Designing an Integrated Programme of Initial Teacher Education: Progress, Considerations and Reflections

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ABSTRACT

This article explores the development of an integrated programme of initial teacher education premised upon a clinical practice approach that aims to develop student teachers as research-informed, reflective practitioners. The article outlines key decisions in developing an integrated approach to a new programme of initial teacher education that is both research-infused and research-informed. It highlights the centrality of a Partnership approach to the design of the programme and outlines the co-construction process that underpinned it. The article also explains how University subject experts are integral to the ITE programme providing both subject and research expertise. The main features of this integrated programme of ITE are outlined, and the article concludes by offering some reflections and considerations about an approach to initial teacher education that is genuinely research informed and grounded in teacher enquiry.

Key words: Initial Teacher Education, clinical practice, research-informed practice and partnership working

Introduction

Teacher education has become globally significant as increasingly it is viewed as a key contributor to successful education systems (Menter, 2019). It has been argued that an education system in which all learners have an equal opportunity to reach their full potential can build the capacity for economic growth and social cohesion (OECD, 2017). Achieving such a shift, however, is dependent upon the careful selection, preparation and development of teachers within an education system. While various socio-economic and contextual factors outside the school affect students' attainment and achievement (Harris and Jones, 2019; Thompson, 2017) the quality of teachers and teaching remains the single best within-school predictor of student learning and achievement (Hattie, 2008).

Increasingly, policy makers are viewing teacher education as an important catalyst for system change and improvement. Hence, there has been considerable international debate about different models of teacher education and the nature of the professional knowledge required to meet the contemporary needs of schools and school systems (Tatto and Menter, 2019). In many countries however, significant and pervasive teacher shortages remain an issue (Zarra & Zarra, 2019) along with concerns about teacher recruitment (Davies *et al*., 2016). As a direct consequence, alternative routes into teaching have emerged aimed at increasing the supply of suitably qualified practitioners into schools, especially within shortage subject areas (Harris *et al*., 2019). In addition, there have been attempts to let the market mediate on the supply side, based on the premise that competition will lead to improvement (Mayer *et al*., 2017; Mayer and Reid, 2016). In some countries, including Wales, excessive marketisation, competition and alternative models of teacher education have not taken a firm hold, while in others, particularly the USA and England, they remain a prevalent presence with relatively little evidence to support their effectiveness (Darling-Hammond, 2017).

Against this backdrop of significant shifts within the teacher education landscape there has also been a growing swell of interest in programmes of initial teacher education (ITE) that provide opportunities for beginning teachers to engage in 'research-informed clinical practice' (Burn and Mutton, 2015). This interest arises from a gradual move away from conventional programmes of ITE, traditionally led and administered by universities, towards a more collaborative approach where schools and universities jointly share responsibility for the design and delivery of ITE programmes (Musset, 2010).

While terminology varies from ITE programme to ITE programme, the broad intention of a 'clinical practice' approach is to facilitate and deepen the interplay between the different kinds of knowledge generated and validated within the different contexts of the school and the university. Essentially, such an integration means not merely extending the time that beginning teachers spend in school but also focusing on the processes by which professional knowledge is created, for example, by equipping beginning teachers to act as researchers and adopting a problem-solving orientation to practice (Mutton *et al.*, 2018).

There is strong evidence to suggest that teachers and teacher educators need to engage with research in order to be most effective (BERA–RSA, 2018). There is also strong evidence which underlines how teachers and teacher educators need to be equipped to engage in enquiry orientated practice which essentially means having the capacity, motivation and opportunity to use research-related skills and research evidence to improve their instructional practice. This type of research-informed practice requires careful preparation and as such should be integral to initial teacher education, so that knowledge of academic subjects, research skills and direct practical experience in the classroom are fully integrated.

