

ITE Reform at the University of Glasgow: Principles, Research-basis and Implications

DR BETH DICKSON
University of Glasgow

ABSTRACT

The Faculty of Education at the University of Glasgow's reform of initial teacher education was undertaken on the basis of current research within a mature educational infrastructure. Within the university research knowledge was utilized in two ways: research on teacher education indicated that enquiry could become a key aspect of teacher identity; and it indicated the need for a curriculum for pre-service teachers *in schools*. Thus enquiry learning was embedded in schools and the new school-based curriculum had three elements: seminars; peer learning through learning rounds; joint-assessed visits. These innovations were positively reinforced by *Teaching Scotland's Future* (Donaldson, 2011). This series of reforms has implications for Wales and can be usefully analysed against the binary thinking which dominates discourses in teacher education; and Williams's thought on the vulnerability of emergent culture. Four binaries are identified and re-conceptualised: binaries of time, space, content and persons. The binary of time (initial and continuing teacher education is conceptualised a career-long process; the binary of space (school and university) is recast as a third space; the binary of content (theory and practice) is recast as different forms of knowledge permeating space and time; and the binary of persons is recast as a (university-based teacher educator and pre-service teacher) is recast as a triad which sets all three in dialogue. Implications include the deeper consideration of career-long teacher learning; and the role of the teacher educator. This emergent practice may be vulnerable to dominant practice.

Key words: Initial Teacher Education, curriculum, learning rounds, binary thinking

Introduction

This article focusses on the reforms of Initial Teacher Education (ITE) undertaken at the University of Glasgow from 2008 onwards, looking at the principles and research evidence on which the work was undertaken. The reform took place in an educational infrastructure in a small country where the roles of educational institutions were reciprocally understood by the agents within the structures; and were more generally understood by the public at large. Reforms were based on research evidence because the role of the university was understood as an innovator which informed practice. College staff in teacher education who pursued research, welcomed the mergers with universities which took place at the turn of the millennium, because of the potential to reinforce the research basis of teacher education (Humes, 2001). Enquiry learning, which had been indicated as a key strand in teacher work by Lawrence Stenhouse (1975), was embedded in programmes. A new curriculum for preservice teachers (PSTs) *in schools*, based on models of partnership working undertaken in the US and Australia, was co-constructed in partnership with local authority personnel, head teachers and teachers in schools.

After a decade it is possible to reflect on the changes but to move easily to implications for Wales on a 'sharing of best practice model' would be invidious. Precedence by itself, is neither a necessary nor sufficient basis for implications and the assumption which underlies 'best' in 'best practice' is often unexamined and therefore less than helpful. Rather, reflection on the past decade's work may direct thinking to examining what appear to be the binary habits of mind which underlie thinking about teacher education by policy makers, strategists, teachers, pupils and parents and by members of society more widely. These binaries, though easy to grasp, are unhelpful in their power to obscure the differences which exist within and in the spaces between them. A suggested basis for teacher education which contests binaries may provide a structure from which participants will draw their own implications informed as such agents are by their context. Because of their explanatory power, this article identifies two theoretical lenses: the account of binary thinking provided by Derrida (1997) and

followers and Raymond Williams's work on epochal change. Four binaries will be examined: those of time, space, content and persons. Then the matters will be reconceptualised in non-binary terms in order to demonstrate some the complexity of the issues involved in educating teachers. Williams's work will enable us to see difficulties which may affect the development of emergent practice (Williams, 1977).

Context of teacher education

In the last decades of the twentieth century in Scotland, teacher education was sited in monocultural colleges of education. At the same time, it was becoming apparent that the financial model on which colleges of education were based was becoming unsustainable and a series of mergers took place as each college of education merged with a university partner (Kirk, 1999). Existing university departments had a different ethos from the colleges with which they merged and their staff had different expectations about the nature of teaching and research (Menter and Hulme, 2011). St Andrew's College of Education merged with the Department of Education and the Department of Adult and Continuing Education at the University of Glasgow to form the Faculty of Education 1999. In colleges of education, the majority of staff were recruited because of an excellent record of classroom practice in schools and would be focussed on training pre-service teachers to be competent in the classroom, either by giving lectures in college or by visiting and observing pre-service teachers teaching in classrooms (Christie, 2008). Without the benefit of any intervention about the intellectual basis of teacher education, the potential of this model merely to reproduce existing practice, or, indeed, to reproduce past practice from when the colleague was teaching in school could be viewed as problematic. When PSTs were working in schools, they would be visited often by subject-tutors and general tutors. Some members of staff would have a keen interest in research, but the main purpose of the colleges was to educate teachers (Kirk, 1999). In this article I will call this model of teacher education Model 1.

Infrastructure: Scottish Executive and policy

Model 1 was only one element of the infrastructure of Scottish education as it impinged on ITE. The Scottish Parliament was established at

Holyrood, Edinburgh on 1 July 1999 and education was a wholly ‘devolved matter’ (The Scotland Act, 1998). This meant that the Scottish Executive was wholly responsible for education. In terms of policy, the key report into teacher pay and conditions, which provided the policy framework for this period, *A Teaching Profession for the 21st Century (TP21)*, published in 2000 and implemented in 2001, followed a period of unrest in the profession. The report focussed on the pay and conditions of serving teachers; but it also recommended that every student who graduated from a teacher education programme in Scotland should be entitled to a one-year teaching contract with a maximum class contact of 0.7 FTE to overcome the disruption to their professional education at a point where continuity was key. The Teacher Induction Scheme is still a key feature of Scottish educational infrastructure.

