

Authors' pre-publication copy.

**Turvey, K. & Hayler, M. (2017) Collaboration and personalisation in teacher education; the case of blogging. *Teaching and Teacher Education*.**

Please note that this is a pre-publication copy of the authors' accepted manuscript. There may be some small discrepancies between this version and the final published article due to minor errors picked up in the production and publication process.

## **Collaboration and personalisation in teacher education; the case of blogging**

*Keith Turvey and Mike Hayler*

*University of Brighton*

### **Abstract**

Through explanatory narrative analysis, we find the process of blogging noteworthy in lending itself to pre-service teachers' professional learning in at least two significant ways. Firstly, blogging can open the potential for collaboration through the discursive space that exists for student teachers as they negotiate the demands placed upon them from school-based and University-based elements of their course. Secondly, blogging appears compatible with a narrative conception of professional learning in which pre-service teachers work collaboratively towards improved synthesis and understanding of their past and present pedagogical experiences, conceptions and beliefs, personalising their passage into the profession.

### **Keywords**

Collaboration, personalisation, professional learning, knowledge ecology.

### **1 Collaboration and personalisation in teacher education**

The aim of this research was to explore the potential of blogging as a hub for a dynamic knowledge ecology amongst pre-service teachers, which could be supportive of their professional learning and provide them with the opportunity to synthesise their university and school-based experiences. Thus, our research addressed the question: How can student teachers' use of blogging yield a collaborative and personalised approach to their professional learning? This also begs the question of why collaboration and personalisation are seen as central to effective professional learning.

In the context of initial teacher education, we define professional learning as a complex process of becoming or identity formation, that is both collaborative and personal. A corpus of research literature attests to the importance of both

collaboration and personalisation in professional learning, not as separate entities but, as inherently interrelated aspects (Schön, 1983; Shulman & Shulman, 2004; Darling Hammond, 2010). Putnam and Borko (2000) emphasise the situated nature of professional learning, building on conceptualisations of knowledge as distributed within communities of practice as individuals grow into the various legitimised and reified ways of being (Lave & Wenger, 1991; Pea, 1993). But Putnam and Borko (2000) also note that, even within models that emphasise the socially situated and distributed model of cognition, professional learning is not uni-directional as “the community, too, changes through the ideas and ways of thinking its new members bring to the discourse” (p.5). In reviewing a decade of research into teacher professional development in this journal, Avalos (2011) notes that the “power of teacher co-learning emerges very strongly from the studies reviewed”, but that “prior beliefs” and “perceptions of self efficacy” were equally important factors (p.17). Similarly, Cheng and Wu more recently (2016) reiterate the reciprocity of both individual and social affordances, as key aspects of effective professional learning communities.

We do not contest the socially situated nature of professional learning. We argue that it is the relationship between collaboration and personalisation that offers particularly fertile ground for understanding the complex change processes that may, or may not, occur at the level of the person. From this perspective, there are strong imperatives for examining professional learning as an anthropomorphic process, as such approaches can help to “unveil the role of emotions in change” (Avalos, 2011, p.11). Indeed, the recognition of anthropomorphic perspectives have in the past been advanced by proponents of reflection in and on practice with evidence of certain advantages such as, inter alia, deeper understanding of professional practice including the authentication or challenging of teacher ideals and beliefs (Schön, 1983; Killeavey & Moloney, 2010). Similarly, Eraut (1994) identifies the risk of not preparing teachers to reflect on and theorize about their professional practice, stating that without these important dispositions they may “become prisoners of their early school experience” (p.71).

Thus, another imperative for further investigation of the nature of the relationship between collaboration and personalisation, and the ways in which blogging can

support these in Initial Teacher Education [ITE]<sup>1</sup>, is a tendency towards the marginalisation of the importance of theory and reflection in recent global education reforms and ITE policy. The United Kingdom (UK) government's education white paper (DfE, 2010) conceptualised teacher education as a craft to be learnt predominantly 'on the job' from established practitioners. McNamara, Murray and Jones (2014) note the political aspiration in England, as in some other countries, is to shift control of ITE away from universities and into a more market-led mixed economy of providers, where schools become the central lead. Similarly, the emergence and promotion of programmes with minimal if any higher education input, such as Teach First (UK) and Teach for America (US), has further marginalised the importance of reflection in teacher education. For example, Kretchmar and Zeichner (2016) characterise such reforms as based on the "belief that teaching is merely a technical skill" and report a certain enmity towards educational theory amongst proponents of what they term "teacher preparation 2.0" (p.423). Thus, we argue, there is a need to restate what we know to be the importance of reflection and theory in professional learning as well as, a need to investigate new opportunities for promoting such dispositions, where appropriate, through the use of digital technologies.

These are some of the broader research aims and concerns that permeated this study during a time of unprecedented change in approach and policy towards ITE in England, but what of blogging and what it could yield for student teachers' professional learning?

## **2 Symbiosis between blogging and professional learning**

As a cultural process, blogging belongs to a trend of increasing 'personalisation' of the web itself and 'personalisation' of the way people engage with the web through mobile devices (Downes, 2004; Traxler, 2010; Wood, 2012; Deng & Yuen, 2013; Scanlon, 2014; Macià & García, 2016). Blogging, we argue, offers a different vision to the common productivity memes in higher education often associated with technologies such as Massive Open Online Courses [MOOCs] (Barber, Donnelly & Rizvi, 2013; Ng'ambi, 2015). Giving voice to the personal in a public arena, there is

---

<sup>1</sup> Initial Teacher Education (ITE) is a generic term used in the UK to describe the various pre-service routes into the teaching profession and qualified teacher status. It is sometimes referred to as Initial Teacher Training (ITT). In this paper we use ITE.

the opportunity for collaboration in the exchange of ideas and experience; a favourable condition for the generation and building of professional knowledge and understanding. This is not about scaling-up education in terms of access, reach and delivery that characterise econometric models based merely on knowledge duplication (Department for Education [DfE], 2016). In blogging, we see the potential for developing a model of professional learning based on the practices of collaboration and personalisation; that is, harnessing the connectivity offered by the web to construct new professional knowledge ecologies. How this potential may be realised, remains contested. Killeavey and Moloney (2010) concluded that, whilst established professional communities can benefit from the use of such online networks, it is unlikely that “a supportive community can be initiated” merely through blogging (p.1075). In a more recent review of online networks and teacher professional development, Macià and García (2016) call for more research into how participation in online networks such as blogs, “influence the depth of teachers’ learning and reflection” (p.305).

In a professional knowledge ecology, we argue, factors are held in an interdependent relationship. An ecology can be conceived as a dynamic system of multiple contingencies for both more and less desirable outcomes. This begs the question; what contingencies for beginner teachers’ professional learning might be fostered by the introduction of blogging? To address this, we need to examine the potential symbiosis between the established characteristics of blogging and professional learning; that is, how blogging and professional learning can be mutually supportive.

Van Merriënboer (2016) argues that knowledge which is often compartmentalised in higher education courses is often not compatible with professional preparation. Teachers, for example, are required to develop “a highly integrated knowledge base, organized in interrelated networks of cognitive schemas” (Van Merriënboer, 2016, p.20). That is, teachers integrate knowledge (for example, a priori, procedural, conceptual) from across numerous domains including, inter alia; subject disciplines, pedagogy, child development, child protection and safeguarding, school contexts, and government education policy. The real-life challenges student teachers face in developing their professional identities and pedagogical practice are also susceptible to the influence, not only of their own attitudes and values, but also others in the

community of practice (Wenger, 1998). Biesta (2007) argues that education is a moral endeavour in which individuals make judgements and choices about teaching based upon their attitudes and beliefs, at least as much as they do on an agreed and shared pedagogical evidence base. This brings into play the affective domains. Studies of mentoring in teacher education in the UK and internationally have found that the various power relationships can render the position of student teacher as vulnerable and unstable (Lasky, 2005; Leaton Gray, 2006; McIntyre & Hobson, 2016; Cheng & Wu, 2016). From this perspective, the development of dispositions such as resilience, openness to collaboration, and a willingness to critically reflect on one's own and others' practice, are problematic. In short, the ecology in which the beginning teacher has to learn is complex and unpredictable. In the light of such vulnerability, what desirable contingencies might emerge for student teachers from the symbiosis of blogging and professional learning?