It has been argued that providing beginning teachers with ongoing support to build their clinical judgement and to refine their application of research knowledge in clinical teaching is therefore critical in their initial training (Clarke *et al.*, 2019).Looking across the UK, there are a growing number of ITE programmes that are based upon a clinical practice model, most notably provision at the University of Glasgow (Conroy, Hulme and Menter, 2013) and the University of Oxford (Burn and Mutton, 2015; Furlong, 2015). They still, however, remain relatively limited in number. It has been proposed therefore that there is an 'urgent need for all stakeholders to work together to create a national strategy for teacher education and professional learning based on the principles of a research informed clinical practice' (BERA/RSA, 2014: 8). Currently, within Wales, the initial teacher education provision remains relatively uneven in this respect.

This article outlines the development of new initial teacher education programme premised upon an integrated design intended to develop student teachers as research-informed reflective practitioners. It outlines how this new programme of ITE embodies the development of professional knowledge through a carefully constructed interface between schools and university experiences. The article initially offers some contextual background before explaining the design and the development of the Swansea University Schools Partnership (SUSP) model of initial teacher education.

Swansea University Partnership (SUSP) Model of ITE

Attracting the 'best and most suitable candidates' to the teaching profession in Wales remains a key aspiration and a central policy imperative (Furlong, 2015: 16). *Education in Wales: Our National Mission* (Welsh Government, 2017b) reinforces the centrality of 'developing a high-quality education profession' as a key objective. It signals the importance of developing a highly skilled education workforce through outstanding initial teacher education (ITE) as well as career-long professional learning.

This national aspiration is further reinforced in *Prosperity for All: the National Strategy* (Welsh Government, 2017d) which proposes an *'Ambitious and Learning'* Wales, supporting young people to make the most of their potential through a new curriculum designed to give learners a broad and enriching learning experience, and to develop the best teachers and leaders to deliver it successfully (Welsh Government, 2017d: 16). Furthermore, *'Education in Wales: Our National Mission'* clearly articulates a new vision for the Welsh teaching profession that requires practitioners to be 'research-engaged, well informed and learning from excellence' (Welsh Government, 2017b: 11). A recent review of the evidence on engaging teachers with research noted the need for a 'workforce that is research literate, research active, and reflective in their practice; drawing on the best available evidence to inform their practice.' (Tripney *et al.*, 2018: 3).

In *Teaching Tomorrow's Teachers* (Furlong, 2015), proposals for a radical reform of initial teacher education in Wales were outlined. The first part of the report examined evidence of the quality of current provision as well as the challenges for the future raised by the Donaldson Review of curriculum and assessment (Donaldson, 2015). The second part of the report outlined a series of 'options for change' and concluded with a set of nine specific recommendations. These recommendations included proposals for the revision of the legal 'Standards' that underpin initial teacher education, new procedures for accrediting teacher education courses, changes to the undergraduate primary route into teaching and strategies for development of pedagogical research capacity.

Within this dynamic and changing environment for initial teacher education in Wales, the opportunity arose for a new programme of teacher education to complement existing provision. In 2018/19 the Swansea University Schools' Partnership (SUSP) was established and worked collaboratively over many months to design a new integrated programme of initial teacher education. Both University and school colleagues played

equal roles in co-constructing a new approach to ITE provision which has been designed so that student teachers have the necessary knowledge, skills and experiences to navigate the new Welsh curriculum and to lead the learning of others when required. The SUSP ITE programme is premised on enabling student teachers to be 'research-informed reflective practi-tioners' and it places a strong emphasis on research and pedagogical knowledge.

As noted earlier, there is now a significant evidence base (e.g. OECD, 2012; BERA 2014) that reinforces how the most effective programmes of Initial Teacher Education provide rigorous, systematic, practical experi-ence combined with opportunities for research engagement and systematic reflection. It has also been proposed that developing as a reflective practi-tioner will necessitate developing the skills of enquiring into practice and being *research informed* (Cordingley, 2016).