Infrastructure: the inspectorate and the regulator

Her Majesty’s Inspectors of Education had a role in inspecting the ITE programmes. Their report *Evolution or Revolution* recommended that teacher educators made ‘best use of the university environment now available to all ITE providers’ and improved ‘partnership arrangements’ (HMIe, 2002: 5). The General Teaching Council of Scotland (GTCS) had been established in 1965 to keep a register of teachers duly qualified to teach in Scotland. The regulator of the profession, GTCS was then an arms-length body. (It became independent in 2012.) A less well-known part of the infrastructure relevant to education is the Scottish Credit and Qualification Framework, a national credit transfer system which maps levels school, college, professional and university qualifications against each other. Each level which is characterised by a set of descriptors, may include qualifications from all three institutions.

The extent of the change posed by the mergers

The mergers of colleges with universities were a change of structure which came with its own challenges. Those voices in Scotland arguing for a teacher education sector which set its own agenda found themselves in Humboldtian universities where the generation of new knowledge through research and reasoned debate was a key university goal and staff who had

lively research interests were a good ‘fit’ with the new site of employment. Being on the site of the ‘contestability of knowledge’, argued by Furlong to be the essential contribution which a university can make to teacher education (2013: 51), had important consequences for teacher education reform at the University of Glasgow. Other college staff found themselves in a research-intensive university being asked to re-think what they had understood teaching PSTs to entail. Universities’ curricula, pedagogy and assessment were differently expressed from the college formats which, with timetables which mirrored that of the school day with scheduled classes from 9.00am – 4.00pm; small class sizes; one-to-one pedagogies and frequent assessments, functioned more like a school than a university. In terms of the new workplace, mergers signalled significant changes in continuing professional development, qualification, recognition and reward (Menter and Hulme, 2011).

Reform at Glasgow

It was in this academic, professional and policy context that ITE reform at the University of Glasgow began around 2008. Considering what initial teacher education would ‘look like’ in a research-intensive Russell Group university was a key priority for the new Faculty.

ITE in a research-intensive university

By moving into the university, it was necessary to put the knowledge about the substance of teacher education and the process by which teachers learned under rational scrutiny. This led to what I shall describe as Model 2. The content of the Postgraduate Certificate of Education (PGCE) programme was changed to incorporate enquiry learning as a key element alongside professional studies, curriculum studies and school experience. Enquiry learning meant both that the students were taught about enquiry learning and asked to design an enquiry with a justification for the design.¹ The move to enquiry learning enabled the programme to attract Masters-level credits.² The practicum was transformed by re-examining the roles of those involved and making three key interventions: seminars; learning rounds; and joint assessment.

Enquiry learning and moving to Masters

The decision to expand enquiry learning in the new PGDE curriculum was an expression of two key epistemological issues in teacher education. What is the 'body of knowledge' on which it is based? How is new knowledge generated in or by the sector? In this the Faculty was influenced by academics, such as Lawrence Stenhouse, who had argued that teachers themselves needed to research their own classrooms in order to evaluate and develop practice. Epistemologically, Stenhouse believed that academic knowledge 'is falsified when it is presented as the results of research detached from an understanding of the research process which is the warrant for those results' and that:

research is ... not a leap towards finality, but from the gradual cumulation of knowledge through the patient definition of error. Its achievement is always provisional. We can only teach better if we learn from the experience of shortfall.

(Stenhouse 1975: 193)

The use of Stenhouse's work in schools and universities in the United States developed an emancipatory set of values focussed on benefitting all teachers and learners proactively including those who may otherwise have been excluded. 'Equity, engagement and agency' is identified as the first theme which practitioner researchers are interested in (Cochran-Smith and Lytle, 2009: 12). Thus in 2008 the influence of Stenhouse was given contemporary expression in Baumfield, Hall and Wall's *Action Research and Education* (2008) and Cochran-Smith and Lytle's *Inquiry as Stance* (2009).

An advantage of this view of procedural knowledge for teacher education in a university is that it is expressed in epistemological terms which can be recognised by the academy. On this view teacher education was based on an epistemological position about the nature of research, rather than being a collection of techniques. Its advantages for professional teacher education were that:

1. It dignified the person of the teacher and makes them more than just a technician; more than a reflective practitioner (Cochran-Smith and Lytle 2009);
2. It provided the teacher with the capacity to find the evidence on which to justify their teaching decisions;
3. It enabled them to meet the sections of Standard for Initial TE which required them to demonstrate that they 'know how to adopt a

- questioning approach to their professional practice and engage appropriately in professional enquiry such as action research (GTCS 2006, 2.4.3);
4. It provided the teacher with the knowledge and skills to *continue* to learn independently or collaboratively in order to improve teaching and learning in the classroom; and
 5. It ran in parallel with research which suggested that continuing professional development conceived of as off-site, one-day courses which teachers could take, were of little effect in developing teacher learning (see *inter alia* Totterdell, Bubb and Hanrahan, 2004).

Because enquiry learning had its own epistemological pedigree, this enabled the Faculty of Education team to present university accrediting committees with reasoned arguments for attaching M-level credit to the PGDE programme.³ Two SCQF emphases at Masters level were useful – the emphasis on criticality of thinking, analysis and application; and the application of ‘a range of standard and specialised research and/or equivalent instruments and techniques of enquiry’ (SCQF n.d.), an emphasis which aligned closely with Stenhouse’s work on curriculum enquiry. The thoroughgoing criticality enabled the team to embed a questioning mindset in pre-service teachers which was developed specifically by using practitioner research techniques in the classroom. The only hesitation about including enquiry learning came from school colleagues on our committee who commented that the proposed title of the course ‘Researching Learning and Teaching’ seemed foreign to the profession. The course title was changed to ‘Enquiring into Learning and Teaching’.