This particular vulnerability of the student teacher and the ecology they inhabit, gives several researchers cause to argue that teachers need benign spaces in which to explore their emergent teacher identities (Luehmann, 2007; McIntyre & Hobson, 2016). Cheng and Wu (2016) argue that effective professional learning communities are those in which "individuals and their community are engaged in a benignly reciprocal interaction" (p.63). Similarly, McIntyre and Hobson (2016) in their examination of the role of secondary school (11-16 years) subject-based mentors of beginning teachers in England drew on Bhabha's (1994, p.56) concept of "third space" which is defined as an "in-between space" where beginning teachers can explore their emergent professional identities and practices with significantly reduced fears of judgement. The importance of such liminality as a contingency for the positive development of professional identity and learning was also associated with blogs in a study carried out by Wood in the UK (2012), who found that blogging offered liminality for secondary school Geography student teachers. According to Wood (2012), blogs offered these student teachers a space in which to extend conceptual understanding in their subject domain and further their understanding of pedagogy. But Wood (2012) also found evidence of teacher identity and voice, gaining expression through the process of blogging. Indeed, whilst Macià and García's (2016) comprehensive international review of teacher online communities and networks, found teachers preferred face-to-face professional learning

communities, conversely, feelings of professional isolation, together with “recovering and nurturing one’s identity as an apprentice,” were found to be significant motivating factors for online participation (p.303).

Another aspect that indicates a potentially positive symbiosis between the process of blogging and the complex nature of professional learning, concerns the way both rely on a chronology that transcends, yet potentially also connects, significant moments in time, whether from the university-based lecture theatre, the school-based classroom, or even beyond both of these. We argue that a narrative view of professional learning (Bruner, 1986; Polkinghorne, 1988; Reisman, 2008; Goodson & Lindblad, 2010; Goodson 2013), recognises the importance of interleaving as a key contingency for reflection and connection that can lead to further development. Wood (2012), notes the potential of the medium to “allow individuals to personalise their passage into teacher identity” (p.87). Blogs offer the potential to punctuate the chronological passage of time, as the personalised experiences of teachers’ professional journeys are shaped into an ongoing narrative of professional development (Pachler & Daly, 2009; Wood, 2012; Deng and Yuen 2013; Macià & García, 2016). Pachler and Daly (2009) concur, finding the process of professional blogging to be significant as participants were prompted to “assemble meaning independently and make a coherent whole out of the narratives they encounter” (p.15).

Pachler and Daly (2009) concur with Wood’s view (2012) of blogs as a nexus for a wider view of professional learning, but they also identify the opportunity for greater agency in a narrative process of meaning-making. This is important because, as we noted earlier, pre-service teachers are required to develop and integrate an eclectic range of knowledge and experience across various domains and contexts. The processing, critical examination and synthesis of such knowledge, experience and belief is vital if they are to make meaning, and gain insights about their own role as teachers, including the assumptions and beliefs that they bring to this process. Blogs can be seen to lend themselves to the synthesis and development of knowledge, experience and beliefs through their potential for open dialogue between participants across geographical and temporal contexts or sites; university, school, home, past, present, can all be brought into focus through the focal point of the blog. Other evidence, however, suggests that realising this potential is complex and involves a

number of factors such as sociability and the establishment of common ground amongst participants (Preece, 2000; Killeavey & Moloney, 2010). Nevertheless, Scanlon (2014) draws attention to the “increased emphasis on openness” afforded by digital scholarship through blogs and similar tools, which she argues are now “part of the changed landscape for teachers and researchers” (p.14). This is a landscape that would seem to offer contingency for dialogue and collaboration through both resource, and “support network building” (Kerawalla, Minocha, Kirkup & Conole, 2008, p.24). Collaboration and community amongst practitioners are seen as vital elements in teachers’ professional learning. As Cochrane-Smith and Lytle (2009) argue, the community of practitioners is where knowledge is “made public and opened up to the scrutiny of others” (p.41).

Our review of the literature on teacher education, and blogging in particular, led us to concur with Macià and García’s conclusions (2016) that further research is needed to examine the contingencies that both, encourage online participation for professional learning through the personalisation and collaboration afforded by blogs, and also how such participation might influence the “depth of teachers’ learning and reflection” (p.305). Consequently, we also saw this as a problem of pedagogical design.

### **3 Methods**

#### ***3.1 Pedagogical design***

Based upon our review of the literature, and our assumptions that personalisation and collaboration are desirable contingencies for professional learning in teachers, our research and pedagogical problem was how to design an approach to blogging that could yield a collaborative and personalised approach to professional learning in the preparation of teachers, and where this would sit within the overall course structure. As already noted, our aim was to use professional blogging as a vehicle to help student teachers construct a meaningful narrative of professional development, combining their university and school-based learning and development. The shifts in ITE policy in England (DfE, 2010) discussed hitherto, meant a change in the amount of time student teachers, on the Post Graduate Certificate in Education [PGCE] primary (5 – 11 years), spent in school and university-based training to achieve



Authors' pre-publication copy.

Qualified Teacher Status (QTS). PGCE Primary student teachers had up until this change in policy spent equal time (50/50) in school and university, but were now required to spend two thirds of their time in school and one third in university during their 10-month intensive course. The overall design of the course prompted by this shift is illustrated in Appendix A. The reduction in the time available for university-based work, led us to consider blogs as a way of maximising both the time and space for student reflection and study. Subsequently, we developed a module – EV682 *Contemporary Issues in Teaching and Learning* – that brought together an eclectic mix of content and approaches from various domains such as Education Studies, computing, and technology-supported learning. As can be seen from Appendix A, this module was conducted and concluded in the first term of the whole course during a period of approximately four months (September – December), in which students' time was divided fairly evenly between weekly school-based and university-based learning.

The module involved whole-cohort lectures and guest keynote lectures, smaller seminar sessions and guided blogging tasks, with follow up online discussion via the WordPress comment facility on each blog. Student teachers were assigned to smaller collaborative blogging groups (3-4 students) by tutors. Tutors aimed for a balance of genders in the smaller blog groups but this was not always possible due to the gender imbalance of the whole cohort. Each group was asked to post four blog posts outside of university classes, spread throughout the term in response to the following themes, which were also introduced and picked up in lectures and seminars thus:

1. September post: *First thoughts on teaching and learning*
2. October post: *Theories of teaching and learning (behaviourism, constructivism and social constructivism)*
3. Early November post: *Safeguarding and online safety*
4. Late November post: *Digital literacy and education*

After a blog was posted, other members of their assigned group responded to their post using the comment tool. Blogging groups were assigned by tutors to ensure that the blogging activities were conceived firstly as a professional task. The university tutors involved in the module had their own tutor blog that acted as a satellite site for

Authors' pre-publication copy.

content (lecture notes and presentations), with links to all of the student teacher blogs. An outline of the aims, intended learning outcomes, indicative content and assessment task for this module, are outlined in Appendix B.

