RESEARCH ARTICLE

Using Student Lived Experience to Test the Theoretical basis of Work-based Learning

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Abstract

This paper draws on findings from a hermeneutic phenomenological study to identify whether a mismatch exists between the theoretical foundation of work-based learning and how work-based learning is experienced by work-based learners.

Four models of work-based learning were compared against the lived experiences of former students who had been healthcare assistants (HCAs) working in acute clinical settings and employed within a large NHS hospital. All had completed a two-year Foundation degree in Health and Social Care (FdSc) course in preparation for becoming assistant practitioners (AP). Findings from interviews with participants were compared and contrasted with four models of work-based learning.

While all four models capture the profoundly social nature of work-based learning, none of the models captured the challenge faced by Foundation degree student participants in making the transition from being a healthcare assistant and becoming a work-based learner to becoming an assistant practitioner. This finding was particularly significant to the lived experience of all participants in this study as the assistant practitioner role was completely new to workplace mentors, their departments and the NHS hospital Trust in which the research was undertaken.

This paper suggests that there may be a gap in the literature in respect of a new model of work-based learning that captures the nature of work-based learning within clinical environments. Such a model might act as a differentiator between practice-based and work-based learning.

Keywords: lived experience, work-based learning, Foundation degree, assistant practitioners

Introduction

This paper utilises findings from a study of the lived experience of a group of 11 healthcare assistants who were all employed on busy acute hospital wards in a large NHS hospital Trust in the English Midlands. The participants in this study had all enrolled on the adult pathway of a Foundation degree (Fd) in Health & Social Care, a two-year diploma level

award that prepares experienced healthcare assistants (HCA) to become assistant practitioners (AP). The programme is delivered over 52 weeks of the year with students receiving one university study day per week for formal teaching or self-directed study. The trainee assistant practitioners who participated in this study undertook their studies via work-based learning and were supported by a workplace mentor and an assessor.

Background

The purpose of the study was to answer the following research questions:

- 1. How do former Foundation degree student participants believe they developed the knowledge to become assistant practitioners?
- 2. How do workplace mentor participants support Foundation degree students' learning?
- 3. What inter-professional factors do former Foundation degree student participants believe determine their work-based learning?

As the findings from this study have already been published (Wareing 2010a, b 2011), this paper attempts to answer the following original overarching research question relating to the lived experiences of work-based learners:

How does the lived experience of Foundation degree student participants compare with the theoretical basis of work-based learning?

Ethical approval for this research study was granted by the NHS Ethics service. Figure 1 shows the research approach adopted for this study.

Methodology

The chosen methodology for this study was hermeneutic phenomenology. Merleau-Ponty (1956) described phenomenology as the study of essences. To capture the 'essence' of a lived experience for the purpose of research, data in the form of language are required. Van Manen (1997) regards lived experience as both 'the starting point and end point of phenomenological research which aims to transform lived experience into a textual expression of its essence' (p36). The choice of hermeneutic phenomenology for this study was influenced by Gadamer's (1989) view that hermeneutics is not only associated with avoiding misinterpretation, but recognises the hermeneutic nature of all human experience and the need to look at all experiences (particularly within the workplace) afresh. Similarly, Jarvis (2010) regards learning as fundamentally phenomenological for 'learning is experiential - it is what we do with our experience...our experiences are affected by the experience we have...learning is intrinsic to our being (p38)'. Hermeneutic phenomenology was adopted as the chosen methodology in this study to uncover participants' lived experiences of 'being' work-based learners and 'becoming' assistant practitioners. Tables 1a and 1b present excerpts from transcribed interviews with all participants to demonstrate how the two themes and nine elements from the study were generated.

Background to theories of work-based learning

The 'provenance' of the theoretical basis of work-based learning can be traced to a range of key theorists whose work includes that of the Russian cultural and historical psychologist Vygotsky (1978) and neuropsychologist Luria (1994); the American philosopher and educationalist Dewey (1916, 1958); and the philosopher and scientist Polanyi (Polanyi 1958, Polanyi and Prosch 1975). These key theorists have influenced the work of contemporary psychologists such as Wertsch (1985), Moll (1990), Cole (1996) and Engeström (2005) who regard learning as deeply existential, culturally embedded and activity orientated. The

emphasis on learning as an existential experience is in keeping with my chosen methodology of hermeneutic phenomenology and determined the use of interviewing of study participants.

