne & Youngs, 2003), the case for linking ITE quality to teacher quality is less conclusive. Whilst studies have found (perhaps unsurprisingly) that teachers who have followed formal certificated ITE programmes are more effective than those who are not (Cochran-Smith & Villegas, 2015; Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005), it is harder to trace significant differences in teacher quality according to the specific ITE route followed (Boyd, Lankford, Rockoff, Loeb, & Wyckoff, 2008; Kane, Rockoff, & Staiger, 2008). All too often the debate over the effectiveness of ITE has become unhelpfully polarised between adherents of 'traditional', theory-led university-based routes and those who argue for a school-led, skills-based 'apprenticeship' approach, with a resultant slow pace of change in teacher education development over several decades (Fullan, 2001; Korthagen, Loughran, & Russell, 2006).

In this chapter we outline some key trends in international approaches to ITE (including both practice-focussed and theory-led ones) and argue that this ideological polarisation is not only simplistic, but is unsupported by research evidence. Instead we note the wide-ranging and compelling body of research evidence which suggests that the most effective teacher preparation programmes are those that are based on a strong theory-practice synergy and located within

[1]'All professional preparation before individuals take full responsibility for teaching one or more classes of pupils' (Schwille & Dembélé, 2007, p. 59).

strong collaborative partnerships between universities and schools (Korthagen et al., 2006).

The argument is that ITE plays an important role both in improving the development of teaching practice and in attracting more high-quality candidates to the teaching profession and is seen as 'a fundamental area in which to support the shift towards new working cultures and to lay the foundations for teachers' capacity to adapt to changing contexts and circumstances' (European Commission, 2015, p. 2). The increased attention paid to improving the quality and effectiveness of ITE is a consequence of a widespread preoccupation of national governments (and at supranational level, as in the post-Lisbon Treaty European Union) with reforming education systems to give them a more competitive edge in a 'global knowledge economy' (Dale & Robertson, 2009). This direct linkage between the quality of teacher education and the flourishing of global economics has been reinforced by the close attention paid to this issue by the Organisation of Economic Cooperation and Development (OECD). The OECD hosted a global summit on the teaching profession in 2011; this summit's three key outcomes in relation to teacher preparation have had a significant impact on recent national-level ITE reforms, and so are immediately recognisable in policy and practice across the globe.

Firstly, the summit report noted the important benefits of '… clear and concise profiles of what teachers are expected to know and be able to do in specific subject areas' (OECD, 2011, p. 19), recommending that these profiles should guide the content and structure of ITE and teacher certification programmes as well as teachers' ongoing evaluation, professional development and career advancement benchmarks (OECD, 2011). Secondly, the OECD report supported the trend in many countries for ITE programmes to move towards models based '…less on academic preparation and more on preparing professionals in school settings' (OECD, 2011, p. 20). Finally, the report called for more flexible ITE structures that opened up new routes into teaching, and approaches that created a '…lifelong learning framework for teachers' by interconnecting ITE, induction and professional development' (OECD, 2011, p. 20).

Expanding upon these three key findings, the OECD's report (OECD, 2011) drew attention to examples of 'effective ITE practice' from what were seen as successful education systems. These included the 'holistic' Finnish model of demanding academic standards for ITE programmes (including the requirement for a Master's degree), the emphasis on practitioner research (Shanghai) – and the focus of this anthology, the use of Japanese lesson study.

The OECD recommendations summarised are broadly in line with the findings of numerous studies (Burn & Mutton, 2015; Darling-Hammond, 2006; Menter et al., 2010; Ure, 2010) at both national and transnational levels. This provides a robust evidence base on which teacher education policy can be effectively targeted at addressing the key issues (and dilemmas) faced when educating professional teachers to work in complex classrooms with a diverse range of student needs. A study on successful programmes in teacher education in the US (Darling-Hammond, 2006) identified coherence between coursework and the practicum experience, a strong core curriculum, an inquiry approach, school – university partnerships and assessment based on professional standards as key

elements in the programmes, and similar findings have emerged from major studies in Europe (Burn & Mutton, 2015; Menter et al., 2010; Ure, 2010). These key elements or issues relate to the ongoing discourses about ITE presented above (European Commission, 2015; OECD, 2011).