Consequently, the SUSP ITE programme was designed and constructed to reflect a clinical practice approach that directly linked theory and prac-tice, thus enabling student teachers to develop the capacity to diagnose instructional problems quickly, to critically evaluate the available evidence and to draw on a wide repertoire of proven instructional strategies to iden-tify the most appropriate solution. Within the SUSP ITE programme there is an emphasis on teacher enquiry along with 'reflection on and in action' as building blocks in developing critical awareness and self-evaluation as part of their professional learning journey (Schön, 2017: 3).

The cornerstone of the SUSP ITE programme is the enhancement and extension of pedagogical knowledge supported by a process of reflection and enquiry, informed by engagement with the appropriate evidence. The SUSP ITE programme reinforces the importance of subject-specific peda-gogical development and encompasses a range of activities (within pedagogical and professional studies explicitly) which focus on enhancing student teachers' understanding of firstly, the subjects they teach (i.e. sub-ject knowledge); secondly, how pupils learn in those subjects and how to teach them (pedagogic content knowledge); and thirdly how to address learning issues in the subjects they teach, in explicit and structured ways (Cordingley *et al.*, 2018).

The SUSP ITE programme has been carefully structured so that it addresses all the Professional Standards for Teaching and Leadership (Welsh Government, 2017c) through rich integrated learning experiences that reinforce, consolidate and support professional proficiency. The SUSP ITE programme puts the learner at the centre of rich, professional learning

experiences coupled with a range of opportunities and challenges to equip them to enter a diverse range of learning and teaching environments. The central aim of the SUSP ITE programme is to develop high–caliber, research–informed, reflective entrants into the teaching profession and in so doing, to contribute to building the capacity for school and system improvement in Wales.

The SUSP Design Features

The view of ITE encompassed within the SUSP programme is expansive and inclusive, it is 'one that gives teachers the skills, knowledge and dispositions to *lead the changes* that are needed' (Furlong, 2015: 38). The *Professional Standards for Teaching and Leadership* state that the 'teacher consistently extends knowledge, skills and understanding and can show how reflection and openness to challenge and support informs professional learning to progressively develop pedagogy' (Welsh Government, 2018b: 9). In addition, it is proposed that student teachers need to find their 'teaching self'. Reflection along with pedagogical competence, is fostered and refined throughout the SUSP ITE programme so that student teachers can start to develop their own clear teaching identity.

If the vision set out in *A Curriculum for Wales – a Curriculum for Life* (Welsh Government, 2015a) and the revision of *Qualified for Life'*(Welsh Government, 2014b) is to be achieved, student teachers will require pedagogical and assessment expertise to meet the requirements of the new curriculum. Consequently, the design principles that underpin the SUSE ITE programme reflect a set of core beliefs and values about high quality teacher education. They reinforce the integration of theory and practice, the centrality of research literacy and the importance of pedagogical knowledge. Each of these core design principles will now be outlined.

1.Student Focused

The SUSP ITE programme is designed around the student teacher with a clear infusion of how adults learn (Brookfield, 2001). The programme centres on the learning needs of student teachers and carefully scaffolds their integrated learning to ensure they meet the professional levels of expertise required. The programme design draws heavily upon the idea of alignment within teacher education, at the macro, meso and micro levels

reflected throughout solid partnership arrangements (Tatto *et al.*, 2018; Mutton *et al.*, 2018).

2. Research-Informed

Through explorations of curriculum, pedagogy, assessment and barriers to learning, student teachers on the SUSP programme will engage with contemporary research evidence and will also develop their own research literacy. Student teachers will be engaged in enquiry orientated practice, as part of their assessed work and will be supported to refine their research literacy skills in order to learn to evaluate different forms of evidence in keeping with a clinical practice approach.

One important and distinctive feature of the SUSP programme is the engagement of University subject-specific academic advisers to work directly with schools and students. Student teachers will have access to subject experts in schools and at the University to deepen subject knowledge and to develop effective pedagogic practices. Student teachers will have opportunities to engage with their subject academic advisers on a one to one basis, as part of dedicated subject seminars and through master classes delivered in schools. There will also be opportunities for all student teachers to engage with University research teams in order to access cutting edge research within their respective subject area.