Practicum: school experience

It is a common claim by pre-service teachers that they learn more about teaching when they are in schools than when they are in college/university. Given that belief it is therefore perhaps surprising that in 1981 Zeichner posed the question of whether the effects of university teacher education were washed out in the practicum. Some US colleagues had worked for a time through professional development schools. From the 1980s onward the Holmes project and the Carnegie Task Force worked across sites of learning (schools and universities) in an attempt to co-design curricula and include the direct involvement of HEIs in school reform (Mitchell and Castenelli, 2000 cited in Menter *et al.*, 2010).

Pre-service learning in schools can be viewed from a variety of theoretical perspectives. It may be thought of as a form of experiential learning where a theory such as Kolb's undergirds what takes place (Kolb, 1984). Kolb focuses mainly on what happens in the learner's mind during the process of concrete experience; reflective observation; abstract conceptualisation and active experimentation. Lave and Wenger's theories on workplace learning focus on the learning which occurs when people in the same workplace interact in order to learn and develop. Newcomers move from the periphery to the centre by learning appropriately in a monitored space. This movement is aided by talk, "For newcomers then the purpose is...to learn to talk as a key to legitimate peripheral participation" (Lave and Wenger 1999: 109). The work of others in demonstrating how the talk in this area is used to deepen teacher professional judgement was also considered in work by *inter alia* McLean Davies *et al.* (2013), Kriewaldt and Turnidge (2013), and Loewenberg, Ball and Forziani (2009).

In this densely theorised and polyphonic space, the development team took the view that it was important to base the programme on a wide range of research which demonstrated some consensus; rather than being too dependent on one voice or theory. The team therefore took the view that the necessary knowledge and the construction of knowledge in the practice of the pre-service teacher would be more richly enabled when the individual was in dialogue with a university-based and a school-based tutor. In each of Kolb's four stages, colleagues who question the pre-service teacher are often able to identify aspects of a teaching event which may have gone unnoticed; prompt the learner to focus on reactions to the experience which provide knowledge, especially if the 'prior learned knowledge' has not 'worked'; guide in the formation of a tentative conclusion; and prompt or guide in suggestions of actions which would result in an improved experience. Thus, the focus on dialogue in professional learning for the development of professional judgement was being signalled.

Five types of dialogue across two sites of learning were identified: the university and the school:

School and university staff had to plan together at a strategic level to initiate the process

These discussions were attended by Head teachers, teachers who had responsibility for pre-service teachers in school, senior managers and lecturers from the university. This group had to become familiar with the

supports provided by the other groups and the constraints under which they operated.

School and university staff discussed the progress of pre-service teachers' practice in schools

Discussions took place between university-based teacher educators and school teachers who had a pre-service teacher in their classrooms. The complementary teacher educator roles worked well for pre-service teachers. The new partnerships ameliorated the effect of the reduction of the number of teacher educator visits to schools since the mergers. Some schools had become reluctant to contact university staff except in the most serious of circumstances. The more familiar the university-based teacher educator became in the school, the more likely school-based colleagues were to notify them if a pre-service teacher was struggling. This meant that next steps could be identified, agreed and monitored within a sensible time-scale. This reduced the phenomenon of lack of progress being identified so late that it could not be rectified within the placement (Menter *et al.* 2011).

School and university staff constructed a joint assessment of the pre-service teacher's learning at the end of the school placement

These discussions harnessed both the experience of the classroom teacher of the realities of classroom practice and the university-based teacher educators' knowledge of *SITE* which described what a pre-service teacher should be able to know and do at this stage, as well as what values they should hold. Teachers who took part in this process expressed their satisfaction about having a language in which to discuss their teaching (Menter *et al.*, 2011).

University-based teacher educators held seminars for pre-service teachers in schools

Seminars took place in schools and were based on key themes for practice such as planning; questioning; assessment or reflection. Pre-service teachers prepared by completing readings from relevant research. Focussed discussion on seminal topics cleared up misunderstandings, could be based on examples from recent experience; and, significantly, could be put into practice later the same day (Menter *et al.*, 2011). This learning did not suffer from the delay between being taught something on a university course and

putting it into practice. The seminars also gave the pre-service teachers access to their peers with whom they could exchange notes; and to their tutors who were available to discuss specific issues with which students were troubled. These discussions had pastoral as well as pedagogic functions as novices moved from the periphery of school life to fuller participation in the community of practice (Lave and Wenger, 1999) as they moved from being neophytes to novices.

University-based teacher educators and classroom teachers held non-evaluative discussions with triads of pre-service teachers who had observed another pre-service teacher teaching. These dialogues were known as learning rounds

This element was based on the work on instructional rounds in the US, particularly the construction of a shared language to overcome the problem of much teacher knowledge either being tacit or thought of as being common-sensical (City *et al.*, 2009). Its aim was to develop the awareness of the pre-service teacher of what factors were at play in the classroom. Three pre-service teachers, the classroom teacher and the university-based tutor observed a segment of a pre-service teacher's work and then withdrew to discuss what had been seen during the observation, usually in terms of the theme which had been discussed at the seminar. The aim of the discussion was not to evaluate the observed student's practice, but to consider the theme of the week in terms of their own practice, to be able to describe what they observed in a shared language.

In 2011 the work which had been undertaken at the University of Glasgow was reinforced in a key policy document, *Teaching Scotland's Future* (Donaldson, 2011), which, among other recommendations, underlined both the need for enquiry pedagogy and the more complex forms of partnership which required greater integration of strategic leadership as well as input from school-based and university-based teacher educators. Menter *et al.*'s *Literature Review* (2010) usefully brought together work and ideas which were being discussed at the time within the development teams and in 2013 Burn and Mutton published their *Review of Research Informed Clinical Practice in Initial Teacher Education* which focussed in review of the issues we were grappling with at Glasgow.

