Exploring the effectiveness of online learning materials to support the mentoring of trainee teachers in workplace settings.

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Abstract

Currently trainee teachers in the United Kingdom following a one-year Post-Graduate Certificate in Education (PGCE) spend approximately two thirds of their training year in a workplace setting, typically a school or a college, and one third at their university or higher education institution (HEI). Much of the training is therefore delivered in the workplace and the university is responsible for the quality assurance of this training provision, and for the programme development and enhancement overall. Where there are concerns about the work based provision, for example, a significant gap in the professional training needs of trainees, then the university has to action plan for improvement. One such significant gap, identified through trainee feedback, was knowledge and skills to engage effectively in multi-agency working. One possible solution to addressing this gap was developing online learning materials to enable trainee teachers and their work based mentors to address this issue. Our research, and the content of the conference paper, explores how effective online materials can be used to support work based learning and professional practice. We are particularly interested in how online materials can support work based mentors and the mentoring practices and processes that happen in the workplace. How the mentoring process aligns with Vygotsky’s [1] suggestion of a ‘zone of proximal development’ will be explored in the context of work based learning and online/elearning approaches.

1. Introduction

The background to this research stems from a significant change in the context and delivery pattern of initial teacher education in England over two decades. Since the early 1990’s there has been an on-going process of change in the relationship between HEIs and schools. Furlong et al [2] referred to the emergence of three types of partnership: ‘HEI-led’, ‘Collaborative’ and ‘Separatist’, with each reflecting a very different approach to joint activities in the context of partnership-based initial teacher training. Given that the key responses to the policy changes introduced in the early 1990s were that the schools had taken on a much more active role in Initial Teacher Education the Department for Education and Employment (DfEE), in December 1999, invited schools to bid to become Training Schools and, as such, to seek new innovative ways of improving the quality of Initial Teacher Training. The first two phases of the Government’s training school programme were launched in 2000 and 2001 respectively and eighty two schools were given training school status and were provided with extra funding by the DfEE to develop and disseminate good practice in ITT and to train teachers to mentor trainees. In its evaluation of the training schools programme, Ofsted’s [3] main focus was the success of the training schools in increasing the number of trainees in the school and the improvements in the quality of mentoring of those trainees. Other benefits identified included enhanced opportunities for on-going professional development of training school staff and the adoption of a more reflective and analytical approach to teaching. In other words, to a large extent the initial benefits had been internal to the training school.

2. Literature Review

Through the course of our research we have identified three distinct fields; multi-agency working, mentoring and the pedagogy and practice of online learning. Awareness of the challenges of collaborative multi-agency working is important if those working in children’s services, including teachers and trainee teachers, are to successfully co-operate and collaborate in working with vulnerable children and young people.

The ability to share information across agencies has been an area of particular concern in recent years with several high profile cases reported in the UK that illustrate mis-management of vulnerable children as a result of a lack of information sharing and collaboration across agencies. On a more practical level, trainees should know that there can be very different professional language used and protocols adopted within the different agencies. It is also important for trainees to be aware of the different
priorities that each agency working with children and young people may have, and that there may be a lack of clarity of the roles and responsibilities within the different services. Another complicating factor is that each agency will have separate funding and budgets and which can cause difficulties in collaborating, for example, with the allocation of time and the provision of staff. Finally, trainees need to be aware of the opportunities and challenges of engagement with parents/carers.

However, we have found that the complexity of working across different professions has been well researched, with many models and approaches explored over the last two decades, for example, ‘activity theory’ and ‘knotworking’ Engeström [6] ‘communities of practices’ Lathlean, J. and le May, A. [7] and ‘situated learning’ Lave J. & Wenger, E. [8]. Similarly, the challenges of multi-agency working became the focus of much research in the early part of this decade; see for example, Farmakopoulou [9], Granville and Langton [10], Milbourne [11] and Tomlinson [12]. This research provided a useful framework when considering the challenges for trainee teachers engaging with multi-agency working, but further discussion is beyond the scope of this paper.