International research leaders and experts in their respective fields will be working with student teachers on the ITE programme. They will offer guidance and expert research input to ensure student teachers and those who support them are knowledgeable about the latest research in their subject areas and have an up to date understanding of all new developments in their field.

3. Leadership Prepared

The SUSP ITE programme will enable student teachers to prepare for future leadership roles within and outside the classroom and will empower them to consider leadership roles at the start of their careers. The ITE programme encompasses the development of leadership skills and competences in line with the QTS level of the *Professional Standards for Teaching and Leadership*. Consequently, student teachers will have opportunities to develop their leadership capabilities, within their core role as a classroom teacher through various structured experiences and opportunities in

schools. They will also explore the leadership of learning and consider the competencies required for leading curriculum change.

4. Pedagogically Competent and Curriculum Ready

A critical component of the professional learning journey for student teachers is how they gain expertise in the pedagogy of their subject area and increasingly, the Areas of Learning (AoLE) and Experience. The *Professional Standards for Teaching and Leadership* state that the 'teacher consistently secures the best outcomes for learners through progressively refining teaching, influencing learners and advancing learning'. The SUSP programme will support pedagogical development through engagement with subject experts, at both school and University to ensure that they have sufficient subject knowledge and expertise to teach within the AoLEs. Through innovative learning experiences in schools, and structured mentoring and coaching, student teachers will develop their practical expertise. Student teachers will also be supported and coached in the process of differentiating their classroom teaching in relation to the learning needs of the pupils and the respective requirements of teaching within their AoLEs.

5. Digitally Confident and Capable

The new Digital Competence Framework (Welsh Government, 2016a) aims to create digitally confident and capable young people. For this to be achieved, we need digitally competent and capable practitioners who can effectively use appropriate technologies to support high-quality learning and teaching, underpinned by a range of effective digital pedagogies. The Swansea University Schools' Partnership approach to ITE has embedded effective digital practice, supported by emerging research across the disciplines. The NNEST will play a pivotal role in developing digital skills and competencies in our student teachers. Plus, there will be opportunities that will arise for student teachers from a future partnership with Microsoft Educator.

6. Collaborative & Innovative

The *Professional Standards for Teachers and Leadership* signal the importance of collaboration and innovation as core expectations of all teachers. There are expectations that teachers firstly, find 'opportunities to work

productively with all partners in learning in order to extend professional effectiveness and secondly, employ 'an innovative outlook which is exemplified through the controlled and measured development of techniques and approaches to improve pedagogic outcomes. The programme will provide opportunities for professional collaboration and innovation within the classroom.

7. Culturally Attuned

The SUSP programme has been designed to give student teachers both the knowledge and understanding of the complex and changing world of teaching. Student teachers will be expected to have knowledge of the history of educational policy in Wales and to know about contemporary Welsh society. This will help them understand the ways in which teaching, and the school curriculum have changed and enable a critical appreciation of current policy and its impact on practice.

The importance of the Welsh language will be reinforced throughout the SUSP ITE programme equipping students with a deep understanding of Wales as a bilingual society. In addition, student teachers will be helped to fully understand the potential impact of poverty on educational achievement and attainment. In Wales 31% of young people are classified as living in poverty which is the highest proportion in the four jurisdictions of the UK (Joseph Rowntree Foundation, 2018). The way poverty affects teaching and learning in classrooms, therefore, is something that student teachers need to appreciate and understand (Thompson, 2017). The programme will, therefore, provide structured opportunities to interrogate what is learned from very different contexts and settings. Student teachers will be challenged and questioned throughout the programme in order to develop their own 'theories of professional practice' (Welsh Government (2018b: 11).

To conclude, the design principles that underpin the SUSP ITE programme reinforce a shared partnership vision for high quality, integrated, ITE provision that is distinctive in its offering but is substantially grounded in the high expectations required of all providers of ITE in Wales. The next section of this article explores the integrated nature of the SUSP ITE programme that reflects a 'clinical practice' approach (Burns and Mutton, 2013).