An important point to note from the pedagogical design of the module, is that the blogging activities and follow up comments from other members of the assigned blogging group, formed an integral part of the module assessment. Others have identified the phenomenon of blogging avoidance (Kerewalla et al., 2008; Deng & Yuen, 2013). Deng and Yuen (2013) in their study with pre-service teachers in Hong Kong, associated this with a voluntary approach to blogging and a “perceived lack of assessment as a demotivating factor” (p.347). In light of this issue, we took what we believed was the most ethical position available in our particular professional context, which was that student teachers should not be asked to voluntarily commit their time on such a short and intensive course, to activities that were not assessed as a significant element of their professional learning. We realised this could have its own impact and limitations on the research outcomes, but that it would not invalidate the research findings. Indeed, if blogging is to be used to support beginning teachers' professional learning, then it is vital to understand the dynamics involved in positioning it as a key pedagogical strategy that is also given value by tutors and students teachers, and therefore assessed. We also assumed, the fact that the module was marked on a pass/fail basis as opposed to students receiving an individual percentage grade, would lend itself to a more collaborative pedagogical design and assessment.

### **3.2 *Research design and conduct***

We used a narrative methodology, as we were predominantly interested in the subjective and perceptual perspectives of the student teachers' experience of blogging and their professional learning. Narrative methodologies often involve the analysis of participant stories, where several in-depth interviews are used to elicit biographical data (Polkinghorne, 1988 & 1995; Chase, 2005; Goodson, 2013; Turvey, 2013).

However, narrative methodologies can also take the form of explanatory narrative research where narrative is used as a device for analysing the data (Polkinghorne, 1988; Pachler, Cook & Bradley, 2009). As Pachler et al., (2009) state, such narrative analysis is an “iterative and inductive approach in which the ‘story’ is allowed to

emerge through systematic analysis and categorisation of available data in discussion with other researchers” (p.81). The intense nature of the 10-month PGCE course meant that ethically, we could not expect participants to take part in several in-depth interviews, without this potentially impacting detrimentally upon their success with the course. It is acknowledged that such compromises led to limitations, but as Schostak notes all methods ultimately form “data into a shape that fits” (Schostak, 2006, p.141). The use of blogs over a period of 4 months, combined with focus group interviews and other documentation such as an end of course survey, did provide us with enough rich data to establish an authentic explanatory narrative that privileged participant perspectives but also supported a rigorous process of analysis (Polkinghorne, 1988).

151 student teachers were enrolled on the Post Graduate Certificate in Education (PGCE) Primary course (5-11 year olds) that started in September 2013. Data was gathered after the completion of the course through 4 different approaches:

- Two student focus group (SFG) interviews (16 students in total)
- Content analysis of collaborative blogs (CB) (10 randomly selected blogs)
- Course survey - given to whole cohort at the end of the course in July. Documentary data (CS) (63 respondents)
- Interviews with module team (IMT) (8 lecturers)

This paper draws on the data from the student focus groups (SFG), the content analysis of the blogs (CB) and the qualitative data from the course survey (CS). For ethical reasons, the selection of participants for the focus groups and subsequent collection and analysis of data was conducted after the completion of the module and after the students had received their graded (pass/fail) assignment feedback. Research activity began in March 2014 – after the completion and assessment of the module - with a call for participants to take part in two focus group interviews. 16 students volunteered and participated in 2 focus group interviews that lasted 41 and 43 minutes respectively. They were semi-structured to enable the students to make their own observations and share their own views about the experience of blogging, whilst also enabling us to focus on our interest in the relationship between the process of

blogging and professional learning. The focus group interviews were then transcribed which enabled us to carry out a thematic analysis.

In the next phase of the research 10 blogs were randomly selected and a qualitative content analysis was carried out on the blogs (CB), using the themes generated from the focus group interviews. Whilst some of the randomly selected blogs contained participants from the student focus groups, others contained none. Whilst a closer match of participants between the two sources of data would have aided triangulation, it would have required further resources to carry out a content analysis of significantly more blogs. Consequently, our decision to randomly select 10 blogs was motivated by pragmatic concerns. Again, whilst it is acknowledged that this limited our capacity to triangulate, it nevertheless remained compatible with our inductive approach to the generation and analysis of the themes. We were interested in how the themes might or might not be manifest within the student teachers' actual blogs more generally, to explore further the relationship between the process of blogging and the student teachers' professional learning in school, university and beyond.

#### **4 Analysis and findings**

We initially analysed the audio recordings of the focus group interviews, with a computer software programme<sup>2</sup> designed to support qualitative and mixed methods research, as a starting point in helping us to find insights and themes in the unstructured data. We then searched for and confirmed these themes within the transcripts of the student focus groups. Both stages involved negotiated co-coding.

Four themes emerged from these stages of our analysis of the focus group interview sessions which are defined in Table 1 below:

---

<sup>2</sup> QSR International: 'NVivo is software that supports qualitative and mixed methods research. It's designed to help you organize, analyse and find insights in unstructured, or qualitative data like: interviews, open-ended survey responses, articles, social media and web content.'

---

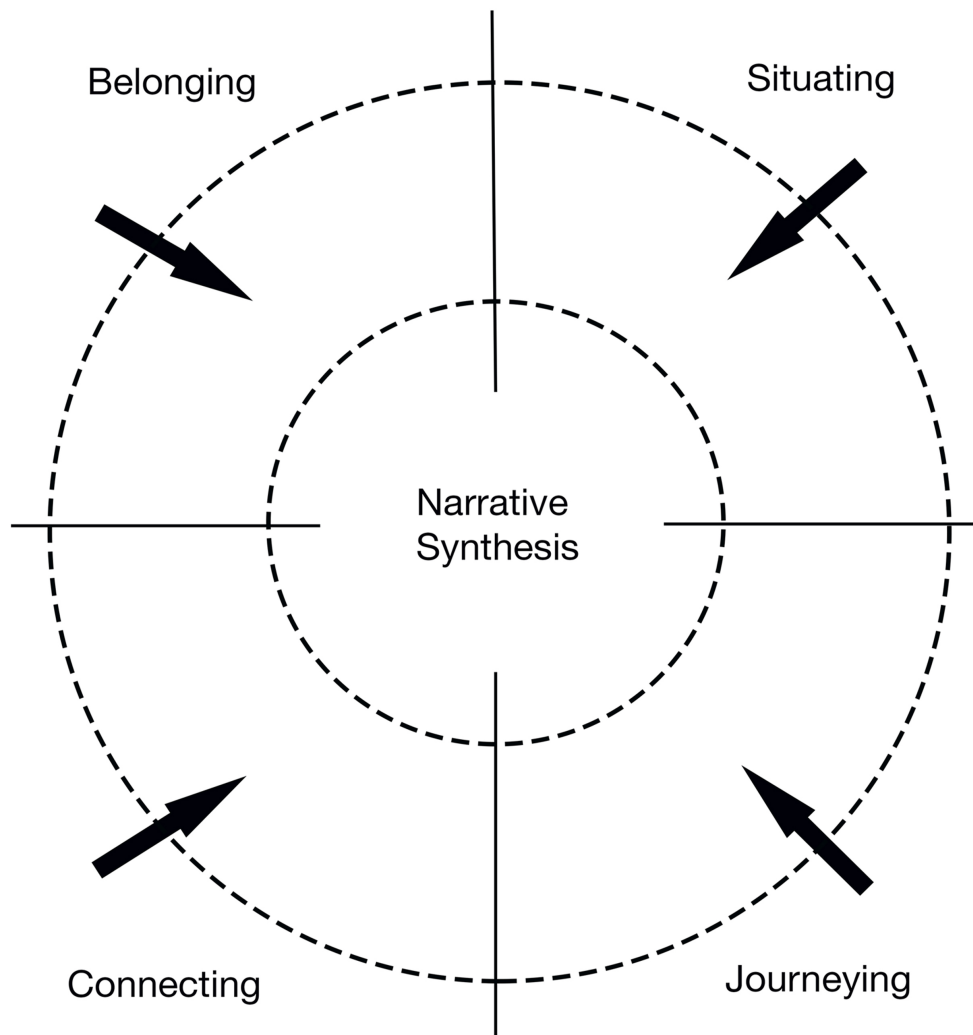
<b>Theme</b>	<b>Characteristics</b>
Belonging	Student teachers are seen to be uniquely positioned in terms of being <i>not</i> school and <i>not</i> university based but display strong sense of belonging to a student teacher community.
Journeying	Growth in professional identity as students display or refer to changes in their conceptual understanding/beliefs/confidence about teaching and learning through critical reflection on their experiences.
Situating	Student teachers engage with wider discourses. For example, they reflect on and make connections between how theory and policy is perceived to be played out in practice.
Connecting	In which the process of collaborative blogging and the medium itself appears significant in its capacity to provide a vehicle for the expression and synthesis of narratives of professional learning.