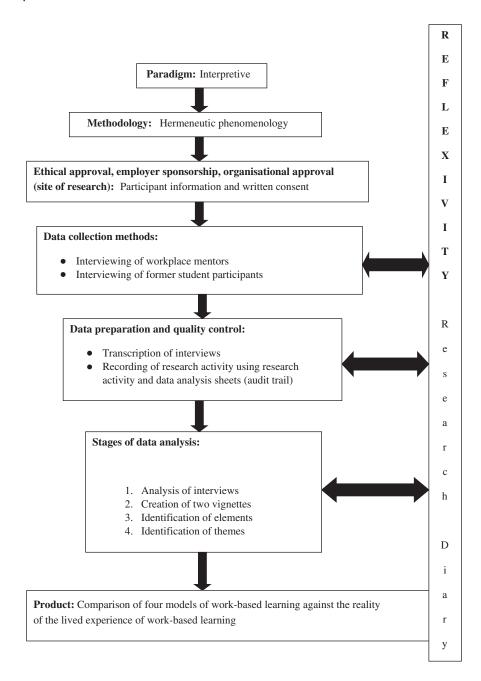


Figure 1 Research approach for this study (adapted from Ajjawi 2006, p130).

Vygotsky (1896–1934) argued for a culturally orientated study of knowledge and stated that the process of a child's development was better understood through the study of culture. He argued that '...the most favourable stage for investigation is...the external cultural method of behaviour' (Vygotsky 1994, p70). Vygotsky developed through research his theory of the zone of proximal development (ZPD) and argued that children should be given tasks which they had not previously performed but were known to be capable of. In essence, he suggested that children should always be given activities that were not based on their known ability, rendering the measurement of a child's pre-existing abilities of little

value. Vygotsky (1978) argued that learning occurred in relation to its cultural backdrop and his work led to the evolution of a school of thought developed further by Luria (1994) and latterly by Wertsch (1985) and Cole (1996), who argued that learning is culturally mediated. For instance, Luria (1994, p53) discussed the significance of tools as signifiers of cultural and historical development: '...the history of culture starts with a primitive outward technique and ends with a complicated psychological technique'. In this sense, Luria argued that tools have significance as culturally mediated objects. Cole (1996) develops Vygotsky's ideas and describes tools as being culturally mediated artefacts that are arranged and rediscovered by each succeeding generation.

Table 1a Themes, elements and excerpts from transcribed interviews with former Foundation degree and workplace mentor participants.

Theme: 'Learning to learn'	
Elements	Excerpts from interviews with participants
Adjusting to each student	"[she's] always been very willing to learn"; "always kept up to date"; "she's been willing to take on wound care"; "if anything ————— [student] will go a step further" (Manjit, p1, line 10 to p2, line 10). "I felt that she has been holding on to me quite closely"; "a bit resentful at times when I have had other students to look after" (Ellen, p1, lines 14–15).
Shared learning	"I kind of shared the learning with her" (Jane, p4, line 36). "We did set shifts"; "researched things together" (Francis, p1, line 18).
Becoming a learner	"it was quite hard because the ward had never had someone who had done work-based learning before, so obviously it was getting everyone to know what you was actually doing and that sometimes when you was at work you did have to do other things as well doing some work or talking to patients and finding something out so like you've got other priorities as well as your work but then you've got to be aware of" (Tori, p2, lines 3–8). "I am more of a practical person than I am a theory person. I did find the book work quite hard you know, trying to find the information that you needed and the understanding of itthe brain has kind of got into its own mode whereas having to look for things and find out things has made me kind of reopen it up again, you know, in that respect and I did find that hard" (Virginia, p3, lines 9–14).
Mentor support	"she was very supportive errrmmmasked me a lot of questions if I didn't know the answer she told me where to look for the answer rather than just giving me the answer so although it was enjoyable to work in the clinical area I had something to go away and work with as well" (Ivan, p3, lines 12–15). "We did a lot of shifts together errrmmmso we were able to sit down together on a regular basis"; "she was always there on the phone for me she was always there if I ever needed her I mean I did have a few problems, she helped me get through them" (Lizzie, p2, lines 9–15).

These perspectives are relevant to work-based learners because the cultural backdrop and significance associated with tools, objects or artefacts are important for a learner who may lack the underpinning knowledge associated with a standard operating procedure. Within healthcare a tool or device is not only introduced to a student in relation to its functionality, but requires the learner to be competent by demonstrating that they are effective, efficient, safe and possess sound knowledge that is acceptable within that particular clinical culture. Therefore, a clinical device is emblematic of a range of culturally defined meanings associated with evidence-based healthcare, health and safety and risk assessment, in addition to what constitutes best and competent practice.