An Integrated Model of ITE

The most recent 'practicum turn' in initial teacher education (Mattson *et al.*, 2011) places a much greater emphasis on the role of the practical or 'field' experiences in the process of learning to teach. This implies greater integration between theory and practice for student teachers. In their work, Darling-Hammond and Bransford (2005: 392) argue that 'teacher education programs that have coherent visions of teaching and learning, and that integrate related strategies across courses and field placements, have a greater impact on the initial conceptions and practices of prospective teachers than those that remain a collection of relatively disconnected courses'.

Previously, within many ITE programmes, the theory and practice elements of the course merely existed side-by-side. Any dialogue between the Universities and schools, focused largely on the routine organisation of school placements and the assessment of student teachers' classroom practice within the framework of nationally set standards of competence. As a result, there was little coherence or connection between the school and university-led experiences and little structured opportunity for student teachers to actively and productively link what they learned in one environment to what they learned in the other (Martin *et al.*, 2011).

The Carter (2015: 21) review of ITE in England noted that 'the most effective programmes … should be structured so there is effective integration between the different types of knowledge and skills trainees need to draw on in order to develop their own teaching.' The Furlong report (2015) into the future direction of ITE in Wales, similarly, highlighted the need to 'ensure that both university and school components are carefully integrated with each other.' (Furlong 2015: 8). The *Criteria for the Accreditation of Initial Teacher Education Programmes in Wales* underscores that partnership is an essential element of ITE curriculum design and requires 'programmes … to be devised so that there are structured opportunities for the different forms of professional knowledge provided by each partner to be brought together' (Welsh Government, 2018b: 10).

This implies a much closer relationship between theory and practice along with the integration of practical and academic knowledge that is reflected in a 'clinical practice' approach to initial teacher education (Conroy, Hulme and Menter, 2013). This approach allows novice teachers to engage in a process of reflective enquiry where they seek to interpret and make sense of the needs of their students in order to select and implement

appropriate pedagogical actions. Hence, in the SUSP model, critical reflection is a key component and expectation of all student teachers.

Clinical Practice

A 'clinical practice' approach is one that is used within medical training, particularly in the preparation of nurses (Ellis, 2019). Clinical practice, within the medical context, places research at the heart of clinical decision making and recognises that such research may come from a variety of sources. Within nursing, clinical practice involves the conscientious, explicit and judicious use of best evidence in order to make decisions about the treatment and care of an individual patient (Cullan and Adams, 2010). Such evidence, it is proposed, typically comes from research conducted by nurses and other health professional ((Ellis, 2019) In summary, this approach necessitates integrating individual clinical expertise with the best available external research and evidence.

The application of clinical practice to education, particularly teacher education, essentially means bringing a research-informed understanding of learning and teaching to interface with the professional understanding and expertise of experienced classroom teachers (Kriewalt and Turnidge, 2013). It implies the effective integration of university and school knowledge that deepens and extends a student teacher's professional knowledge and practice. As Burn and Mutton (2013: 3) note: 'by clinical practice, we mean, the experiential processes by which novices develop their abilities to teach effectively'.

Within a clinical practice approach there is a clear focus on teacher enquiry where teachers are equipped to undertake their own research and to evaluate the research of others in direct relation to the classroom situations that they face. This implies that universities need to engage with schools far more, to develop research literacy and understanding. Consequently, the SUSP ITE programme is premised upon student teachers being 'research informed' with a clear expectation they will engage with some form of close to practice research that will allow them to find evidence, appraise evidence and act on the evidence. The skill of critical reflection is key to the evaluation of research evidence and integral to the professional capability of those entering the teaching profession, hence the effective mentoring of student teachers is crucial (Furlong and Maynard, 2012; Hagger, & McIntyre, 2018).