---

**Table 1:** Themes that emerged from analysis of student teacher focus groups (SFG).

We acknowledge that the four themes in Table 1 are inevitably a ‘best fit’ in organisation to some extent. The comments from students could have been linked with more than one of these or with others not included, such as ‘confidence’ or ‘caring’ or ‘professionalism’ itself, but our analysis of the data as narrative, led us to believe that these four themes best represented what came from the focus groups. Some of the themes have been identified previously within the literature on pre-service teachers and teachers, as discussed alongside the analysis of data below.

Perhaps unsurprisingly, we found that the application of the themes to the content analysis of the blogs (CB) was not straightforward, in that content from blog posts and the follow-up comments from other student teachers, often cut across more than one theme. This prompted us to try to capture this thematic complexity in a way that facilitated our analysis further (Figure 1).



**Figure 1:** Conceptual model used to facilitate qualitative content analysis of blogs

We considered the data in relation to the model in Figure 1. The closer towards the centre of the conceptual model that data is located, the more it appears to cut across and synthesise with more than one of the themes, lending itself to a narrative analysis. Using an explanatory narrative analysis enabled us to keep the integrity of the data intact rather than generate the further abstraction of themes (Polkinghorne, 1988 & 1995; Chase, 2005; Goodson, 2013; Turvey, 2013). The model enabled us to explore the connections between these themes and to develop an explanatory narrative analysis of the data; that is, the story of the various sources of data was allowed to emerge, to reach an agreed interpretation (Polkinghorne, 1988; Pachler, et al., 2009).

In our presentation of the analysis that follows, we draw firstly on some of the student focus group data (SFG) to show how the themes were generated from this. We then focus our attention on the content analysis of the student teachers' collaborative blogs (CB). When data from the blogs is presented, it is tagged with a number and a letter. Each collaborative blog (3-4 student teachers) was assigned a number to aid the random selection of 10 blogs. Within this, each of the students was assigned a letter to identify their contribution to the collaborative blog. This section is then concluded with the presentation of some of the qualitative data from the course survey (CS), to highlight and analyse some of the issues raised by those student teachers who found the approach using blogging to be problematic and in particular, how this highlighted tensions between collaboration and personalisation.

#### **4.1 *Belonging***

The theme of Belonging (Table 1) was explicit in the focus group data. The student teachers in both focus groups made regular reference to how much they valued collaborating with each other to share their ideas.

The importance of a sense of belonging is a common theme in the literature on teachers and teacher education, and professional identities more generally. Baumeister and Leary (1995) argue that the need to belong is fundamental to human motivation, while Deci and Ryan, (2000) identify 'belonging' as a necessary condition for all psychological growth, integrity and well-being. Skaalvik and Skaalvik (2011) consider teachers' feelings of belonging to the school where they are teaching, and conclude that this in some ways mirrors students' sense of belonging within their school, which has been shown elsewhere to be positively related to both motivation (Furrer & Skinner, 2003; Goodenow & Grady, 1993), and satisfaction (McMahon, Parnes, Keys & Viola, 2008; Shochet, Dadds, Ham & Montague, 2006). Fox and Wilson (2015) recognise the way in which relationships with tutors, practising teachers and other students can enhance trainee teachers' sense of belonging to the profession. A study of secondary teacher education (McNally, Cope, Inglis & Stronach, 1994), identified recognition by teachers as colleagues and confirmation of teacher status by pupils, as the major dimensions of student teachers' own developing sense of 'belonging' to the teaching community. Becoming part of a community of

Authors' pre-publication copy.

practice (Wenger, 1998) is clearly not only about gaining specific knowledge and skills, but also a process of 'becoming' a particular kind of person through 'belonging' to a professional community (Wenger, 1998).

The data from the focus group interview sessions with our students, demonstrate a strong sense of belonging through shared responsibility, as well as recognition that their shared identity as student teachers represents an opportunity to learn from each other's experiences as well as their own, as illustrated by the following comments:

*'I think the blog has made me active in terms of discussing/researching professional development with others through blogs, twitter etc.'*

*'Being able to share ideas and read others' blogs not just writing essays for only one tutor to read, made me feel aware of my audience and the benefits to other PGCE students.'*

*'The module helped me to realise how complex and constantly-changing the profession of teaching can be, and that to be a teacher means engaging with current debate. The module has made me understand my position within the profession and taught me to find out information to further my development.'*

*'The process of collaborating to create Blogs and Web Pages has been a new and interesting experience. The Blogs threw light onto the range of opinions on areas of teaching and learning within our group.'*

*'As a group we all decided very early on that inclusion of SEN pupils was of great interest to all three of us and we all had a personal link with this theme.'*

(All SFG)

The shared sense of responsibility seen in these extracts, was not something that was experienced by all students. Inevitably, there were tensions for some, as the following comment implies:

*I thought it (blogging) was good, I thought, in terms of where it can improve, all of it was seamless for us, it was really good, but then I heard other people clashed personality wise and in differing levels of, like, computer literacy (SFG)*

We will return to these tensions, but it was in the content analysis of the blogs that a sense of belonging and being uniquely positioned – as student teachers - to learn from



Authors' pre-publication copy.

each other's ideas and experiences, emerged more fully. For example, in student 6B's and 24P's responses below the theme of belonging is seen in how comfortable these two students are, expressing their views within the student teacher community, whilst also challenging and developing other student teachers' points. The issues they raise were also situated within the wider discourses about professional practice and the professional responsibilities of teachers.

*6B - Whilst I agree with Martin that no system can filter out everything that we would wish our children not to see, I also think that we have more control over the internet within schools than previously stated. Thus, I disagree that we should have to be 'tolerant' of a situation in which children may be exposed to inappropriate and damaging content. This is not something I feel comfortable with. (CB)*

*24P - On the other side however, when looking at the case studies you presented in this blog, like Victoria Climbié and Keanu Williams<sup>3</sup>, their guardian's intentions were completely twisted and manipulative. This surely initiates questions towards how calculated and manipulative these people were towards the schools and agencies involved. So maybe the signs were missed because of carefully calculated planning to avoid suspicion? (CB)*

Similarly, belonging to the community of student teachers also seemed to enable them to utilise their own and each others' common or in this case different, school-based experiences. In the extract below this student reflects on the importance of sharing effective practices and resources between colleagues, after reading about another student teacher's experience in the same school, thus:

*35V – The (literacy) strategies described in both posts are examples of many used within schools, and are often used with great success. However, I think it is extremely important for these strategies to be used consistently across all classes within schools. Beth's example of the use of literacy cards may have given positive results within her class, but, having been on placement in the same school, I have seen neither these cards nor any circle time sessions in my base class. (CB)*

In summary, the sense of belonging and being uniquely placed as student teachers seemed to play an important role in enabling the students to share their own personalised professional concerns and experiences, as well as feel part of the wider

---

<sup>3</sup> Two children who were victims of the failure of the system for their care in the UK, and who tragically died in the years 2000 and 2011 respectively.

student teacher community. That is, the greater the sense of belonging that the student teachers expressed or seemed to feel, the more easily they were able to collaborate and share their personal beliefs and understanding as they evolved.