The Swiss biologist Jean Piaget (1896–1980) began to study cognitive development and learning at the time when Vygotsky's life came to a premature end in 1934. Piaget argued

that cognitive development and early language are closely related and that a child's development occurs in the following stages from sensorimotor (from birth to two years, characterised by the manipulation of objects and non-verbal communication); through to a formal operational stage where abstract thinking and near-adult like skills are developed (Piaget 1972). In contrast to culture, Piaget argued that learning was primarily reliant on adaptation. The relationship between a child and their environment was based on a child's ability to engage in activities associated with assimilation and accommodation in order to adapt to new and changing environments. Tudge & Rogoff (1989) argued that both Piaget and Vygotsky regarded the role of the individual and their environment as inseparable and shared the belief that children are active in their own development and arrive at knowledge of the world through activity. Piaget was primarily concerned with the development of logic and the way that children shift their perspectives of understanding and argued that each stage of a child's development could be accounted for logically, whereas Vygotsky was concerned with the development of knowledge and skills based on culturally developed tools that mediated mental functioning (Tudge & Rogoff 1989).

Table 1b Themes, elements and excerpts from transcribed interviews with former Foundation degree and workplace mentor participants.

Theme: 'Becoming an Assistant Practitioner'		
Elements:	Excerpts from interviews with participants:	
Role and boundaries	"she has been on the ward long enough now and she knows her boundaries and she"II always ask and I will try and get her to work with me" (Kelly, p2, lines 4–5). "she does feel a lot more part of the team and part of the ward that she is able to help out a lot more and it's really expanded her role. I mean hopefully she will get her band 4 here" (Manjit, p2, lines 25–27).	
Involving the student	"I got the student involved, maybe I shouldn't have"; "it was a lot to take in" (Sarbjit, p2, lines 18–21)". like positioning the patient and finding out exactly where the pain is, what sort of pain" (Tara, p3, lines 6–7).	
Conflict	"People didn't understand why I had to be away from work so much when I was doing my study and that caused a bit of conflict between us on the ward" (Dani, p1, lines 8–10). "Some healthcare assistants didn't like it at all. I found I was getting spoke [sic] about behind my back and I found that it was the way I was being talked about;things like I don't know my role anymorethat had to be resolved with having like a meeting with healthcare assistants where I had to like debrief them of my feelings and how exactly what I am doing now, my role and how I found I was working, because they did lack a lot of knowledge behind the course" (Sara, p2, lines 1–8).	
Being a team player	"I felt more usefulerrrmmmI felt as though I was more a part of the team that I wasn't just me helping you going to do this, going to do that, you know I got included in like when they were doing handovers, I was more involved in handovers" (Virginia, p2, lines 17–20).	
Role and recognition	"To start off with I didn't have much change in my role but then coming into the second year your role goes from a healthcare assistant to more like an assistant practitioners role where you've got these extra skills"; "you are becoming more in demand within the clinical area like somebody needing bloods for instance suddenly it wouldn't be just your staff nurse asking you, you start to get targeted by the doctors" (Sara, p1, lines 14–19). "I feel really disheartened that we have done all this work and I can do a lot more on the ward now and I do, do, what I can and it's not being recognised at all" (Pearl, p4, lines 12–14).	

Engeström (2005) discussed the cultural impact of the textbook on the minds of classroom students. He argued that in order for children to engage in learning that was expansive, they needed to treat textbooks as historical artefacts and be encouraged to devise their own activities in order to find new ways of undertaking school work. Engeström (2005) argued that such an approach would enable students to benefit from school learning by gaining powerful intellectual tools that could grasp the complexity of the world utilising a process of learning via self-organisation. Such self-organisation could in turn lead to networks of learning activity that might transcend institutional boundaries.

On the surface it might seem strange to be considering educational and psychological perspectives relating to children in respect of a study associated with learning within the world of work and where, under English law, only adults aged 18 or over can be employed as providers of personal care. The distinction between how children learn and how adults learn was made by the American educationalist Malcolm Knowles in the 1960s, who adopted the term 'andragogy'. His theory of andragogy was characterised by adults needing to know why they need to learn something as a prerequisite; by adults having a 'self-concept' where knowledge is necessary when they realise that they are responsible for their own decision making; by adults drawing on their accumulated experience to inform their learning; by adults possessing a 'readiness to learn' that determines the sequence of learning activities and the development of the learner; and by an understanding that new knowledge is of value by virtue of its application which motivates adults to learn through a wider range of external and internal motivators such as pay, promotion and job satisfaction (Knowles et al. 2005). Knowles' conception of adult learning is not only relevant to the extrinsic nature of learning for work, in terms of the application of knowledge, but also to the extrinsic rewards associated with the completion of learning in terms of gaining a new job title and higher salary, both of which many of the participants in my study were able to secure on completion of their courses.