The choice of mentor and the training for the role are clearly very important to achieving desirable outcomes. It is, therefore, concerning to read Tedder and Lawy [13] describing that ‘there remains a lack of clarity within the sector about what mentoring should mean’ in their research into mentoring practice in initial teacher education in further education. The model for trainee teachers in further education outlined by Tedder and Lawy [14] where “a mentor is allocated to a trainee to advise on general skills on ‘the pedagogy of the classroom’ and on subject issues” (p417) mirrors what happens in schools and other institutions. The focus on ‘classroom pedagogy’ and ‘subject issues’ is perhaps not surprising following a recommendation by Her Majesty’s Inspectors (HMI) in 2003 that HEIs ‘ensure the provision of workplace mentoring to support trainees in developing the necessary skills to teach their specialist subjects’ [15]. Issues beyond the classroom, such as, multi-agency working may have slipped down the list of priorities as a result of this recommendation, this is an issue we will return to later in this paper after we have explored the choice of mentor and the mentoring role.

The ‘allocation’ of mentors must ensure that they are appropriately motivated and trained, and capable of building effectively personal and professional working relationships with their mentees. Colley [16] outlines the importance of the mentor – mentee relationship highlighting the complexity of the relationship as the needs of a third party, in this case the university, is taken into account. A complicating factor here is an increased emphasis on grading trainees against standards and characteristics, a requirement of agencies, such as, the Teacher Development agency (TDA), Lifelong Learning UK (LLUK) and Ofsted for institutions delivering teacher training programmes. As a result, Cullimore and Simmons [17] point to a tension in the mentoring process as mentors are required to spend more time assessing and grading trainees leaving less time, potentially, to support, guide and action plan trainees’ professional development. This may not be a direction that some in the profession would wish to see the mentoring role heading in, but it might help to clarify the role which many have felt lacked a clear direction. Rice [18] for example, pointed out that despite the fact that ‘the mentoring of student teachers in England and Wales started over 15 years ago literature (Pajares, 1992; Hawkes, 1998; Jones et al. 2004) suggests that the roles and responsibilities of the mentor are still poorly defined’.

Although the role of the school based mentor in initial teacher training has been developing for nearly twenty years now, it continues to prove difficult to clearly define the nature and extent of the role. Rice [19] traces this problem right back to 1992 when the school based mentoring role was effectively put into place within the DES Circular 09/92. Rice points out that the term ‘mentor’ does not appear in this Circular, perhaps implying that a lack of clarity of the mentoring role may have stemmed from this and indeed carries on to today. There is evidence that the mentoring role is being researched and that more detailed guidance is being offered within the profession. For example, the Teacher Training Resource Base (TTRB), an online resource available to all involved in initial teacher training, is one of the organisations that provide general guidance on mentoring and research covering a range of issues, such as, pedagogical practice for mentors; familiarising mentors with adult learning theory; reflective practice; communities of practice and models of workplace learning, such as, the apprenticeship model. There is also a comprehensive literature on, for example, who makes a good mentor; defining the mentoring role and effective mentoring practice available from general management training materials, and guidance on mentoring in other related professional fields that can be drawn upon to inform mentoring in Initial teacher training. Some of the issues raised in this literature are discussed in the findings below.

It is challenging to provide school based mentors, with appropriate Continuing Professional Development opportunities to up-skill them to deliver effective training in all areas. New and different ways of addressing this problem has led many within the
education community to consider eLearning as an appropriate methodology. In the case of University sector in general there has been a drive towards more flexible modes of learning, with eLearning being a desirable option with students recruited to programmes from very diverse geographical locations. Turney [20] drawing upon the work of Connolly [21] and Sharpe [22], concludes that ‘Technology is increasingly being exploited for learning and teaching in universities around the world’. Although for trainee teachers’ University attendance is normally a requirement with eLearning used to support this work, with much of the trainees’ time spend away from the university in schools eLearning offers a real opportunity to support their training at a distance.

To provide flexibility in the training programme it was decided that these materials should be web based so that they could be made available to school based mentors to support their work with trainees to supplement anything that was done at the university. Turney [23] points out that technology is used largely because it is considered to offer greater flexibility in relation to time, place, pace, entry and exit. However, flexibility is only one consideration in choosing to use online materials within a training programme, there are many other things to take into account such as, the efficacy of technology in engaging learners/trainees, perhaps linked to trainees preferred learning styles, their access and use of ICT and the competing demands on their time.