#### **4.2 Journeying**

As identified in Table 1 above, the theme of Journeying encapsulated what we interpreted to be the gradual growth of student teachers' professional identity, through changes in their conceptual understanding of aspects of teaching and learning, along with changes to their attitudes, beliefs and confidence. That is, the personalising of their journey and professional formation. The metaphor and framework of the journey has often been invoked in research accounts of education and the education of teachers (Mansfield & Volet, 2010; Gatti & Calalano, 2015). Wenger (1998) argued that as "we define who we are by where we have been and where we are going," (p.149) we move through a succession of forms of participation. As we participate, "our identities form trajectories, both within and across communities of practice" (p. 154). These trajectories may be: 'peripheral' (at the edge of the community, not fully a member but contributing to one's identity) or 'inbound' (joining the community with the intent of becoming a full participant), which can be seen in the data from the focus groups and the blogs in our study. Later trajectories can be characterised as 'insider', 'boundary' or 'outbound' but these first two (peripheral and inbound), sit well with our notion of Journeying for students preparing to become teachers.

Elements of change in the 'Journey' towards being a teacher were quite often evidenced through blog posts in which the students acknowledged being surprised by an observation they had made, but these changes were often subtle as opposed to representing a radical change of direction in their thinking. The response below from student 6B for example, illustrates this phenomenon in that she is responding to a whole cohort lecture about theories of learning, in which she was introduced to notions such as behaviourism, constructivism and social constructivism. She connects what she has learnt about these theories in university with her experience in her current school, coming to what she feels is a surprising conclusion, that there is evidence that teachers draw upon aspects of all theories of learning.

**6B-** *I have been surprised by the influence that these thinkers and theories have had on modern day education. There seems to be, in my school at least, no one way of*

Authors' pre-publication copy.

*going about teaching. Our teachers seem informed by all methods, taking into account the role of the teacher as key to transmitting knowledge, but also to scaffolding. Children are passive at points, but active and individual at others. (CB)*

Here 'inbound' or 'peripheral' positioning appeared to prompt an adjustment in her thinking in relation to theories of teaching and learning. Another feature of this theme of Journeying, was the connection that many student teachers made with their own experiences as learners, either at school or, in previous roles as helpers or teaching assistants in schools; or indeed as parents, as illustrated in the following extracts from student teachers' blog posts and comments:

*6C - What's clear to me from my own kids' experience is that, while ICT provides a fundamental context for their learning, it nonetheless presents a solipsistic and asocial world which rubs against the notion of a shared learning environment, and as such must be used selectively and appropriately, and not as an end in itself.*

*18F - I know from having experiences where a child has disclosed something to me and I had to take it further to the deputy head at the time. They worked around the clock and did everything in their power (which actually is a great deal seeing as the files that are shared are seen by police, doctors, teachers and social workers).*

*21H - Throughout my own education I believe I absorbed more information and gained more knowledge while learning through social constructivism, being able to informally and formally discuss and research ideas behind subjects allowed me to think more clearly.*

*21G - It is easy to say that Skinner's behaviourist theory has been undermined and overtaken by the more recent constructivist theories but there are elements of his positive reinforcement theory that I do agree with. When my teacher praised me for good work or behaviour, I felt motivated to work harder and achieve more which resulted in me learning more in school.*

(All CB)

In each of these extracts, student teachers reference their own prior experiences in making sense of the current concerns and ideas they are discussing and confronting. Their 'inbound' trajectories as becoming teachers cut across other prior and parallel identities (Wenger, 1998) as parent, teaching assistant or school child, prompting a revisiting of and in some cases an adjustment to their past experiences. In other blog extracts, there was evidence of a much more significant sense of professional growth and development, as the students made reference to key moments of realisation either

Authors' pre-publication copy.

about their achievements on the course, in relation to their university based experiences, or the development of their school-based pedagogical practice. For example:

*22K - And finally the question of “What is my Teaching Self?” emerged. This was an epiphany for me! There was the sudden realisation that I should develop my own teaching style and not attempt to be anyone other than myself.*

*22L - If you told me 12 weeks ago I would be tweeting, blogging, programming, Scratching and creating a puppet show I would have taken some convincing.*

*22J - This led me to think that I need to challenge this inflexibility in my thinking, otherwise how will I develop the children I teach as creative, flexible thinkers?*

(CB)

In summary, the theme of Journeying revealed significant qualitative evidence of the various ways in which student teachers personalised the process of making meaning, often drawing on their past identities and experiences. This sometimes appeared as a continuation between their past and present experiences, whereas at other times there was evidence of adjustment and adaptation.

### **4.3 *Situating and connecting***

We deal with these two themes together, but again, integral to these, was the underlying processes of collaboration and personalisation afforded by the medium. In analysing the data from the perspective of these themes, student teachers' situating of theory, policy and practice within wider education discourses, was often made explicit through their making use of the affordance of the medium to connect with other sources and material to inform their debate and synthesise different arguments. These sources included both academic and news media.

The perceived disconnection in the education of teachers between the teaching of theory and the daily concerns of practice in school, has been a familiar theme in the literature of teacher education as also discussed hitherto (McCormack & Thomas, 2003; Loughran & Russell, 2007; Zeichner, 2010). The narrative of associations that see theory and practice as opposites has often been challenged (Niemi, 2002; Darling-Hammond, 2010). Unlike Allen (2009), or Sjølie (2014), we did not ask our students about their relationship with theory but, as demonstrated in the previous section, we

did find evidence of student teachers drawing on theory and practice within data from the blogs. The impact of centralised educational policy on student teachers' understanding and practice of teaching can be difficult to clearly identify. The influence of said policy on practice may have been most notable in schools (Docking, 2000; Furlong, 2001), but direct intervention in university-based Initial Teacher Education has also been significant (Furlong, 2005; McNamara et al., 2014). The influence of policy was not foregrounded in our discussions with students in the focus group interviews, but it is a significant feature of several posts within the blogs.

The extracts that follow are all from group 43's blog in response to a university lecture and discussion on issues of online safety and safeguarding. Hyperlinks to references, where available, were provided by the students on the blog but have been removed here for brevity. The extracts have been abridged to highlight connections to wider reading and links, and also to emphasise how the student teachers are situating their own views within the wider discourse. Thus:

*43Ae - I thought that today's lecture on issues regarding the safeguarding and wellbeing of children was both engaging and thought provoking. There was an excellent section on e-safety that I will not go into on this blog entry and will leave to another member of my group to explore in their reply. Instead I will focus on safeguarding and wellbeing.....The Every Child Matters report of 2003 recommended that different services (schools, local authorities, police, child protection services) should take a more multi-agency approach and share information in order to protect children. The subsequent Children Act of 2004 turned the report's suggestions into legislation.....There is a school of thought that 'therapy has intruded into education' (Mintz, 2009, Has Therapy Intruded into Education?. Journal of Philosophy of Education, 43), and that it is not the role of teachers to be concerned with children's wellbeing.....I was shocked to learn that the UK was bottom in an international comparison for children's wellbeing (Unicef, 2007) and I agree with Wilkinson and Pickett in their book "The Spirit Level" that our high levels of inequality has a massive influence on this.*

*43Ac - I take up your gauntlet Ae of discussing e-safety, although I could write a whole dissertation on the subject! The internet is a constantly evolving public place, 're-shaping (children's) communication, identity and relationship management' (Livingstone et al., 2013, p.303). In primary education this is especially difficult when children are developing social and emotional competencies (Coleman and Hagell, 2007).....I would argue that with effective strategies in place digital*

Authors' pre-publication copy.