Implications

John Furlong's *Teaching Tomorrow's Teachers* (2015) has provided a landmark report for teacher education in Wales which aims to 'help deliver the high aspirations that [the Minister and his Government] have for the children and young people of Wales' (Furlong 2015: 1) – a commonly shared aim among all who have a responsibility for teacher education. Are there any implications for Wales of the work undertaken in Scotland?

Infrastructure

It may be that colleagues in Wales wish consider how educational infrastructure might develop in terms of: quality assurance of the initial *and continuing phases* of teacher education through standards; and dispersal of power across various actors to enable all roles to be in constructive tension for the purpose of improving learning in schools. Currently the Education Workforce Council's Initial Teacher Education Accreditation Board accredits initial teacher education programmes. Where will Wales ask the follow-up questions? Where will career-long teacher education take place? How will it be constructed? How will it be accredited, recognised and rewarded? The *Professional standards for teaching and leadership standards* (Welsh Government, 2017) focus on the teacher and the leader in a formal school role. The standards are to be used to 'Encourage development that is longer term'. Might this be expressed in a developmental range of standards which looks more specifically at the values, knowledge and skills which characterise the stages of the teacher's career? Recognising that what a newly qualified teacher can know and do is different from what colleagues achieve one or two decades later?

Binaries in Teacher Education

In terms of implications for initial teacher education in Wales, it may be more useful to frame this part of the discussion in terms of binary thinking and the difficulties of enabling emergent practice to become fully present. By doing this emergent practice may be set against common assumptions held about the field in order to ensure that all actors can make their own analyses simultaneously.

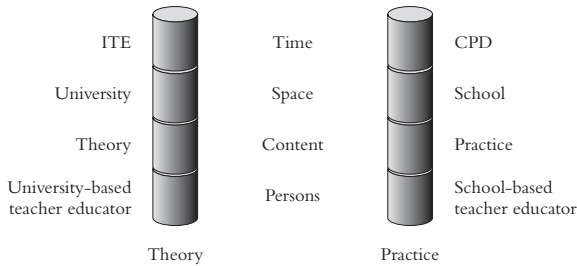
Binary thinking, as discussed in Derridean texts, such as his reading of *Phaedra* and his work in *Of Grammatology*, is argued to be a deeply embedded mode of Western thought (Derrida, 1997). By careful critical analysis of key philosophical texts, Derrida argued that when gaps appear in the coherence of an argument, the gaps seem to be close to inverting classic binary distinctions such as those between nature/culture, male/female, for example, rather than reinforcing them. Yet a veil is drawn over the potential inversion of the binary which is not explained in the rest of the text and indeed, assumes its usual status where one element is privileged against the other; or where each element is conceived of as being absolutely different from the other e.g. A/non-A, human/animal. Instead of an 'either/or' habit of mind, deconstruction, while following the work implicit in each element of the binary, fosters a 'both/and' habit to ensure that the singular identity of each element is preserved, along with any resulting contradictions, rather than hiding/repressing contradictions inside a binary which is regarded as so manifestly truthful that it is beyond critique. Derridean thought, with a much more comprehensive and complex reach than outlined here, has been used to produce new thinking in deconstructing the male/female binary (although work had begun already in this area in the classical feminist tradition; the empire/colony binary; and the homo/heterosexual binary (see inter alia Showalter (1986), Spivak (1999) and Butler (1993).

What has been conceived of as a binary can usually be conceptualised in such a way as to demonstrate that there are more than two factors in operation within and between the elements; that prestige does not necessarily lie with only one aspect of the binary (the problem being that the 'other' element in the binary is regarded negatively) and that even if there are two factors, they may not necessarily be opposed. I follow Richard Niesche in arguing that rather than seeing Derrida's work as negative (Biesta, 2009), it can be regarded as affirmative, with an openness to that which is other, and, as a 'form of justice' (Niesche 2014:18). Thus the warrant for viewing teacher education through a Derridean lens is its capacity to explain ourselves to ourselves as we live now.

In the field of teacher education the most obvious binary is that of theory and practice and that has nested within it (Baachi, 2015) three other binaries which are mutually reinforcing:

- Binary of content – theory and practice;
- Binary of time – initial teacher education and continuing professional development;

Figure 1: Theory/Practice Binary in Layers



- Binary of space – university and school; and
- Binary of persons – university-based teacher educator and pre-service teacher.

To show how used researchers in the field are to thinking in binary terms, if one were searching for an article on initial teacher education, one would not expect to find an article on continuing professional development. Writing ‘initial teacher education’ into the British Education Index generates 910 hits; entering ‘continuing professional development’ generates 659 hits; but entering ‘initial teacher education’ AND ‘continuing professional development’ generates 17.⁴ While this is suggestive, rather than definitive, it does bear out the ‘either/or’ rather than the ‘both/and’ direction of thinking.

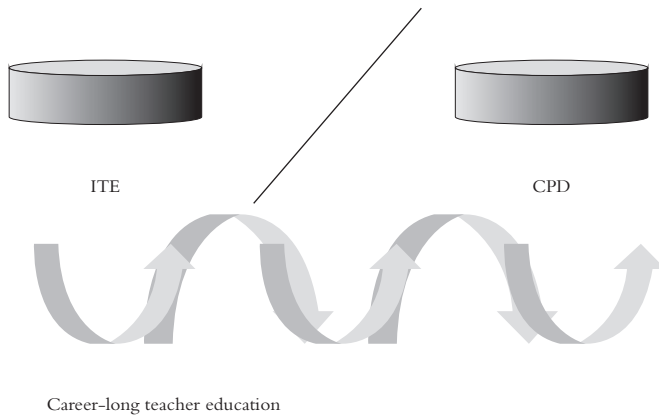
Given the development of thinking in other areas of the arts, humanities and social sciences using a deconstructive method, it may be that it can illuminate teacher education too. Figure 1 shows the mutually reinforcing layers of the teacher education binary.