In the following three ongoing prominent discourses on ITE, the practice orientation, the research orientation and professional learning through partnership will be further elaborated on. In research, policy documents and reports these discourses will often be presented as complimentary, or closely linked.[2] At the same time, different ideological agendas may result in different understanding and enactment of policies related to these issues (Beauchamp, Clarke, Hulme, & Murray, 2015); as already noted in our introduction, innovation in ITE has been hampered by its political sensitivities, meaning that ideological imperatives have consistently outweighed the consensus of researchers. Finally, these three discourses, or issues, will be discussed in relation to Lesson study as an approach to learning teaching in ITE.

The Practice Orientation

There is widespread acceptance of the need to increase the coherence between the education received by teachers and what actually happens in classrooms, with a consequential demand that the role of practical field-experience in ITE has to be re-evaluated in order to construct a sound professional identity (Musset, 2010). Many students experience a gap between theory and practice and find 'theories' irrelevant to professional development (Laursen, 2014). Darling-Hammond (2014) describes the 'presumed divide' between theory and practice as one of the core dilemmas of teacher education; an argument reinforced by the OECD's report into teaching quality which recommended a shift away from 'academic preparation' in ITE programmes towards a balance of theory and practice, with more time practicing teaching in schools. This view has gained traction with the perception that 'traditional' university-based teacher education programmes are often a connection of unrelated courses lacking a coherent perception of teaching and learning. This perceived lack of coherence has led to persistent concerns about the fragmentation of clinical work and coursework, which has been a constant challenge in teacher education (Grossman, Hammerness, & MacDonald, 2009; Hammerness, 2012; Zeichner & Gore, 1990). As a way to move beyond this separation of course work and clinical experience Grossman et al. (2009) suggest to organise the curriculum around a set of 'core practices', defined as 'high-leverage practices'. In focussing on these practices teacher educators 'must attend to both conceptual and practical aspects associated with any given practice'

[2]For example, 'School leaders and providers of Continuing Professional Development (including ITE providers) have key roles to play in creating opportunities and environments for *practice-oriented* and *research-based* professional development that will strengthen the agency (capacity for action) of teachers for learner-oriented teaching and innovation' (European Commission, 2015, p. 3, authors' emphasis).

(Grossman et al., 2009, p. 278), and incorporate 'pedagogies of enactment' to the existing pedagogies of 'reflection and investigation' in teacher education. This approach further requires a reorganisation of curriculum and new thinking about the relationship between university courses and field placements.

The 'practice orientation' has been accelerated at a global level in recent years; as already noted, the OCED's *Building a High-Quality Teaching Profession* encouraged national systems to refocus their ITE programmes towards '…a more appropriate balance between theory and practice' (OCED, 2011, p. 20) – by which it meant a shift away from 'academic theory' towards more time in the classroom. However, as is frequently the case with such high-profile reports, the translation of recommendation into policy and practice can involve misinterpretation and misapplication.

Zeichner (2012) argues that cautiousness is needed when turning once again towards a practice-based teacher education. In the United States, with 'intense attacks' on colleges' and universities' roles in the preparation of teachers, the 'practice orientation' might lead to 'narrowing the role of teachers to that of technicians who are able to implement a particular set of teaching strategies' (Zeichner, 2012, p. 379), rather than developing a broad professional vision. There is a need to scrutinise carefully which models and teaching practices become part of a common teacher education curriculum, Zeichner (2012) further claims, and teachers as well as policy-makers and researchers should take part in this process.

In fact a close reading of the OECD's 2011 report shows that this narrowing towards a technicist, apprenticeship model of training teachers was not its intention; rather it stresses that the rebalancing between theory and practice is more about creating a synergy between the two, with ITE course work drawing upon 'research based, state-of-the-art practice' (OECD, 2011, p. 20) and the practice in schools (associated with universities) including time spent on pedagogic research and developing/piloting innovative practice.