*technologies offer children agency in 'creativity, communication and learning' (Byron, 2010, p.1) in a shared community.*

*43Ad - The timing of this blog post is relevant to a very recent news article and BBC (television) Panorama documentary. Former director of public prosecution has stated that there should be a 'mandatory reporting' law whereby teachers and other professionals should be prosecuted if they fail to report any child abuse suspicions (Berg & Jones, 2013).....To me, Mintz (2009) stating that the role of the teacher is to educate and impart knowledge and that other services are responsible for child safeguarding and wellbeing is naive.*

(CB)

The student teachers in this extract, like others, situate their own views and developing understanding within the wider discourse of education topics, through reference to their wider academic reading, the news media (BBC News, Sky News, local news) and by utilising the medium to provide hyperlinks to these and other sources such as YouTube. The immediacy and connectivity of the digital medium appeared to support this. Also it should be noted here that despite abridging this data to highlight the identified themes, it is possible to detect the themes of journeying and belonging in this data in that there is a strong sense of belonging in this group; as 43Ac jokes about accepting the challenge from 43Ae regarding safety. Similarly, 43Ad responds to an argument and question presented in 43Ae's original blog post, that 'therapy has intruded into education'. In exploiting the connectivity and immediacy of the medium to situate their views in the wider discourse through links to other relevant articles or reports, personalisation and collaboration could be detected as they responded to each other's challenges within their group, but also offered their own personal perspectives. This concurs with others' evidence of the potential of blogs as a liminal and benign space in which beginning teachers can develop their professional voice (Wood, 2012; Macià & García, 2016).

However, other blogs were less rich in terms of links to different sources and the wider discourse surrounding the topic. For example, Group 21's blog and discussion, based on the same lecture of e-Safety and Safeguarding, provided few links to other sources or the wider discourse. Much of the blog post and follow up discussion tended to comprise descriptive agreement as these extracts illustrate:

Authors' pre-publication copy.

*21H - A word that kept coming up today was communication, whether it is between teacher and pupil, parent and teacher, teacher and colleagues, social worker and social worker or principle and teacher.*

*21I - I agree with your recognition of the word that did crop up in the lecture a lot, 'communication'. This is so important in a classroom situation for everyone involved in creating a co-operative and enriching learning environment. However, personally I have found it a challenge to make the transition from coming into the classroom and asserting your authority as a teacher rather than as their friend.*

*21G - I did agree with elements of the Byron Review 2008, which emphasizes the importance of empowering children so that they can keep themselves safe. I feel that this is vitally important!*

(CB)

To a certain extent, some groups had periods in which their blog posts and responses were less rich and appeared merely to be going through the motions of collaboration and personalisation, with little evidence of synthesis between theory and practice.

#### **4.4 Collaboration and personalisation Vs individualism**

As noted earlier, the process of collaborative blogging was problematic for some student teachers. The nature of their concerns was evidenced through our analysis of the end of course survey and students' responses to questions about how the module could be improved. A theme that ran through some of these responses concerned the formal assessment of a collaborative blog, and also difficulty, for some, in seeing the purpose, as these survey responses (CS) from different students illustrate:

*The collaborative task although interesting also meant a collaborative grade which did mean that you relied on other students too heavily.*

*Group work was difficult.*

*I would prefer individual blogs instead of group blogs.*

*I would have preferred to choose the group I worked with.*

*More examples of what is expected of us right from the start.*

Authors' pre-publication copy.

*The introduction to the task. It was a little confusing and vague and I felt lost to begin with!*

*I'd have liked more guidance on how to do well in the assignment.*

(CS)

It is clear from these comments that the design of the module and use of collaborative blogging caused concern for some student teachers, taking them outside of their comfort zone in terms of their expectations of how they would be assessed and the purpose or rationale for the process. These comments in response to the survey, suggest a perceived disconnect for some student teachers between practice and theory (Loughran & Russell, 2007; Zeichner, 2010) in that their concern was meeting the 'expectations' or doing 'well in the assignment'. Teacher education in many countries requires pre-service teachers to demonstrate their individual competency in relation to a set of professional standards, often evidenced through individual portfolios. These factors concerning the framing of teacher education cannot be ignored and our evidence suggests that they played a significant role in the ways in which the intervention was perceived as something 'other' by some student teachers. For some student teachers, the 'otherness' of the pedagogical design (e.g. formally assessing a collaborative process and output) represented innovation that was embraced, whereas for others it brought uncertainty and anxiety.

## **5 Discussion**

As stated earlier, the research question that we sought to address in this project is: How can student teachers' use of blogging yield a collaborative and personalised approach to their professional learning? Blogging, in and of itself, is clearly not a panacea for all the challenges and potential difficulties of learning how to teach. But our intervention examined new terrain in researching the potential of blogging when implemented both as a collaborative and formally assessed design for pre-service teachers' professional learning. The evidence from our study suggests that the formally assessed nature of the pedagogical design appeared to be a significant factor in relation to some student teachers' participation (Macià & García 2016), usually provoking a sense of shared responsibility and individual motivation as Deng and Yuen (2013) hypothesised. This was most evident in the analysis through the theme of belonging. By formally assessing student teachers' collaborative blogs, blogging



avoidance (ibid) was minimised, although not eliminated. Some tutors received emails from students asking for further clarifications of expectations before they blogged, and some students expressed anxiety about the process in their course survey.

A formally assessed collaborative framework for blogging appeared to support personalisation as student teachers' connections with, and in some cases, adjustments to, their a priori knowledge was made visible through the process of reflection and meaning-making that blogging lends itself to (Pachler & Daly, 2009; Avalos, 2011; Wood, 2012; Deng & Yuen 2013). This was seen mostly through the theme of journeying, where the analysis of blog content showed links with student teachers' past experiences and, in some cases, adjustments in their thinking as their experiences in school or university lectures challenged their previous assumptions. In some cases, their previous assumptions about their own professional and personal identities (Wenger, 1998) were challenged, as they shared significant insights into how they had adjusted their view of their own beliefs, capabilities or aspirations, as in the student teacher who had surprised herself about her computer programming and blogging capabilities and her enjoyment of these, or, the student teacher who felt she had come to a realisation about the importance of developing her own pedagogy and being herself. That is, even within a formally assessed collaborative framework, blogging appeared to lend itself to a narrative conception of professional learning as pre-service teachers negotiated the process of assimilating and accommodating new knowledge and experiences into their existing schema (Bruner 1986; Van Merriënboer, 2016).

Most significantly, we feel that this research illustrates how personalisation of the learning process is not an individual, self-contained pursuit. Prioritising collaboration in the design of the assessment, supported the student teachers and mostly led to a mutually productive relation between blogging and professional learning. This concurs with Cheng and Wu's (2016) contention that professional learning communities are most effective when "individuals and their community are engaged in a benignly reciprocal interaction" (p.63). Playing down individualism and formally legitimising collaboration through blogging by designing it into the assessment process, explicitly recognised the importance of the student teacher community in terms of its nature as a third or liminal space (Bhabha, 1994; Luehmann, 2007; Wood,

2012; McIntyre & Hobson, 2016). Through the themes of situating, connecting and belonging, the data provided evidence of student teachers sharing ideas as well as valuing each other's experiences and ideas as a resource for professional learning. This indicates that contingencies can be designed for blogging that amplify the significance and impact of student teachers' unique positioning in terms of being *neither school nor university*, laying the foundations for a pedagogy of professional learning based upon a knowledge ecology. That is, a knowledge ecology in which ideas and experiences remain public and open for the analysis of others in the professional community of practice (Wenger, 1998; Cochrane-Smith & Lytle, 2009; Scanlon, 2014).

We would also add, that blogs are not inherently benign spaces. Some students found this module challenging and felt uncomfortable with the formal assessment of their collaborative blogs. One of the limitations of our methodological design was that we were not able to explore more deeply why this was the case. In-depth interviews with student teachers could have provided more insight into this but were ruled out for sound ethical reasons as discussed above.