Four models of work-based learning

In the next section, four models of work-based learning are discussed; they have been selected because they are grounded in a range of different philosophical traditions. These include sociocultural and social constructivist perspectives (Lave & Wenger 1991, Billett 1996, 2001, Wenger 1998) and the organisational and managerial perspectives of Illeris's (2004, 2011) hybridised model and Raelin's (1997, 2008) comprehensive model. A comparative analysis of each model is made using the two major themes ('learning to learn' and 'becoming an assistant practitioner') generated from the research study.

Communities of practice

Lave & Wenger's (1991) community of practice (COP) model states that we are social beings, that knowledge is a matter of competence with respect to valued enterprises, and that knowing is a matter of participating in the pursuit of such enterprises. Meaning rests on our ability to experience the world and therefore our engagement with it is meaningful and, ultimately, the product of learning. Communities of practice evolve through different stages including realising the potential of the community, a coalescing stage, the active (productive) stage, dispersal and then the final 'memorable' retrospective stage. The relationship of the COP to the host organisation can include non-recognition, a bootlegged status, becoming legitimate and/or of strategic value, or (preferably) being seen as transformative and therefore of immense value to the host organisation (Lave & Wenger 1991). This conception of learning as occurring within a social context regards knowledge as socially distributed (Gibbons 1994) and knowledge produced within the workplace as transmittable (Gonczi 2004). Therefore, all members of the organisation need to want and be prepared to recognise and foster a COP for the purpose of mutual benefit and as a

learning enterprise. Lave and Wenger's social theory is comprised of meaning (a way of talking about our changing ability), practice (a way of talking about the shared historical and social resources, frameworks and perspectives), community (a way of talking about social configurations) and identity (a way of talking about how learning changes who we are and what creates personal histories). Therefore, Lave and Wenger's conception of practice as orientated by the shared historical and social resources of the community draws heavily on the Russian cultural, historical and psychological perspectives of Vygotsky and Luria, as illustrated by the notion of a learner's personal history or ontogeny. It could be argued that the boundaries of communities are indistinct as there is little consideration given to the nature of identity based on professional groupings. The theory relies heavily on traditional notions of apprentices as novices or newcomers while ignoring the fact that a worker may have been in practice for many years and possess skill and expertise without deep underpinning knowledge. Lave & Wenger's (1991) research has also been criticised for its utilisation of traditional occupations, using case studies into learning among tailors, butchers and naval quarter-masters (Fuller & Unwin 2003). Wenger developed a later model comprising three infrastructures of learning (engagement, development of capability, activity through inquiry) where 'engagement with learning...includes drawing on expertise and knowledge of other members of [the student's] community and thus reaffirms the nature of the community as a learning organism' (Wenger 1998, p237).

A workplace curriculum model

Billett's (1996, 2001) model for a workplace curriculum incorporates many of the ideas of work-based learning described in the previous model in relation to the social requirements of and hindrances to learning in the workplace. One key difference is the emphasis placed on the personal agency of the individual worker and the resources or 'affordances' such as access, time, sharing of knowledge and learning opportunities (Billett 2002), which enable learners to utilise the workplace as a legitimate site of learning. The aim of the model is to encourage structured learning experiences that develop attributes within individuals that are required for expert work performance. The model aims to identify and structure a pathway of learning experiences through direct guidance to assist in the development of understanding, to hone procedures required for expert practice. The model utilises a learning curriculum approach in preference to a structure dominated by teaching. Again, the work of Vygotsky (1978) and the use of scaffolded learning (Palincsar 1986) are alluded to with regard to the structuring of learning under expert guidance in this model. Billett argues that workplaces are legitimate sites of learning centring on the needs of the individual. The model is also based on the idea of a community of practice where learners move from the periphery to the core in relation to their participation in activities that are increasingly complex and require greater decision-making and judgement. Billett's model places emphasis on learning within the workplace that draws on the andragogical perspectives of Knowles et al. (2005) in respect of the learner being self-directed, but views motivation through a range of extrinsic networks in contrast to an emphasis on intrinsic drivers such as a learner's experience, pay, motivation and job satisfaction. Billett's model emphasises experiential and self-directed independent learning to enable the novice to become an expert reflective professional practitioner.