Using online material to support work place learning would appear to be a pragmatic and relatively unproblematic way of delivering certain course content. It certainly provides the potential for access and learning opportunities for students’ off-campus as outlined by Biggs [24], and it may also enable the programme delivery to engage in a more ‘blended’ approach to learning Sharpe [25]. It is, however, likely to create fewer difficulties than might be the case with other eLearning approaches and activities involving online teaching, and direct communication to provide guidance and support, see, for example, the eight different modes of eLearning delivery outlined by Harris [26]. However, Seol [27], in discussing the transactional distance between the e-teacher and eLearners, highlights concerns about highly structured programmes that have low levels of dialogue between the instructor and learners, and these concerns might equally be applied to the provision online materials that are left for the learner to interpret.

Where there is appropriate mentor-trainee engagement with online supporting stimulus material it is likely that positive learner development will take place. Constructivist learning theories and in particular Vygotsky [28] theory of a zone of proximal development appear to be clearly reflected in this mentoring relationship. We therefore felt that in providing access to online materials we might be able to provide a framework, or a ‘scaffold’, for individual learner development to take place as Turney [29] suggests:

> Despite this, the ability of students to use technology to repeatedly return to resources was a clear benefit. The constant availability of resources allowed students to take responsibility for their own study at a pace appropriate for the learner. (p81)

In considering the use of online materials as a ‘scaffold’ it is also possible to identify some direct links to the comprehensive literature on learning styles (Entwistle [30]; Gardner [31]; Honey and Mumford [32] [33]; and Silver [34]) as online materials can provide opportunities for individuals to learn beyond the ‘taught’ classroom, on their own and/or in collaboration with peers and mentors. However, learning styles is not an uncontested area, Coffield [35], for example, highlights a number of issues about the authenticity and significance of learning styles within the learning process, a caution to bear in mind when promoting the use of online materials to support preferred learning styles in the workplace.

Other concerns have also been raised about the significance of ICT in supporting and enhancing learning, in particular the context(s) in which supporting evidence has been gathered (see for example, Convery [36], Somekh [37], Reynolds [38] and Selwyn [39]. Convery [40] raises concerns about the ‘cultural context in which educational technology research is commissioned’. He describes how in countries such as, the UK, the USA and Australia government technology agencies stress the importance of the use of technology in education from the perspective of skills development for the future workforce.

If this is the case, finding from research and development work carried out by government agencies, such as Becta in the UK, would need to be carefully scrutinised for their impact on learning and teaching, in addition to any skills development that has taken place. Convery ibid states that government agencies stress ‘the importance of developing technological skills for securing national economic competitive advantage’, with presumably less emphasis within their research on more complex questions about the significance of technology in cognitive development and the learning process.

Somekh [41] highlights a lack of impact resulting from enormous amounts of money spent by the UK Government on information technology initiatives within the field of education throughout the 1980’s and 1990’s and into the 21st Century. The lack of
engagement with technology of many working within the education profession over such a long period is interesting, and it may, however, have more to do with the robustness of the technology available at that time than any particular pedagogical concerns. There is no doubt that as technology has advanced in recent years with, for example, Interactive Whiteboards and Internet use now evident in many learning situations, the significance of technology is not be ignored.

The area of technology research may develop as a consequence of more active engagement with technology in learning and teaching at the present time, but Convery [42] suggests that there remains a lack of critical debate within this area. Drawing upon Somekh’s experiences within the field of educational technology research over two decades, he highlights how, for example, at conferences ICT researchers can find themselves annexed off as a sub-group, left to present their research findings within ‘something of a closed shop’.

3. Analysis of Finding

The UK Newly Qualified Teacher (NQT) survey 2007/08 showed that knowledge and understanding of multi-agency working was rated by 32% of trainees nationally as ‘very good or good’, indicating that 68% did not feel that they were sufficiently prepared. Our research with trainees nearing the end of their one year Postgraduate programme of training also revealed a serious lack of awareness of multi-agency practice – and significant ignorance about multi-professional practice when working with pupils experiencing special educational needs and/or vulnerability.

For Example, when asked what they understood by the term and concept of ‘multi-professional working’, some of the responses received included: working with the wider school - outside your subject specialism; the ability to work within a number of subject areas, working academically and pastorally; I think in the case of a teacher it would mean they take the role of teacher/social worker; as a guess, different professionals working together. Others stated that they had absolutely no idea of this meant and had not heard the term used whilst on work-based placements.