A turn to the practical is a current trend in ITE at a global level (European Commission, 2015; Furlong & Lawn, 2011) although this trend is more noticeable in some contexts than others; England provides a particularly striking example of where this has taken place in a highly politicised environment in which the knowledge base of teaching has been contested as part of a 'discourse of relevance' (Beauchamp et al., 2015; Maguire & Weiner, 1994). This discourse on relevance relates to political understanding of the nature of teaching and highlights experiential skills and knowledge new teachers need to be 'classroom ready'. Whilst this discourse is notably dominant within official documentation and public pronouncements in England, where the locus of teacher education has largely been shifted away from the academy into the classroom, it can also be detected in policy and practice in other countries, such as Australia (Brennan & Willis, 2013), Sweden (Beach & Bagley, 2013) and the United States (Zeichner, 2010). McNarara, Murray, and Jones (2013) note the way that the enthusiasm for 'practice-led' ITE amongst policy-makers is based largely on a perception of teaching as essentially a craft (in a simplistic way) rather than an intellectual activity. As such, it instinctively sees teacher preparation as being most appropriately located in the workplace and being largely an 'apprenticeship' model.

These policy-makers go on to assume that "more time spent in schools inevitably – and unproblematic – leads to better and 'more relevant' learning" (Beauchamp et al., 2015, p. 163). In England in particular, the policy shift towards a 'school-led' ITE model has been marked by an explicitly ideological justification; the Conservative-led coalition government (2010–2015) justified its shift towards school-led ITE as being a necessary corrective to what it portrayed as the 'trendy progressivism' of an earlier era. These ITE reforms, however, are also reflective of a wider neoliberal reform agenda in which schools are 'freed' from local democratic control and encouraged to operate in a more market-led environment (Ball & Junemann, 2012). In England this is enacted through the Academies Programme, with comparable models including the Australian Independent Public Schools (Keddie, Gobby, & Wilkins, 2018), the Swedish *friskola* (Rönnberg, 2017) and the US Charter Schools (Baltodano, 2012).

The politicisation of teacher education policy and practice has had a perverse effect in which each increase in the sense of urgency for change leads to a corresponding stifling of innovation (Wilkins & Ainley, 2013), as teacher educators' academic professionalism is eroded and replaced by neoliberal ideals of accountability and productivity (Hargreaves & Shirley, 2009; Kosnik, Beck, & Goodwin, 2016; Murray, Czerniawski, & Barber, 2011).

The English 'school-led' model is also explicitly aimed at addressing the issue of teacher recruitment. Again, policy-makers have for some time focussed on evidence from 'high-performing' school systems such as Finland, Singapore and Korea showing that attracting 'elite' candidates to teacher education programmes is a key factor in improving teacher quality (Barber & Mourshed, 2007; Wilkins & Comber, 2015). For policy-makers, diversification of ITE pathways, in particular through offering more practical, school-based programmes, with less emphasis on theoretical input and formal academic qualifications, has been seen as a key way of widening the appeal of teaching as a career; for instance, by attracting older career-changers to the profession (OECD, 2011; Wilkins, 2017).

The 'practice orientation' in summary, cannot be understood purely in pedagogical or epistemological terms; it must be viewed in the context of both the local political contexts in different nation states and as being shaped by teacher supply and demand. It is, in essence, as much a product of the neoliberal reform project that has increasingly dominated education reform, at national and international levels, over much of the past three decades (Furlong, 2013; Wilkins, 2015).

The neoliberal conceptualisation of ITE, emphasising the 'practice orientation', is set against the more 'traditional' discourse of teacher education, the 'research orientation' which argues that in order to meet the complexity of today's classrooms it is necessary to equip 'beginning teachers to act as researchers, adopting a problem-solving orientation to practice' (Burn & Mutton, 2015, p. 217).

The Research Orientation

As with the 'practice orientation' a research-oriented approach is not new in ITE. Dewey (1904) argued in favour of the 'laboratory approach' to learning teaching,

as opposed to 'the apprenticeship approach'. Whilst the apprentice approach had as its main object to give teachers in training working command of the necessary tools of their profession, 'the aim of the laboratory approach was to use practice work as an instrument in making real and vital theoretical instruction; the knowledge of subject-matter and of principles of education' (Dewey, 1904, p. 9). Dewey's ideas about an inquiry-based approach in professional development have later been argued for by many researchers (Cochran-Smith & Lytle, 2009; Sachs, 2016; Zeichner, 2010) and also underlined in todays' policy documents, 'Teachers should be able to develop and maintain a mindset and a practical approach which *are based on reflection and inquiry*, and focused on ongoing professional development' (European Commission, 2015, p. 3, authors' italicised). The argument is that teaching needs to be transformed into a knowledge-rich profession, where teachers develop 'a research role alongside their teaching role; with teachers engaging more actively with new knowledge; and with professional development focussed on the evidence-base for improved practice' (OECD, 2005, p. 10). ITE is considered to be the starting point for this ongoing professional development.