A model of working life

Illeris's (2004, 2011) model for learning in working life incorporates the concept of holism and shows elements of workplace learning and their mutual connections. It is based on two existing models: a model dealing with the workplace as a learning space and a general model of the learning process. This new model makes the distinction between social and individual levels of learning and points to the overlap between working practice of the organisation and the identities of learners (see Figure 2).

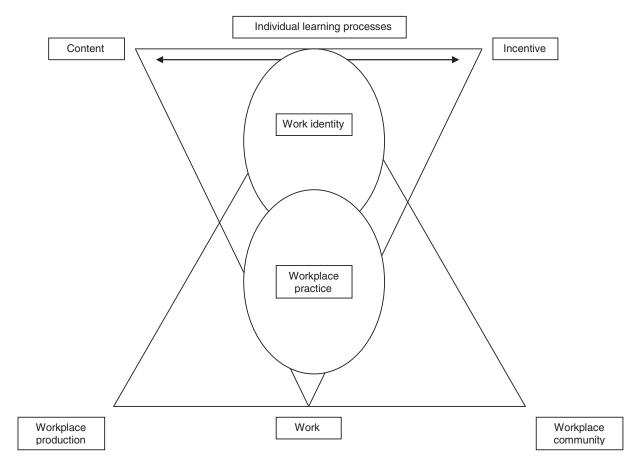


Figure 2 A model for working life (Illeris 2011, p43).

The premise of the model is that work and workplaces are sites of learning and knowledge transfer, which echoes Boud & Solomon's (2001) and Gonczi's (2004) assertions of the workplace as a legitimate site for learning. Illeris sees learning in the context of the individual and (presumably) their self-perceived learning needs. The knowledge, skills and attitudes to be fostered include learners engaging in reflective activities that require them to be sufficiently motivated to seek out activities and opportunities for learning. The model rests on the need for coaching and mentoring within organisations that are explicitly committed to learning and development. It does not differentiate between formal and informal learning, and in relation to social aspects of this model takes no account of issues of power and gender that affect both the individual and social duality. This perspective is in sharp contrast to the work of Marsick & Watkins (1990) and Eraut (2004) who distinguished incidental and informal learning within the workplace; and ignores the significance of gender in patterns of women's knowing, as described by Belenky et al. (2008). The model may appeal to specific professional settings and groups, but is not really holistic due to its limited recognition of multiple factors that may assist or hinder learners. However, as an 'entry level' model it may prove useful as a starting point for discussions on the concept and some of the dynamics inherit in workplace learning, although users of the model would need to establish a common understanding of the concept of holism and agree on whether a holistic approach should be applied to the understanding of the learner, the learning environment or both.

Comprehensive model of work-based learning

The final theory of work-based learning draws on Raelin (2008). This comprehensive model incorporates a continuum from theory to practice through to reflection, conceptualisation,

experimentation and experience while acknowledging two forms of knowing, tacit and explicit. Raelin (2008) argues that tacit collective learning can occur through 'action science', where learners increase their effectiveness in social situations through heightened personal awareness of their actions and assumptions; whereas the explicit learning can occur through 'applied science', where sound empirical methods are utilised to gain insight and objective knowledge. Both domains of learning occur within communities of practice and through the utilisation of action learning, respectively. Raelin's model draws on the work of other theorists, notably Wenger (1998) and Schön (2003). Raelin's (2008) model contrasts 'theory versus practice' modes of learning centring on explicit knowledge and modes of experiential learning. These modes include declarative knowledge, conceptualisation and reflection, applied science, action science; and tacit knowledge including procedural, experimentation, experience and action learning. The knowledge, skills and attitudes to be fostered by this model include reflection, facilitation and awareness (on the part of the learner) of the interconnectedness of forms of learning and types of knowledge. Raelin's model is illustrated in Figure 3.

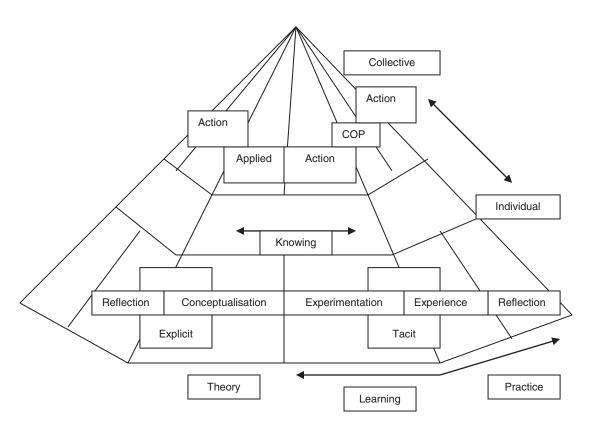


Figure 3 Comprehensive model of work-based learning (Raelin 2008, p79).