What happens when these binaries are re-configured and what are the implications for teacher education in Scotland and Wales?

The binary of time

One of the most pernicious aspects of the binary of time is that PSTs are commonly assumed to be “the finished article” when they complete their qualifications. A newly qualified teacher is ready to *begin* to practise and there is a little evidence both in Scotland and Australia that PSTs who begin their professional learning with support from both school and university personnel across sites, particularly in the site of practice, report

Figure 2: Binary of Time reconceptualised as a spiral



increased confidence with which to begin their professional career (Menter *et al.* 2011, MacLean 2013) However, no ITE programme can prepare the PST with sufficient knowledge for the remainder of their careers. Firstly, the pace of technological and social change is so great that we cannot know what knowledge will be needed in the next decade, far less the subsequent three.

Secondly, not only is the ITE curriculum short – only one year for some programmes – to be coherent, it has to balance breadth and depth. Not all the single issues which charities or third-sector groups think should be put into ITE programmes can be accommodated because the programme would become so wide that issues could not be covered in any depth. The programme would lose coherence. However, there is plenty of time for these important issues to be considered when the curriculum is considered as being career – long. Thirdly it has been argued that by the fourth or fifth year after graduating, the learning new teachers were exposed to during their initial learning ‘washes out’ (Zeichner and Tabachnick 1981; Zeichner and Conklin 2005). This is where teachers are in danger of learning from the processes and ethos of the school which may not be being continually revised and therefore lead to the reproduction of inequality.

When the binary is re-conceptualised as a spiral through time, it immediately illuminates the way in which the full length of a career is available for many of the elements that cannot be sensibly covered within a short time period.

Binary of time: implications

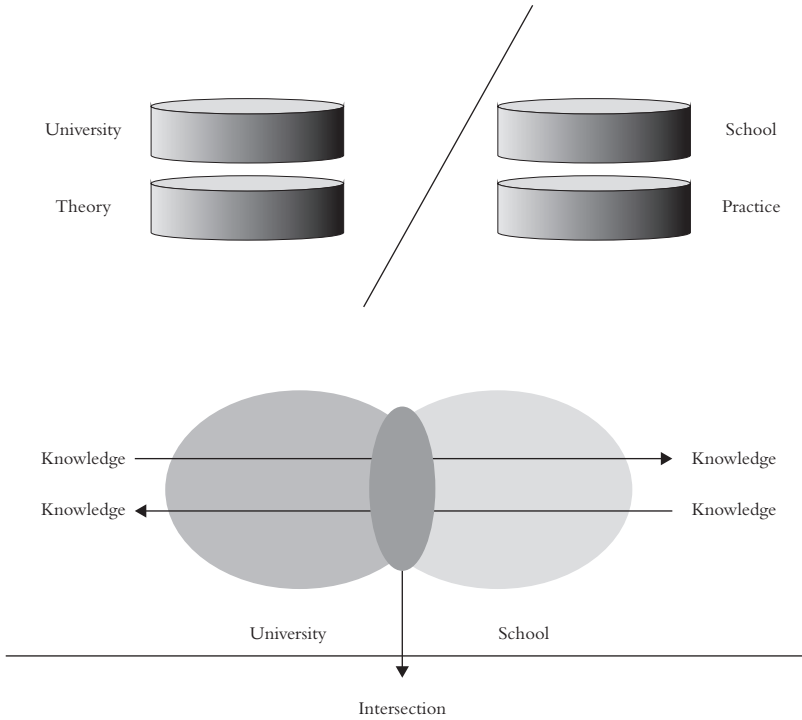
Both Scotland and Wales might to focus on what this means for teacher learning after the ITE (or in Scotland the TIS) period is over. What is its curriculum, pedagogies and assessment? Who are the teachers? From what knowledge does it begin? What knowledge does it generate? How is that disseminated? To whom is it disseminated? How is it expressed in structures of recognition and reward? Although an aspiration of the Glasgow work, the sheer logistics of moving these elements of structure about meant that the work focussed on the initial period rather than ensuring that similar provision characterised the career span. This was due in part to the fact that the initial period was within the control of the universities and change could be brought about more quickly within the institution. Further development of the career-long teacher learning curriculum requires active partnership of all stakeholders including government, universities, schools and representatives from other aspects of structure which impinge on the education of teachers.

The binaries of space and content

The binary of space is conceptualised as the university and the school. The binary of content is thought of as theory and practice. (See Figure 1) These binaries may be reconceptualised as an intersection. (See Figure 3).

A common place of teacher education sometimes held by school teachers and PSTs as they observe students is that theory is taught in universities and applied in schools. This assumption depends on a definition of theory which is close to declarative knowledge taught by transmission in a lecture theatre and a definition of practice which develops procedural knowledge. In teacher learning discourse, 'theory' is a word which shifts in meaning depending on speaker, context and audience. It can mean, neutrally, an explanation (usually abstract) which may be a foundational part of a discipline it. More diffusely, it can come to mean abstract learning and, pejoratively, it can also mean knowledge which is of little value in the 'real' world i.e. the school. The binaries of space and content not only re-inforce each other but are hegemonically paradoxical. Although universities are usually assumed to be more prestigious than schools, among teachers, 'theory' associated with universities does not always seem realistic and may be regarded with scepticism when given as a reason for a particular decision taken by a pre-service teacher.

Figure 3: Binary of space and content



Reconceptualizing the binary of content requires recognition that ‘theory’ may include declarative *and* procedural knowledge; and that both types of knowledge need to be accessible on both sites. At the end of a period in schools PSTs move from the epicentre of practice back to the university, from immersion to the withdrawal necessary to process the learning which has occurred. Development comes not only with dialogue but also with distance. Reconceptualizing the binary of space requires universities and schools to be thought of as complementary sites of learning. PSTs learn in both places and having access to all kinds of knowledge on both sites is key.