Within the SUSP programme, the aim is for student teachers to become research-informed reflective practitioners. There is sufficient evidence to suggest that such engagement with research can inform and enhance teachers' technical knowledge about instructional practices. Darling-Hammond and Bransford (2005) have highlighted the characteristics of the 'research-informed reflective practitioner' and argue that 'teachers need to do more than simply implement particular techniques; they need to be able to think pedagogically, reason through dilemmas, investigate problems, and analyze student learning to develop appropriate curriculum for a diverse group of learners.' (Darling-Hammond and Bransford, 2005: 392). More recently, Bohle-Carbonnell *et al.* (2015) have proposed that: "to be able to solve non-standard problems, individuals have to transform their current body of knowledge and methods of working. As a result of this, 'adaptive expertise' leads to the creation of something new' (Bohle-Carbonnell *et al.*, 2015: 8).

The SUSP ITE programme, therefore, has been carefully designed with structured opportunities for student teachers to develop their research literacy and 'adaptive expertise', not only in their own classroom practice – through an integrated research-informed programme – but also through professional learning opportunities that allow student teachers to adapt and apply their knowledge and understanding in real-time (Timperley, 2016). It is clear that developing teachers' research literacy is a proven way of deepening and expanding teachers' professional expertise (BERA/RSA). Hence, the SUSP programme has been designed so that there is specific input and support for student teachers as they develop their research literacy and engage in close to practice research.

Martin *et al.* (2011: 15) note the need for careful preparation of developing innovative approaches to initial teacher education reinforcing that, 'hand in hand with these new calls to implement clinical-rich teacher preparation must be understandings of how to construct and support rich, clinical contexts that serve as transformative settings for teacher learning.' Therefore, the SUSP agreed that the creation of a third (hybrid) space was needed to 'bring practitioner and academic knowledge together in less hierarchical ways in order to create new learning opportunities for prospective teachers' (Zeichner, 2010: 92).

Burroughs *et al.* (2019: 8) note that 'movement into an authentic co-constructed partnership calls for flexibility, collaboration, openness to learn from partners, diplomacy, and even a willingness to let go of previously held beliefs and practices.' Martin *et al.* (2011) argue that 'working

towards the third space requires an embracing of complexity and uncertainty in social contexts, rather than control and power' (Martin *et al.*, 2011: 14). Therefore, as the new collaborative community, the SUSP had to set aside traditional roles and adopted a genuinely collaborative approach to working which was neither school nor university-led but neutrally situated within the collaboration of equal partners.

Partnership and Co-construction

To be most effective, clinical practice requires authentic partnerships that ensure the integration of expertise and learning approaches in different contexts. To facilitate such cross-sector partnership and authentic knowledge exchange, therefore, the SUSP felt it was imperative that all parties contributed to every element of the design of the new ITE programme, from course content and student teacher support right through to joint teaching and practice-appropriate assessment. Such an approach reflects the Darling-Hammond and Bransford (2005) recommendation that 'the university … and the school develop a shared conception of good teaching that informs their joint work' (Darling-Hammond 2005: 416). Yet, as Redman (2014) notes, 'the complex process of preparing teachers takes time and requires supportive partnerships at every level, and at every point of the pre-service teachers' learning journey' (Redman, 2014: 20). Furthermore, as Rust (2018: 9) acknowledges, 'the very complexity of the field requires a powerful shift in practice and in thinking' and this shift can be both disruptive and problematic.

Any partnership does not exist in isolation from other structures and, as Rust (2009) notes, with the creation of a third space 'triad', 'teacher educators … must become adept at moving between these communities, retaining the scholarly discipline required by the university and embracing the discipline of practice that is essential to effective teaching in school ...' (Rust, 2009: 9). Hence for the SUSP ITE programme to be successful, it was important that any potential barriers were considered, and addressed, from the earliest stages of programme development. It was also very clear that simply co-constructing course content would not, in and of itself, reflect the work of an authentic or functioning partnership. Consequently, the next part of this article focuses on the steps taken ensure that the SUSP ITE programme was genuinely and systematically co-constructed.