Our research with trainees also highlighted concerns relating to wider issues around a workplace training model and draws attention to the ‘lottery’ that reflects the reality of workplace learning for trainee teachers. Within this, much depends on the school a trainee happens to be placed in and the mentor’s enthusiasm, experience and knowledge for certain parts of the curriculum. As the mentoring process was taking place away from the university, in a workplace setting, it was also important for us to understand the nature of workplace learning. The National Workplace Learning Network highlight a range of workplace learning opportunities, such as, on-the-job, experiential learning, informal learning, coaching and mentoring. In exploring their potential for engaging trainee teachers in developing knowledge and understanding of multi-agency working involving vulnerable pupils we identified the mentoring process as having the greatest potential from the above list of workplace learning opportunities. However, we remained concerned about the following two issues, raised by Tedder and Lawy [43] in the literature review above; a lack of clarity about the mentoring role, that could be compounded by a lack of responsibility for developing work beyond the classroom and/or related to their subject teaching. In this context we started to explore how we might support the mentoring process that was necessary to enable trainees to engage with non-subject specific and/or classroom teaching focused, multi-agency working. Through trial and error we moved from linear worksheet based material, to more interactive Powerpoint based material presented on a CD, to exploring the use of online learning material produced by us for a specific purpose.

One of our findings, at the desk research stage of the project, was that there was already such an enormous amount of information on multi-agency working available online that it was potentially confusing and certainly very time consuming to engage with, particularly for trainees and mentors with many other priorities. Information providers included government agencies, such as, the Department for Children Schools and Families (DCSF), who in setting out their Every Child Matters agenda provided comprehensive coverage of multi-agency working. In addition to this central information each of the sectors involved in providing aspects of the children’s services provided their own support materials to provide advice and guidance and outline specific roles and responsibilities. As discussed in the literature review above, we also found that there were problems associated with the range of literature available, for example, different professional language used and the protocols adopted within the different agencies. There was, therefore, the potential for trainees and mentors engaging with this material to become confused by the terminology and professional practices of the different agencies. We also found that even the Every Child Matters website, which was a significant resource for integrating the practices of children’s services in the UK, was not easy to navigate.

Our concerns about the material that was already available online clearly presented us with a challenge in developing our own support material. The material would need to be in a form that would engage trainees
and that could be readily up-dated in response to the changing policy and practice contexts. The benefits of producing the material online meant that trainees and their mentors could access the materials at any time and work with them at a pace that best suited their needs. We were conscious of the fact that the materials needed to be presented in a format that enabled both trainees and mentors to work with them irrespective of their preferred learning styles. Making the materials as interactive as possible was also a priority as we became aware that trainee’s needs were very much based on a ‘needs to know basis’ i.e. they would engage more effectively when their learning had a direct relevance to their work.

4. Contribution to Knowledge

One significant issue to arise from our research was the identification of areas of work, such as, multi-agency working, where it can be very difficult to engage trainee teachers in ‘real work’ situations. This is partly related to the confidential nature of the work, but also that observing practice, first hand, is not possible or very appropriate. In exploring alternatives we identified the mentoring process as the best opportunity to support and engage trainees in multi-agency working. However, it became clear that mentors themselves may lack expertise in this area of work and that mentors and trainees would benefit from support materials, providing those materials addressed particular issues. They would need to be easily accessible, flexible and interactive, regularly modified and updated in response to constantly changing political and social agendas. Developing appropriately focused online materials appears to be one solution and this is what we are currently exploring. There are technical and pragmatic challenges in doing this effectively, and there are pedagogical questions that require further examination.

5. Conclusion & Future Work

Like a lot of research activity we have found ourselves on a journey that has taken us far from the straight and narrow. What at first seemed like a relatively straight-forward problem, to plug an identified gap in the knowledge and understanding of trainee teachers turned into an multi level exploration of workplace contexts, personal relationships, pedagogical principles and learning materials. We feel that we are still only at the exploration stage of evaluating the potential for online material to support effective learning in a workplace context via a mentoring relationship. Our expertise is not in the field of ICT and although this brings certain challenges it may also bring new insights as a touch of a cynicism can sometimes enable more critical reflection.

6. References