Our research found that promoting, valuing and assessing professional collaboration is complex and the use of digital technologies brings added layers of complexity, as well as new possibilities. But we also believe it raises significant questions for teacher education policy and pedagogy, namely; what kind of teaching profession do we want to foster? For the affordances of digital technologies such as blogs to be optimised and promote student teachers' active collaboration and participation in constructing professional knowledge ecologies, collaboration and shared knowledge construction need to be valued and recognised at least as equal to individual achievement and performance.

As discussed in the introduction, and illustrated in the data, collaboration and personalisation are not mutually exclusive qualities but are interdependent (Putnam & Borko, 2000; Shulman & Shulman, 2004; Cheng & Wu, 2016). Yet, the tendency towards econometric (UNESCO, 2014) measures of quality based on individual performance, prevail in all phases of education (Alexander, 2015), and teacher education is no exception. Predominantly, practice in teacher education in England

remains fixated on grading student teachers' individual performances in the classroom and in their university assignments, as they build a portfolio of individualised evidence to acquire professional standing (DfE, 2011). Similarly, the United States' Education Department (2016) published new regulations for teacher preparation programmes, linking the effectiveness of teacher education to teachers' individual performance beyond graduation, based on the distant proxy of pupils' individual performance. Such individualised measurement of the teacher may lend itself to a marketized global economy of teacher 'training' providers. However, we have significant concerns that such a climate will do little to foster a self-improving profession able to utilise the opportunities that digital technologies could yield for career-long professional development, through mutual collaboration and personalisation based on open and critical engagement in professional dialogue and professional communities of practice (Wenger, 1998).

## **6 Conclusion**

Contingencies for the creation of benign spaces, digital or otherwise, can be designed into the pedagogical detail of teacher preparation programmes. Teacher educators have a vital role to play in this design process. Blogs do lend themselves to such a role, and further research is required into the depth of reflection in teacher learning through blogs. Teacher education designs also need to be predicated on a conception of teacher professional identity as a process of personalisation and collaboration, where openness to the scrutiny of ideas and experience is valued and promoted; again, the key role of the teacher educator in this process should not be underestimated. Reconciling this conception with the highly quantified and individually accountable teacher professional identity that is taking hold globally is, we contest, a significant problem. For collaboration and personalisation to thrive and promote the growth of professional knowledge ecologies, individualism must be kept in check.

## **References**

Alexander, R. J. (2015). Teaching and learning for all? The quality imperative revisited. *International Journal of Educational Development*, 40, 250-258.

Authors' pre-publication copy.

Allen, J. M. (2009). Valuing practice over theory: How beginning teachers re-orient their practice in the transition from the university to the workplace. *Teaching and Teacher Education*, 25(5), 647–654.

Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education*, 27(1), 10-20.

Barber, M., Donnelly, K., & Rizvi, S. (2013). An avalanche is coming: Higher Education and the revolution ahead. Institute for Public Policy Research (England). Retrieved on 11 July, 2017 from: <http://www.ippr.org/publications/an-avalanche-is-coming-higher-education-and-the-revolution-ahead>

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.

Bhabha, H. K. (1994). *The location of culture*. New York: Routledge.

Biesta, G. (2007). Why 'what works' won't work: Evidence-based practice and the democratic deficit in educational research. *Educational Theory*, 55(1), 1-22.

Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge MA: Harvard University Press.

Chase, S. E. (2005). Narrative inquiry: Multiple lenses, approaches, voices. In N. Denzin, & Y. Lincoln, (Eds.), *Handbook of qualitative research* (3rd ed., pp.651-679), California: Sage.

Cheng, X., & Wu, L-y. (2016). The affordances of teacher professional learning communities: A case study of a Chinese secondary school. *Teaching and Teacher Education*, 58, 54-67.

Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research for the next generation*. New York: Teachers College Press.

Authors' pre-publication copy.

Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 61(1-2), 35–47.

Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry*, 11, 227-268.

Deng, L., & Yuen, A. H. K. (2013). Blogs in pre-service teacher education: Exploring the participation issue. *Technology, Pedagogy and Education*, 22(3), 339-356.

Department for Education [DfE]. (2010). *The Importance of Teaching*. London: HMSO. Retrieved on 11 July, 2017 from: <https://www.gov.uk/government/publications/the-importance-of-teaching-the-schools-white-paper-2010> .

DfE (2016). *Educational Excellence Everywhere*. London: HMSO. Retrieved on 11 July, 2017 from: <https://www.gov.uk/government/publications/educational-excellence-everywhere>.

Docking, J. (2000). *New Labour's policies for schools: Raising the standard?* London: David Fulton.

Downes, S. (2004). Educational blogging. *Educause Review*, 39(5), 14-26. Retrieved on 11 July, 2017 from: <http://net.educause.edu/ir/library/pdf/ERM0450.pdf> .

Eraut, M. (1994). *Developing professional knowledge and competence*. London: Routledge Falmer.

Fox, A., & Wilson, W. (2015). Networking and the development of professionals: Beginning teachers building social capital. *Teaching and Teacher Education*, 47, 93–107.

Authors' pre-publication copy.

- Furrer, C., & Skinner, E. A. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology, 95*, 148-162.
- Furlong, J. (2001). Reforming teacher education, re-forming teachers: Accountability, professionalism and competence. In R. Phillips & J. Furlong (Eds.), *Education, reform and the state: 25 years of policy, politics and practice* (pp.118-135). London: Routledge.
- Furlong, J. (2005) New Labour and teacher education: The end of an era. *Oxford Review of Education, 31*(1), 119-134.
- Gatti, L., & Catalano, T. (2015). The business of learning to teach: A critical metaphor analysis of one teacher's journey. *Teaching and Teacher Education, 45*, 149-160.
- Goodenow, C., & Grady, K. E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *Journal of Experimental Education, 62*, 60-71.
- Goodson, I. F. (2013). *Developing Narrative Theory: Life histories and personal representation*. London: Routledge.
- Goodson, I.F., & Lindblad, S. (Eds.). (2010). *Teachers' professional work and life under restructuring in Europe*. Rotterdam: Sense.
- Kerawalla, L., Minocha, S., Kirkup, G., & Conole, G. (2008). Characterising the different blogging behaviours of students on an online distance learning course. *Learning Media and Technology, 33*(1), 21-33.
- Killeavy, M., & Moloney, A. (2010). Reflection in social space: Can blogging support reflective practice for beginning teachers? *Teaching and Teacher Education, 26*, 1070-1076.

Authors' pre-publication copy.

- Kretchmar, K., & Zeichner, K. (2016). Teacher prep 3.0: A vision for teacher education to impact social transformation. *Journal of Education for Teaching*, 42(4), 417-433.
- Lasky, S. (2005). A sociocultural approach to understanding teacher identity, agency and professional vulnerability in a context of secondary school reform. *Teaching and Teacher Education*, 21, 899–916.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Leaton Gray, S. (2006). *Teachers under siege*. Stoke: Trentham Books.
- Loughran, J., & Russell, T. (Eds.). (2007). *Enacting a pedagogy of teacher education*. Abingdon: Routledge.
- Luehmann, A. (2007). Identity development as a lens to science teacher preparation. *Science Education*, 91(5), 82-839.
- Mansfield, C., F., & Volet, S. E. (2010). Developing beliefs about classroom motivation: Journeys of preservice teachers. *Teaching and Teacher Education*, 26(7), 1404-1415.
- Macià, M., & García, I. (2016). Informal online communities and networks as a source of teacher professional development: A review. *Teaching and Teacher Education*, 55, 291-307.
- McCormack, A., & Thomas, K. (2003). Is survival enough? Induction experiences of beginning teachers within a New South Wales context. *Asia-Pacific Journal of Teacher Education*, 31(2), 126-138.
- McIntyre, J., & Hobson, A. J. (2016). Supporting beginner teacher identity development: External mentors and the third space. *Research Papers in Education*, 31(2), 133-158.