In international literature, there are tensions related to the concept of research-based education and confusion between several closely related concepts, research-based, research-informed, research-led, evidence-based and evidence-informed policy and practice (Niemi, 2016). In a Finnish context these concepts are used in complementary ways, where research-based means that education is grounded in continuous research-based inquiry in academic disciplines, including educational sciences. Teacher educators in university–departments and teacher-training schools are seen as teachers and researchers, and teachers in school may also work as research-based professionals conducting action research projects or small case studies in classrooms or school communities. The aim of ITE is to lead students into a culture of inquiry, to learn how knowledge is constructed and to use different sources of evidence in their work. A research-based teacher education also means that teacher education in itself should be an object of study and research (Niemi, 2016).

A report on teacher education in the United Kingdom (BERA-RSA, 2014) identified four different ways in which research can contribute to teacher education: (1) the content of teacher education is built on research-based knowledge; (2) research informs the design and structure of teacher education programmes; (3) teachers and teacher educators are equipped to be both partakers in and consumers of research and (4) teachers and teacher educators conduct research on their own practice. The report argues for both schools and colleges to become research-rich environments, which requires that teachers and researchers work in partnership rather than conducting their work as entirely separate entities. In a review of research-informed clinical practice in ITE, Burn and Mutton (2015) argue that research-informed clinical practice 'makes a very important contribution to school and system improvement' (Burn & Mutton, 2015, p. 228). The impact of such practice is primarily determined by the interplay between different components involved. They further point to the importance of establishing secure partnerships and conclude that this depend on stability within policy contexts.

Professional Learning Through Partnership

'The professionalism of teachers, teacher educators and leaders in education should incorporate collaborative practices, and a collaborative culture. Both should therefore be promoted in the content and process of ITE' (European Commission, 2015, p. 3). Becoming a professional means to be involved in and be a participant in a professional learning community (Wenger, 1998). For individuals 'learning is an issue of engaging in and contributing to the practices of their communities' (Wenger, 1998, p. 7). Through teacher education, student–teachers engage in communities of practices both at campus and in schools. Historically, in formal professional programmes, the academic part took place at college and during practicum. At college or university students learned about teaching, and in schools they learned how to put principles and methods into practice. Darling-Hammond (2006, 2014) describes this divide as one of the 'perennial dilemmas' in teacher education.

Different approaches have been made in order to establish more collaborative partnerships. In England, higher education institutions were required to enter into formal partnerships with schools for the initial training of teachers in 1993. These were described as 'complementary partnerships', where HEIs were expected to take responsibility for the organisation of the overall programme and the school should support student–teachers teaching in classrooms with school-based teacher–mentors (Edwards & Mutton, 2007). Edward and Mutton (2007) further point out that most of these partnerships turned out as neither collaborative nor complementary, but as 'HEI-led' arrangements. At the same time, schools involved in partnerships did not want to 'disrupt' their own practices and managed their work with student–teachers within their own school systems. Edwards and Mutton (2007) call for a rethinking of the notion of partnerships, making them more flexible and ensuring that knowledge about teacher education is embedded in local practices as well as drawing on wider perspectives. Even though new partnerships with schools have expanded in England and addressed the problem of teacher supply, Furlong, McNamara, Campbell, Howson, and Lewis (2008, p. 318) are critical, claiming that this has produced a teacher education that is

> almost entirely practically oriented. The essential contributions of higher education to professional formation – the consideration of research, of theory and of critique – all of these have been expunged as important components of professional education.

Burn and Mutton (2015) point to partnership models that have been based on principles of collaboration and being research-informed, the Oxford Internship Scheme (UK), Professional Development Schools (US), the Melbourne Master of Teaching programme (Australia) and Authentic Teacher Education (Netherlands). Common ideas throughout these programmes are the close integration of the different sources of knowledge, rejecting that 'ideas from one context can simply be applied in another' (Burn & Mutton, 2015, p. 226). Except for teacher education programmes in Finland, Burn and Mutton (2015) note that the above