The theoretical basis of Raelin's model rests on tacit and explicit knowledge and constructivism; where work and workplaces are regarded as legitimate sites of learning. Like Illeris (2011), Raelin does not differentiate between formal and informal learning. This model requires organisations to explore the nature of workplace learning and its potential based on the nature of work and characteristics of work, practice and workers. It could be argued that although Raelin's (2008) model is all-encompassing, its utilisation of so many pedagogical themes may lead to misinterpretation and misunderstanding, not least as tacit and explicit knowledge are not easily distinguishable.

Discussion

In order to determine how the lived experience of Foundation degree student participants compares with the theoretical basis of work-based learning, the theoretical aspects of each model are contrasted using the two themes and their constituent elements that were generated from interviews with the 11 former Foundation degree participants. Table 2 gives the relationship between elements and the two themes generated from the pilot study and interviews with all participants.

Table 2 Table of elements and themes generated from pilot study and interviews with workplace mentors and former Foundation degree student participants.

Pilot study with three Interviews with eight Interviews with eleven workplace mentors generated workplace mentors generated former students generated the following elements: the following elements: the following elements: Organization Conflict Learning objects Role & boundaries Processes of learning Becoming a learner Learner attributes Knowledge signifiers Involving the student Interaction Being a team player Learning environment Adjusting to each student Mutuality Role & recognition Co-workers **Shared learning** Role boundaries Mentor support Learning in practice Reflection Other learners

The Theme of 'Learning to learn' is comprised of the following elements:

Adjusting to each student; Shared learning; Becoming a learner; Mentor support.

The Theme of 'Becoming an Assistant Practitioner' is comprised of the following elements:

Role & boundaries; Involving the student; Conflict; Being a team player; Role & recognition.

'Learning to learn' in a community of practice

For some participants both being part of a community of practice and being recognised as legitimate learners within their departments were diminished by the need to deliver direct patient care. The element of 'learning in practice' that underpins the theme of 'learning to learn' indicates that learning within a community of practice could not be guaranteed. For example, direct care giving was seen by other workers as pre-eminent to participation in learning activities. In essence, other workers were unable to see that a healthcare assistant (HCA) could give care and learn and that working practices were only legitimised in terms of activity that lay within an HCA role as distinct from activities that went beyond it.

Therefore, the theme of 'learning to learn' suggests that all participants were encouraged by their workplace mentors to participate. But the nature of their participatory learning was not peripheral due to their pre-existing status and responsibilities as healthcare assistants.

'Becoming an Assistant Practitioner' in a community of practice

The elements of 'role and boundaries' and 'role and recognition' that were generated by interviews with former Foundation degree student participants suggest that learners' identity within their existing community of practice was far more important than the creation of a new or distinct community of practice that might have emerged to support trainee assistant practitioners. Indeed, there was no evidence from the findings of the study that a distinct trainee assistant practitioner community of practice had been established within the organisation. Lave & Wenger's (1991) model, while stressing the situatedness of the learner, places little emphasis on the area of learners pre-existing identity or on shifts in occupational forms. However, Wenger's (1998) later work alludes to theories of identity, power and meaning, which corresponds to some of the elements of this theme. Although Lave and Wenger's model places significant emphasis on participation as a means of moving from a peripheral team position, the element of 'being a team player', which was significant to becoming an assistant practitioner, was characterised by the acquisition of clinical skills. Therefore, although Lave and Wenger's model of communities of practice alludes to the nature of participatory learning in which former Foundation degree participants engaged, their existing identity within their clinical teams was well established. Being a novice or an apprentice was not the experience of former Foundation degree student participants. The start of their studies was characterised by managing conflict, establishing an identity as a learner in their own right and making sense of the assistant practitioner role, while their concluding lived experience (as Foundation degree students) was characterised by becoming an assistant practitioner, receiving recognition from peers in addition to feeling the need to prove the validity of their AP role.