The initial stage of establishing the Partnership involved the selection of the SUSP lead schools using criteria developed collectively by external

ITE advisors, education consortia and university subject specialists. The lead schools were selected mainly for their expertise in delivering ITE, their approach to collaboration and their commitment to the ethos of Schools as Learning Organisations (Kools and Stoll, 2016). These attributes also underpinned the partnership approach and were critical in ensuring the effectiveness of the co-construction process.

A three-phase approach was adopted to co-construct the macro and micro elements of the SUSP ITE programme. Phase 1 focused on the 'macro' level programme development with four school-based events, each linked to a key theme for the delivery of the ITE programme. The first event focused on the programme structure, curriculum and the outline content for the Practice and Theory (PaT) days. The second event considered the assessment strategies used to enhance student teachers' development and to evidence individual progress against the new Professional Standards for Teaching and Leadership. The third event focused on partnership, governance and quality assurance to ensure any structures or processes were fit for purpose for all delivery elements, providing strategic direction yet maintaining operational oversight across all partnership schools.

The fourth event explored contractual and professional learning support arrangements, defining the roles and responsibilities of all stakeholders to support the delivery of ITE. Senior staff from each Lead school and several network schools participated in each co-construction event. All the co-construction meetings were held in a school setting, were organised and facilitated by university staff but were driven primarily by school members. Each event followed a cyclical process of build, select, review and each subsequent meeting commenced with a period of shared reflection and the revisiting of previous decisions about course design and structure.

Phase 2 of the co-construction process focused on the 'micro' content to be delivered as part of the school-based Practice and Theory (PaT) element of the programme that integrates the taught and practical elements of professional and pedagogical studies. The PaT groups, comprising university and school staff collaborated to develop course content using cloud-based systems and software packages (SharePoint, OneNote, Teams). Phase 3 of the co-construction process is ongoing to develop the 'micro' curriculum content that will be delivered to the student teachers in a university setting prior to and between each school placement during the 2019/20 academic year.

At all times the SUSP co-construction process was transparent and participatory, drawing on the collective strength and expertise of all partner

schools. The 'buy-in' to the process was carefully negotiated at the outset and ensured that all SUSP schools have played a full part in decisions about content, structure, governance, quality assurance and self-evaluation processes. As noted earlier, the SUSP ITE programme integrates a range of professional learning experiences, in a research informed environment, to enable student teachers to reflect upon and to develop their own theories of professional practice so that they become professionals 'in their own right' (Welsh Government, 2018b: 9).

Coda

The use of research-based skills and knowledge is now internationally recognised to raise the quality of teaching and learning, both in ITE and in schools, thereby enhancing student learning and improving student outcomes (Welsh Government, 2017b; BERA–RSA, 2014). It has been demonstrated that developing the capacity of teacher educators in this way supports their ability to design teacher professional learning around a complex understanding of professional practice supported in turn by teacher engagement with research and in research activity (Furlong, 2013). For Wales, enhancing research capacity and developing research literacy within the teaching profession is an important common denominator within current education reform. Success, however, will be determined by the way in which teachers are prepared for their role and how well they are supported throughout their career.

In this respect, the SUSP programme of initial teacher education (ITE) is more than just a course of preparation for entry into the teaching profession. Through its integrated approach and a clear focus on ensuring engagement with all forms of research, SUSP student teachers will be prepared to enter the profession ready, willing and able to embrace a life-long career in education. The SUSP will actively and collectively support students to develop their research skills, professional attitudes and subject knowledge from the very beginning of their studies.

As highlighted throughout this article, the SUSP programme is a fully integrated model of ITE based on a clinical practice approach that is aimed at developing research-informed reflective practitioners. The programme is based upon a strong conceptual framework and set of key principles that form a model of ITE provision underpinned by a shared commitment to develop teachers who, from the very start of their career, are research

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informed and can contribute to the school as a learning organisation both independently and collaboratively (Kools and Stoll, 2018).