Authors' pre-publication copy.

- McMahon, S. D., Parnes, A. L., Keys, C. B., & Viola, J. J. (2008). School belonging among low-income urban youth with disabilities: Testing a theoretical model. *Psychology in the Schools, 45*, 387-401.
- McNally J., Cope P., Inglis W., & Stronach I. (1994). Current realities in the student teaching experience. *Teaching and Teacher Education, 10*(2), 219-230.
- McNamara, O., Murray, J., & Jones, M. (2014). *Workplace learning in teacher education*. London: Springer.
- Niemi, H. (2002). Active learning: A cultural change needed in teacher education and schools. *Teaching and Teacher Education, 18*(7), 763-780.
- Ng'ambi, D. (2015). Massive open online courses (MOOCs): Disrupting teaching and learning practices in higher education. *British Journal of Educational Technology, 46*(3), 451-454.
- Pachler, N., Cook., J & Bradley, C. (2009). Whither case-based approaches to understanding mobile learning? In G. Vavoula, N. Pachler, & A. Kukulska-Hulme (Eds.), *Researching mobile learning: Frameworks, tools and research designs* (pp. 77-95). Bern: Peter Lang.
- Pachler, N., & Daly, C. (2009). Narrative and learning with Web 2.0 technologies: Towards a research agenda. *Journal of Computer Assisted Learning, 25*, 6–18.
- Pea, R. (1993). Practices of distributed intelligence and designs for education. In G. Salomon (Ed.), *Distributed cognitions* (pp. 47-87). New York: Cambridge University Press.
- Polkinghorne, D. E. (1988). *Narrative Knowing and the human sciences*. New York: New York University Press.
- Polkinghorne, D. E. (1995) Narrative configuration in qualitative analysis. In A. Hatch, & R. Wisniewski (Eds.), *Life history and narrative* (pp. 5-24). London: Falmer Press.



Authors' pre-publication copy.

Preece, J. (2000). *Online communities: Designing usability, supporting sociability*. New York: Wiley and Sons.

Putnam, R., & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 9(1), 4-15.

Riessman, C. K. (2008). *Narrative methods for the human sciences*. London: Sage.

Scanlon, E. (2014). Scholarship in the digital age: Open educational resources, publication and public engagement. *British Journal of Educational Technology*, 45(1) 12-23.

Schön, D. (1983). *The reflective practitioner*. London: Temple Smith

Schostak, J. (2006). *Interviewing and representation in qualitative research*. Buckingham: Open University Press.

Shochet, I. M., Dadds, M. R., Ham, D., & Montague, R. (2006). School connectedness is an underemphasized parameter in adolescent mental health: Results of a community prediction study. *Journal of Clinical Child and Adolescent Psychology*, 35, 170-179.

Shulman, L., & Shulman, J. (2004). How and what teachers learn: A shifting perspective. *Journal of Curriculum Studies*, 36(2), 257-27.

Sjølie, E. (2014). The role of theory in teacher education: Reconsidered from a student teacher perspective. *Journal of Curriculum Studies*, 46(6), 729-750.

Skaalvik, M., & Skaalvik, S. (2011) Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27, 1029-1038.

Traxler, J. (2010). Distance education and mobile learning: Catching up, taking stock. *Distance Education*, 31(2), 1-6.

Authors' pre-publication copy.

Turvey, K. (2013) *Narrative ecologies: Teachers as pedagogical toolmakers*. New York/London: Routledge.

UNESCO [United Nations Educational, Scientific and Cultural Organisation] (2014). *Teaching and Learning: Achieving Quality for All*. EFA Global Monitoring Report. Paris, France: UNESCO. Retrieved on 11 July, 2017 from: <http://en.unesco.org/gem-report/report/2014/teaching-and-learning-achieving-quality-all#sthash.2hVKuzp5.dpbs> .

US Education Department (2016). *Teacher Preparation Issues*. Retrieved on 11 July, 2017 from: <https://www.federalregister.gov/documents/2016/10/31/2016-24856/teacher-preparation-issues#h-7>

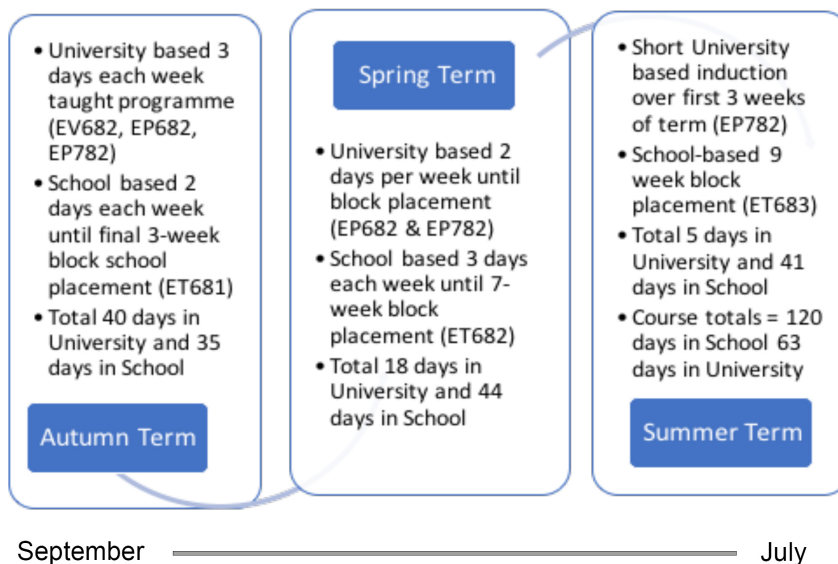
Van Merriënboer, J. (2016). How people learn. In N. Rushby & D. W. Surry (Eds.), *The Wiley handbook of learning technology* (pp.15-34). Hoboken, NJ: John Wiley & Sons, Inc.

Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. New York: Cambridge University Press.

Wood, P. (2012). Blogs as liminal space: Student teachers at the threshold. *Technology Pedagogy and Education*, 21(1) 85-99.

Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, 61(1-2), 89-99.

## Appendix A: Model of PGCE Primary course



### Key to Modules

ET681, ET682, ET683: School-based training modules

EV682: Contemporary Issues in Teaching and Learning

EP682: Foundation Subjects (e.g. History, Geography, Music)

EP782: Professional Knowledge and Enquiry - Masters level module comprising taught programme of Primary Mathematics, English and Science assessed via a school-based professional enquiry

## Appendix B: Extracts from module specification

### Contemporary Issues in Teaching and Learning

#### Aims

- To develop student teachers' knowledge and understanding of contemporary issues in teaching and learning;
- To critically examine the nature of learning;
- To develop the skills of teamwork and collaboration in the context of professional learning;
- To use a range of technological tools in support of student teachers' professional learning.

#### Content

- Inclusion
- Child development
- Working with others
- Assessment for learning
- Safeguarding including e-safety
- Equality and diversity
- Developing digital literacy
- Pedagogies computational thinking
- Effective communication through digital media
- Knowledge and understanding of current curriculum requirements
- Strategies for effective behaviour management

#### Assessment

##### Task 1 (Collaborative)

Students will engage in an on-going discussion of essential issues for effective teaching and learning in Primary Education today (Blog 1000 word equivalent per student). They will collaborate to design and develop an informative web-based resource (3 additional web pages) for fellow student teachers that explores an identified issue (2000 word equivalent per student). LO1, 2, 3 and 4

##### Task 2 (Individual)

Students will submit an individual evaluation, which will highlight their own contribution to the development of the resource and an aspect of their own pedagogical understanding for further development (500 words). LO3