'Learning to learn' and a workplace curriculum model

Several former Foundation degree student participants highlighted the critical importance of the role of their workplace mentor in experiential learning. The workplace curriculum model suggests that workers move from participation in work from low to high accountability and complexity; have access to knowledge that would not be acquired by discovery alone; receive direct guidance from more experienced others and experts, and that indirect guidance is provided by the physical and social environment. On the surface, a model that includes a key professional concept such as accountability aligns well with a study exploring learning within a professional clinical environment. The nature of accountability in relation to how trained nurses delegate tasks to trainee assistant practitioners in this study was not demonstrative or suggestive of a trajectory of accountability. While the role of the workplace mentor was fundamental to students' learning, notions of expertise only figured in the study findings when expertise was associated with the needs of a patient, rather than with meeting the learning needs of a student, and reflects the level of practice of the assistant practitioner role. However, for several participants the nature of the physical and social environment had an adverse effect on their experience of work-based learning. For instance, the element of 'working with mentors' was described by former Foundation degree students as producing a sense that they were, at times, competing with nursing students in order to secure sufficient time with their mentors.

A key concept embedded within the workplace curriculum model is 'participation' with regard to participating in working practice which embodies participatory learning and guided participation where students receive direct intervention from an instructor or, as was the case in this study, a workplace mentor. The elements of mentors 'adjusting to each

student' and trainee APs 'becoming a learner' that constitute the theme of learning to learn illustrate that for some students becoming a student and attempting work-based learning resulted in a negative reaction from fellow team members who, it would appear, were quite vociferous in their opposition. This finding suggests that when a clinical environment is utilised for work-based learning friction arises between participation in clinical practice and providing a service. The findings suggest that this occurred as a result of the division of labour that determined how professional roles were to be fulfilled within the workplace.

'Becoming an Assistant Practitioner' and a workplace curriculum model

None of my findings revealed the somewhat implicit 'clues and cues' of learning in practice which Billett's model describes. Again, former Foundation degree student participants were experienced healthcare assistants who had already encountered the 'clues and cues' that determine appropriate clinical practice and had developed a degree of expertise associated with their clinical areas. Dreyfus & Dreyfus (1986) described five stages of development that are required in order to become an expert. These span being a novice, an advanced beginner and becoming competent (stages 1-3); to gaining proficiency and becoming an expert (stages 4 & 5). The 'clues and cues' which Billett describes appear to corrrelate with stage 3 of the Dreyfus and Dreyfus model in the sense that competent practice is conceptualised when a learner can recognise 'a situation [that] has a particular constellation of...elements [where] a certain conclusion should be drawn, decision made, or expectation investigated' (Dreyfus & Dreyfus 1986, p24). These participants did not refer to 'clues and cues' associated with what might be deemed appropriate clinical practice as they were not novices or trainees being prepared for practice. However, the findings might have been different if study participants had been recruited into traineeships from non-clinical backgrounds, or if the host organisation had an established cadre of qualified and experienced assistant practitioners engaged in the coaching of trainee APs.

'Learning to learn' and the comprehensive model

The methodological premise of Raelin's model rests on tacit and explicit knowledge and constructivism; where work and workplaces are regarded as legitimate sites of learning. However, the elements of 'shared learning' and 'mentor support' contained in the theme 'learning to learn' indicate the problems which former Foundation degree student participants experienced in being able to use their workplace and secure sufficient time with their mentors to engage in learning activities. In relation to the findings of this study, tacit knowledge was alluded to by former Foundation degree student participants when the needs of a patient or patient problem was explored or when a student was confronted by a patient whose medical condition fell outside the clinical speciality. This led to former Foundation degree student participants realising the degree of knowledge which they already possessed and is regarded as hidden or 'tacit'. This finding suggests that the outcome of an unfamiliar clinical situation led to the uncovering of tacit knowledge, which created a 'developmental turn' for students.

'Becoming an Assistant Practitioner' and the comprehensive model

Raelin does not differentiate between formal and informal learning, yet former Foundation degree student participants recalled knowledge gained within the formal setting of the university. Moreover, participants were aware of the existence of other knowledge contained in different study pathways (e.g. the mental health pathway) within the Foundation degree programme and the application of their knowledge within the informal setting of clinical practice. Therefore, former Foundation degree student participants alluded to their tacit knowledge and provided evidence of the commensurate nature of

theoretical learning and its direct realisation and application to practice when participants returned to the clinical area from a day spent at university.

'Learning to learn' and the model for learning in working life

Most participants in this study regarded their experience of work-based learning positively. However, Fuller & Unwin (2003) conceptualise the nature of learning within the workplace as either expansive or restrictive. Expansive learning environments are characterised as providing opportunities for participation in communities of practice that are inside and outside the workplace. Expansive learning environments use errors, mistakes and failures as opportunities for learning.