Binary of space and content: implications

Both nations might think about how to provide space and time within the site of practice and to recognise the hard work and leadership needed to construct and maintain a third space between university and schools for teacher learning. This third space may be physically on either site. Enquiry learning, for example, may be usefully conducted on the school site but during the course of the career, periods of immersion in the epicentre of practice may be constructively followed by periods of withdrawal to the university in order to take a new qualification which enables the learner to reflect on the meaning of the teacher's career as experienced to date.

Binary of persons reconceived as a triad for dialogic learning

Again, this binary reinforces the previous three as the personnel who teach the PSTs are defined by the location which pays their wages. In each space, both these persons are teachers, teaching PSTs and pupils respectively (See Figure 1).

But when the university-based teacher educator (U-BTE) works in the intersection between sites, then she and the classroom teacher (S-BTE) form a dialogic triad with the PST in which each member has direct access to the other two as described in Figure 4.

The two teacher educators work to enable the PST to take over the role of classroom teacher as the PST moves through the spiral from university through intersection to the school itself. This was one of the most useful aspects of Model 2 for all those who were part of a triad.

If we combine binary of persons with binary of space we see the work which takes place in the intersection between school and university where both teacher educators work together to develop the PSTs judgement, value, skills and knowledge to move him/her through the intersection and out the far side into the school itself, as seen in Figure 5.

My contention is that so rich are the possibilities of this space that it is useful for serving teachers as well as PSTs and therefore may be placed at other stages in the spiral of time.

Figure 4: Binary of persons reconceptualised as a triad

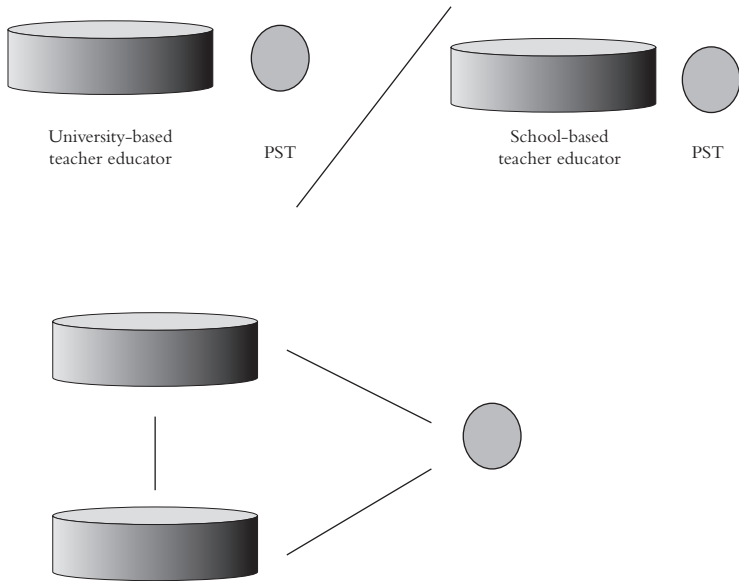
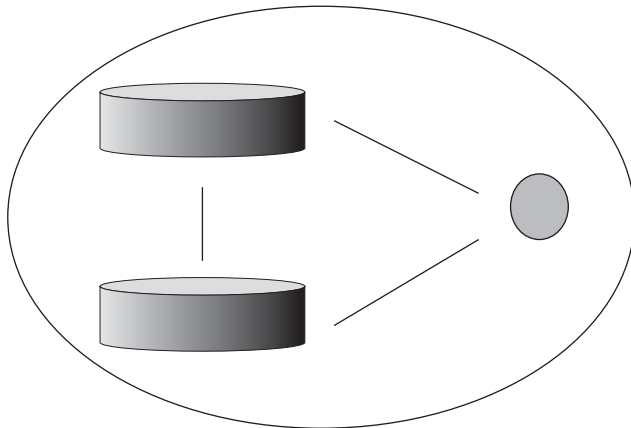


Figure 5: Reconceptualisation of Binary 2 and 4 combined



Binary of persons: implications

Yet this binary is more slippery than the ideal triad outlined above because it raises the question of second order teachers: who they are; where they are situated and what they know. Should there be complementary roles for U-BTEs and S-BTEs? As Menter and Hulme have shown (2011), not all teacher educators based in universities may have the research and scholarship background which is commonly associated with the university. They may embody school scholarship rather than research scholarship with possible negative consequences for the continuation of dominant over emergent practice. However, it has been argued that their deployment of classroom experience as cultural capital among the PSTs with whom they are working forges strong relationships (Murray 2013). Czerniawski's (2016) international study shows a deal of commonality in the nature of development in these roles and the barriers faced teacher educators around time and resource. Interestingly, White (2013) has found that teacher educators situated solely in schools experience a lack of being able to discuss practice with someone in the same role which has consequences for professional identity. Because Wales and Scotland still have complementary sites of teacher learning, teacher educators may be conceptualised as having complementary roles (Donaldson 2011; Furlong 2016), even if these are at rudimentary stages in development.

There is scope for school-based teacher educators whose roles can be conceptualised as moving on from thinking about the learning of PSTs or NQTs to the career-long learning needs of teachers. Kennedy's framework (2005) and Helen Timperley's work (2011) make important contributions to this topic. Wales's conceptualisation of serving teachers as school-based teacher educators in schools which have elected and been accepted as being able to offer PSTs an experience of quality, is more efficient than the Glasgow system which depends on a cohort of staff who have retired from teaching or who work part-time to partner with schools. The opportunity for Welsh teachers to develop professional learning within this partnership model is made easier by the relationships which will form across the sites of learning. Scotland might learn from this. The day when formal qualifications for both school-based and university-based teacher educators cannot be far away.