By engaging with relevant research evidence, from the outset of the SUSP ITE programme, student teachers will be well-informed, critical thinkers who can contribute to the development and evaluation of the new curriculum in Wales. Through ongoing collaboration with subject experts in both schools and the University, they will be up to date with current thinking and research knowledge in their subject area.

Furlong (2015: 8) notes that in order to be of the 'highest quality, initial teacher education needs its universities to provide strong, research led courses; it needs a school system that is willing to take responsibility and provide leadership in key parts of all programmes; and it needs to ensure that both university and school components are carefully integrated with each other'.

The SUSP ITE programme has been carefully designed to be 'research-led' with the core aim of equipping the student teachers of today to be the effective, evaluative and critically reflective teachers of tomorrow. Considering the centrality of research within the SUSP ITE progamme, however, raises some broader issues and questions about how teachers use research evidence in a critical and reflective way to develop their classroom skills and knowledge. Recently, Wiliam (2019) has argued that teaching is unlikely to ever be a research-based profession.

Classrooms are just too complicated for research ever to tell teachers what to do. Teachers need to know about research, to be sure, so that they can make smarter decisions about where to invest their time, but teachers, and school leaders need to become critical consumers of research – using research evidence where it is available and relevant, but also recognising that there are many things teachers need to make decisions about where there is no research evidence, and also realising that sometimes the research that is available may not be applicable in a particular context.

This argument is both powerful and persuasive highlighting the need for teachers to use research when it is 'relevant' and to be 'critical con-sumers of research'. This last point is particularly important. Evaluating research evidence is a skill that necessitates carefully development, expert nurturing and regular practice. It requires beginning teachers to develop the capacity to be discerning about research, to be critical and to conduct their own 'close to practice research' to help them to identify appropriate, instructional solutions (Lewis *et al.*, 2017).

The SUSP ITE programme views the teacher as a professional com-bining three aspects of professional knowledge – practical, theoretical and

technical. This includes knowledge derived through personal experience as well as research, analysis and critical reflection. By engaging with research findings, it is proposed that SUSP teachers will be better equipped for critical reflection and practical deliberation accompanied by the exercise of research-informed practical judgment. At the same time 'research will be enriched, through greater insight into the challenges and complexities of educational practice' (BERA–RSA, 2014: 21).

Within education there is a strong tradition of the teacher as researcher. Over four decades ago Stenhouse (1978: 1) eloquently argued that research was 'systematic enquiry made public' and that teacher enquiry or research was as legitimate and important as any other. Since that time, a lot of energy and effort has been placed to ensure that teachers and teaching are enquiry-based, and research informed. There have been successive peaks and troughs of interest in teacher enquiry and teacher research, at different times, accompanied by 'new' models and approaches, some of them clearly engaged in intellectual recycling and re-labelling.

Empirical evidence about the impact on learners from these various forms of teacher enquiry, however, are far less forthcoming than the rich descriptions and detailed accounts of the professional activities they entail (Harris and Jones, 2019). It could be argued, therefore, that yet more variations on a theme are not needed and that teacher enquiry, in the way that Stenhouse (1978) articulated it, is already a clear enough starting point. It is proposed that what the profession needs is not further iterations or models of teacher enquiry but rather a system-wide programme of professional learning, from initial teacher education onwards, that is deliberately designed to integrate teachers' practical knowledge with the insights from academic study, evidence and scholarship.

In Wales the movement towards 'research informed clinical practice' is gaining momentum within initial teacher education. The SUSP programme is part of this new wave of ITE provision that aims to create successive generations of teachers as researchers who can engage in a meaningful process of enquiry, who can formulate and implement appropriate pedagogical approaches and who can critically reflect on the process and the outcomes. A clinical practice approach to teacher education has already proved fruitful in other countries particularly where it is system-wide and deeply embedded (Conroy, Hulme and Menter, 2013; Sahlberg, 2012; McLean Davies, 2015). There is more than enough evidence to suggest that if teacher education in Wales continues to pursue the same research-informed trajectory, then the chances of deep system change and improvement within the profession are significantly higher.

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