A major weakness of the Illeris (2011) model is that it is not explicit with regard to what favourable (or expansive) conditions of learning might be, the degree of expansiveness and restrictiveness to which a work-based learner may be subjected and what strategies might be adopted to overcome such obstacles (such as guided participation or reflection as recommended by Billett and Raelin). As a consequence, several omissions and assumptions are evident in the Illeris model. The model does not differentiate between different types of knowledge, which is important given the tripartite relationship that exists between work-based learners, their employer and the educational provider in most work-based learning programmes (Helyer 2010). Secondly, the model presupposes that students possess the knowledge, skills and attitudes to engage in reflective activity and to seek out activities and opportunities for learning. The former Foundation degree student participants in this study produced some vivid recollections of incidents of learning that involved their workplace mentors. However, it could be argued that this final model places a strong emphasis on socio-cultural factors which, in relation to the professional culture of nursing and qualified nursing staff who perceived the AP role as a reinvention of second level (enrolled) nurses, was relevant to the lived experience of participants in this study.

'Becoming an Assistant Practitioner' and the model for learning in working life

Organisational and technical factors did not appear to shape the lived experience of former Foundation degree students in this study. As in other models of workplace learning, there is a strong underlying influence of research conducted in industrial settings which emphasises specific discourses associated with production, efficiency and technology that are largely peripheral to the experience of trainee assistant practitioners who are familiar with a limited range of technical equipment and, due to their level of practice, have little direct association with wider organisational concerns.

Conclusion

It would appear that all four models of work-based learning capture the fundamentally social nature of learning within the workplace. Some of the dominant discourses within workplace pedagogy such as the concepts of communities of practice and reflection pervade several of the models and therefore there is a degree of similarity in terms of the pedagogical values and strategies for work-based learning.

The theoretical basis of work-based learning may not reflect the lived experience of Foundation degree students as they seek to learn how to learn and become assistant practitioners. The lived experience of Foundation degree student participants compared with the theoretical basis of work-based learning is determined by the degree to which a model of work-based learning can capture and reflect the complexity of factors that determine work-based learning in busy clinical environments. Clearly, no educational model or theoretical perspective of work-based learning can possess sufficient explanatory

reach to portray all aspects of learning within the workplace. Furthermore, none of the four theorists claimed that their model had universal application. However, while all four models of work-based learning capture the profoundly social nature of work-based learning, none of the models captured the challenge faced by Foundation degree student participants making the transition from being a healthcare assistant and becoming a work-based learner, to becoming an assistant practitioner. This finding was particularly significant to the lived experience of all participants in this study as the assistant practitioner role was completely new to workplace mentors, their departments and the NHS hospital Trust in which the research was undertaken. Notions of apprenticeship and legitimate peripheral participation espoused by some of the theoretical perspectives were not appropriate for work-based learners who were not only well established within their clinical teams, but possessed a wealth of clinical and life experience that is not commensurate with the status of a novice or newcomer. None of the models indicated the extent to which the demands of work itself can actually be a barrier to learning in the workplace, which is a key feature of busy acute hospital wards that rely heavily on support workers to meet the direct care needs of patients who may have multiple long-term conditions.

The educational implications of this study are that the presence of a workplace mentor who is prepared to coach mentees and actively engage them through participation in clinical activity is essential to the work-based learning of trainee assistant practitioners. Foundation degree students need to be prepared to become work-based learners and should be provided with strategies to enable them to anticipate some of the negative responses from fellow colleagues that formed the lived experience of the participants in this study. The providers of Foundation degree courses should develop a range of pre-enrolment resources to prepare prospective Foundation degree students for work-based learning and provide them with some strategies to enable them to start to think about their workplace as a learning environment. Examples include ensuring that prospective students understand the role of workplace mentors and can: negotiate meetings with them; be confident in seeking feedback on practice performance; use mentors and other professionals to engage in reflection-in-action in addition to thinking about more practical issues such as time management and making best use of self-directed study opportunities.

The findings of this study suggest that there may be a gap in the literature for a new model of work-based learning that captures the nature of work-based learning within clinical environments. Such a model would need to have sufficient explanatory reach to capture the challenge of making the adjustment to being a work-based learner and also the process of using work-based learning as a platform towards the transition to a new role, as illustrated by the role of the assistant practitioner. The model would need to acknowledge a range of inter-professional factors that have an impact on work-based learners and work-based learning, while recognising that, within clinical environments, care-giving itself can act as a barrier to learning. It could be argued that such a model might act as a differentiator between practice-based learning (as is common on traditional pre-registration programmes such as nursing, midwifery and radiography) and work-based learning by demarcating notions of apprenticeship and being a novice from the possession of knowledge and experience that employees acquire throughout their learning journey.

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