Vulnerability of emergent practice: implications

While thinking in unfamiliar spaces was exacting; acting to bring new thinking into reality was arduous. The infrastructure which exists in part, as a result of previous modes of binary thought, always seemed impregnable. Moving elements of structure around to create a new structure is difficult because of the physical, emotional and cognitive effort involved.

While emergent practice can be achieved, it is always under pressure to revert to become assimilated to dominant (i.e. binary) practice. Raymond Williams's description of the changes associated with 'epochal' change are useful here. As one epoch changes to another, Williams argues that not only are there stages to the change but there is an internal dynamic at work: dominant, residual and emergent aspects of culture. Residual aspects are those which seem to have an air of the past about them but are still active in the present. A key residual element in teacher education might be the 'crit', the assessment of a pre-service teacher's practice which will determine whether or not they have successfully completed their period of school experience. Despite the strong emphasis on formative assessment in the new model and the fact that changes were made to the personnel who oversaw the final assessment, it is still often referred to by teachers and PSTs as 'the crit'. Emergent practice might be considered as the dialogue-rich clinical practice which we were striving to instantiate: it was emerging from the dominant thinking about teacher education at the time. Williams argues that if emergent practice is to reform dominant practice, rather than being assimilated into it (and therefore lose much of its vitality), it 'depends crucially on finding new forms' (1977: 126).

Together, Wales and Scotland need to consider the following issues. Firstly, staff who lead such radical change are often promoted because of their evident leadership capacities. This takes their embodied knowledge out of the context of teacher education and may leave a knowledge vacuum. Agency in that case trumps structure. Secondly, governments may become attracted by new ideas in which case elements of the structure are moved by fiat and belief, rather than evidence or practice. That can lead to the closure of non-school-based teacher education sites. Structure in that case is destroyed physically; movement between sites necessary for serious thinking is reduced. While structure can be re-constructed to support teacher learning on one site of learning only, the conditions necessary to achieve that well are not yet universally seen as a key responsibility of schools. As White (2013) as shown, the movement to one site of learning

does not solve the issues of how teacher educators should be educated. Thirdly, because the old structure's familiarity is sometimes perceived as more comfortable, or affordable, or easier to manage, or easier to understand than the new complexity, the dominant order may seek to incorporate some of the features of emergent practice which it regards as useful. Unless emergent practice is wholly enshrined in new forms which are realistically and financially viable, it is at risk of losing form and agency over time. Therefore the role of other educational infrastructure is crucial. In Scotland the role held by GTCS is necessary in order to mediate between actors: notably between teachers and government; but in this case mediating between universities and government and schools is key in keeping quality questions and quality assurance issues at the forefront of practice.

Conclusion

Wales is reforming much of its educational infrastructure which is important because it enables the system as a whole to absorb the pressure which concentrated change brings. Colleagues in Wales may consider conceptualising teacher education as a career-long phenomenon to enable a focus on what learning consists of at different stages of the career. They may monitor movement between schools and university with declarative and procedural knowledge being used and generated appropriately on each site for mutual development and co-operation. They may consider the professional learning needs of teacher educators on both sites. Scots may also wish to reflect on these issues. While I have described some of the clinical practice undertaken in Scotland, the field of teacher education is replete with human agency and enabling structures. There is no 'one' or 'right' structure; rather there is the deconstructing of existing structures and the deferral inherent in and among them which can continue to be re-formed in order to meet the future needs of educating teachers in different contexts and in different cultures.

References

- Baachi, C. (2009). *Analysing Policy: what's the problem represented to be?* Frenchs Forest, NSW: Pearson Education.
- Baumfield, V., Hall, E. and Wall, K. (2008). *Action Research in the Classroom*, London, Sage Publications Limited.

- British Educational Index (2019). Available at: <https://www.ebsco.com/products/research-databases/british-education-index> (Accessed 30 September 2019).
- Bryce, T.G.K and W.M. Humes, (eds) (2008). *Scottish Education: Beyond Devolution*, Edinburgh: Edinburgh University Press.
- Burn, K. and Mutton, T. (2013). *Review of Research Informed Clinical Practice in Initial Teacher Education*. London: British Education Research Association (BERA).
- Butler, J. (1993). *Bodies that Matter: on the discursive limits of "sex"*. New York: London: Routledge.
- Christie, D. (2008). Professional Studies in Initial Teacher Education. In: Bryce, T. G. K. & Humes, W. (eds) *Scottish Education: beyond devolution*. Edinburgh: Edinburgh University Press.
- City, E. A., Elmore, R. F., Fiarman S.E., and Teitel, L. (2009). *Instructional Rounds in Education: a network approach to improving teaching and learning*. Cambridge, MA: Harvard Educational Press.
- Cochran-Smith, M. and Lytle, S. (2009). *Inquiry as Stance: Practitioner research for the next generation*, London and New York, Teachers College Press.
- Czerniawski, G., Guberman, A. and Macphail, A. (2017). The professional developmental needs of higher education-based teacher educators: an international comparative needs analysis. *European Journal of Teacher Education*, 40, 127–40.
- Derrida, J. (1997). *Of Grammatology*. Baltimore: Johns Hopkins University Press.
- Donaldson, G. (2011). *Teaching Scotland's Future: report of a review of teacher education in Scotland*. Edinburgh: Scottish Government.
- Furlong, J. (2013). *Education: an anatomy of the discipline*, Abingdon: Routledge.
- Furlong, J. (2016). Initial Teacher Education in Wales – a rationale for reform. *Wales Journal of Education*, 18, 45–63.
- HMIE (2002). *Evolution or Revolution: HMIE scoping review of initial teacher education*. Edinburgh: Scottish Executive.
- Humes, W. (2001). 'Conditions for professional development'. *Scottish Educational Review*, 33, 6–17.
- Humes, W. and Bryce, T. G. K. (1999). 'The Distinctiveness of Scottish Education'. In: Bryce, T. G. K. and Humes, W. (eds) *Scottish Education*. Edinburgh: Edinburgh University Press.
- Kennedy, A. (2005). 'Models of Continuing Professional Development: a framework for analysis'. *Journal of In-Service Education*, 31, 235–50.
- Kidner, C. (2013). *SPICe Briefing Curriculum for Excellence 13/13*. Available at: http://www.parliament.scot/ResearchBriefingsAndFactsheets/S4/SB_13-13.pdf (Accessed 29 August 2019).
- Kirk, G. (1999). 'Teacher Education Institutions'. In: Bryce, T. G. K. & Humes, W. (eds) *Scottish Education*. Edinburgh: Edinburgh University Press.
- Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*, Englewood Cliffs, New Jersey, Prentice-Hall.
- Kriewaldt, J. and Turnidge, D. (2013). 'Conceptualising an Approach to Clinical Reasoning in the Education Profession'. *Australian Journal of Teacher Education*, 38 (6), 102.

- Lave, J. and Wenger, F. (1999). *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Loewenberg Ball, D. and Forzani, F. M. (2009). 'The Work of Teaching and the Challenge for Teacher Education'. *Journal of Teacher Education*, 60, 497–511.
- Mclean Davies, L. M. A., Deans, S., Dinham, P., Griffin, B., Kameniar, J., Page, Reid, C., Rickards, F., Tayler, C. and Tyler, D. (2013). 'Masterly preparation: Embedding clinical practice in a graduate pre-service teacher education programme'. *Journal of Education for Teaching: International research and pedagogy*, 39, 93–106.
- Menter, I., Baumfield, V., Carroll, M., Dickson, B., Hulme, M., Lowden, K. and Mallon, W. (2011). *The Glasgow West Teacher Education Initiative: a clinical approach to teacher education*. Glasgow: University of Glasgow.
- Menter, I. and Hulme, M. (2011). Four 'academic sub-tribes' but one territory? Teacher educators and teacher education in Scotland. *Journal of Education for Teaching*, 37 (3), 293–308.
- Menter, I., Hulme, M., Elliot, D. and Lewin, J. (2010). *Literature Review on Teacher Education in the 21st Century*. Edinburgh: Scottish Government.
- Murray, J. (2014). Teacher educators' constructions of professionalism: a case study. *Asia-Pacific Journal of Teacher Education*, 42, 7–21.
- Niesche, R. (2014). *Deconstructing Educational Leadership: Derrida and Lyotard*, London and New York, Routledge Taylor Francis.
- Scottish Executive (2000). *A Teaching Profession for the 21st century*. Edinburgh: Scottish Executive.
- Scottish Executive (2001). *A Teaching Profession for the 21st Century: agreement reached following the recommendations made in the McCrone report*. Edinburgh: Scottish Executive.
- Scottish Executive. (n.d). *About the Framework*. Edinburgh: Scottish Executive.
- Scottish Government (2011). 'Continuing to build excellence in teaching: the Scottish government's response to Teaching Scotland's Future'. <http://dera.ioe.ac.uk/id/eprint/10452>.
- Showalter, E. (ed) (1986). *The New Feminist Criticism: essays on women, literature and theory*. London: Virago.
- Spivak, G. (1999). 'A critique of postcolonial reason: toward a history of the vanishing present'. Cambridge: Harvard University Press.
- Stenhouse, L. (1983). 'Research as a basis for teaching', in *Authority, Education and Emancipation*. London: Heinemann Educational.
- Teitel, L. (2013). *School-based Instructional Rounds: Implementing Teaching and Learning across classrooms*. Harvard: Harvard Educational Publishing Group.
- Timperley, H. S. (2011). *Realizing the power of professional learning*, Maidenhead: Open University Press.
- Totterdell M, W. L., Bubb S. and Hanrahan K. (2004). 'The impact of NQT induction programmes on the enhancement of teacher expertise, professional development, job satisfaction or retention rates: a systematic review of research

- on induction'. *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education.
- White, E. (2013). Exploring the professional development needs of new teacher educators situated solely in school: pedagogical knowledge and professional identity. *Professional Development in Education*, 39, 82–98.
- Welsh Government (2019). *How best to use the professional standards*, Cardiff: Welsh Government.
- Williams, R. (1977). *Marxism and Literature*, Oxford, Oxford University Press.
- Zeichner, K. and Conklin, H. (2005). 'Teacher Education Programs.' In: Cochran-Smith, M. and Zeichner, K. (eds) *Studying Teacher Education: the report of the AERA panel on research and teacher education*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Zeichner, K. B. and Tabachnick, B. R. (1981). Are the effects of university teacher education 'washed out' by school experience? *Journal of Teacher Education*, 32, 7–11.

Notes

- 1 Subsequently the course was amended to enable students to carry out an enquiry into their own practice in school.
- 2 The Scottish Credit and Qualifications Framework describes learning from secondary school qualifications to PhD and assigns these qualifications a level which can then be read across School, Further Education Colleges and Universities in order to demonstrate to educators and employers: the generic features of learning displayed at each level; the number of hours associated with that level; and where the qualification sits with regard to qualifications in other sites of education.
- 3 The use of SCQF's descriptors for Masters-level study were adduced in order to demonstrate to the university and to the regulator that new courses met the relevant independently agreed requirements for Masters study in Scotland.
- 4 Figures are accurate as of 30/9/19