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Do as we do and not as we say: Teacher educators supporting student teachers to learn on teaching practice

Abstract

This paper reports data from a larger study into the ways in which Physical Education Teacher Education (PETE) students engaged in professional learning during teaching practice (TP) in Ireland. The study comprised one umbrella case study of Greendale University, schools and PETE students which consisted of five individual cases: tetrads of PETE student teacher, cooperating teacher (CT), University tutor (UT) and School Principal (SP). Each tetrad was defined as a unique community of practice located within the wider structures of school, education and university policies on teacher education. Data were collected over one academic year using qualitative research methods and grounded theory as a systematic data analysis tool.

Findings indicate that in each of the five cases, support for PETE student learning was, to some degree, dysfunctional. In particular, it became evident that there were two conflicting teacher-learning curricula in operation. The official curriculum, expressed in policy and by SPs, UTs and CTs, valued a PETE student who cared for pupils, had a rich pedagogical content knowledge, knew how to plan for and assess pupils' learning, valued reflection, and was an active member of a community of practice. The unofficial, but essentially more powerful enacted curriculum, encouraged

PETE students to draw upon their own resources to learn pedagogical content knowledge in an isolated and unsupported manner.

The data highlight the force of the unofficial curriculum and the ways in which PETE students were guided to the core of the dysfunctional community of practice by untrained mentors and untrained UTs. PETE students in this study learned to survive in a largely unsupportive professional learning environment and, just as theories of social reproduction intimate, indicated that they would reproduce this practice with PETE students in their care in the future.

The findings suggest that in cases similar to those studied, there is a need for teacher educators in Ireland, (in both universities and schools) to critically interrogate their personal practices and implicit theories of teacher education. There is also evidence to suggest that PETE students in Ireland could benefit from the development of school-university partnerships that act as fundamental unit of high quality professional learning. Finally, there is a need to select mentors and university tutors on the basis of expertise and disposition so that PETE students are supported in their professional learning. In the cases studied, this may have led to a stronger focus on the intended or official curriculum of TP, led by the revised maxim: 'Do as we say *and* as we do'.

Keywords: official and unofficial curriculum, teaching practice, professional learning, mentoring, Physical Education, school-university relationship.

Introduction

Teacher education remains a black box. We do not know what effective teachers do, know, believe or build on nor do we know what conditions make it possible (Cochran-Smith, 2005, p.8).

There is, currently, intense interest in evidence-based teacher education research in an *“intentional and systematic effort to unlock the black box of teacher education, turn the lights on inside it and shine spotlights into its corners, rafters and floorboards”* (ibid, p.8). The spotlights in this research were directed at PETE students’ professional learning on TP, and the ways in which the process of TP guidance and supervision supported and, at times, hindered student learning. Underpinning this research is an understanding of the conceptual and practical complexity of learning generally, and PETE student learning in particular. Choosing to focus specifically on PETE student professional learning responds to the dearth of research in this area in Ireland.

According to Barab and Duffy (2000), there has been a shift in the emphasis of learning theories from cognitive theories that highlight individual learners, to anthropological or situative theories that focus on the social nature of learning (p.26). In situative theories, learning is associated with an increase in the ability to participate effectively in the practices of a community; thus learning is conceptualised as collaborative social practice, located in communities of practice and occurring through legitimate peripheral participation (LPP) in those communities (Lave & Wenger, 1991). Lave and Wenger (1991) argue that:

To be able to participate in a legitimately peripheral way entails that newcomers have broad access to arenas of mature practice (p.110).

Lave & Wenger's view of learning has obvious implications for learning in ITE, particularly in understanding the ways in which TP supervision is constructed to enable mentors to move apprentice teachers (newcomers) from LPP to full participation in the community of practice (Lave & Wenger, 1991). Applied to the school environment and to training PETE students, viewing learning as a social practice highlights the need to examine how the school context, into which a PETE student is placed for TP, can be described as a community of practice that supports these learners. Ideally, such a community of practice would comprise colleagues, mentors, student peers and university tutors, and would facilitate PETE student learning through ongoing discussion and collaboration on commonly valued issues and concerns (Mawer, 1996). In this way, teacher competencies would be developed in authentic settings (Fenwick, 1999) and in *"school conditions that make it possible for new teachers to take advantage of the resources available to them"* (Cochran-Smith, 2005, p.9).

This study investigated the ways in which cooperating teachers (CTs), University tutors (UTs) and school principals (SPs) worked as expert teacher educators to support Irish PETE students to learn within five case studies. The research took place within the context of TP in order to capture its authentic conditions.

Communities of Practice within Teaching Practice

Communities of practice, according to Wenger (1998) are everywhere and we are generally involved in a number of them; they are an integral part of our

daily lives. Lave & Wenger (1991) describe this intersection of communities of practice as follows:

A community of practice is a set of relations among persons, activity, and world over time and in relation with other tangential and overlapping communities of practice
(Lave & Wenger, 1991, p.98).

Teachers are part of such a community of practice. Teachers, are, for example, part of a larger community of practice within their school that includes administrators, students and parents (Kirk & Macdonald, 1998). There are decided advantages to describing the activities of teachers as 'communities of practice' because by using such a framework, it is possible to identify the social and cultural factors that impinge on what is learned and how learning takes place (ibid).

A Community of Practice is a persistent, sustained social network of individuals who share '*social capital*' (Putnam, 2000); i.e. a knowledge base, set of beliefs, values, history and experiences focused on a common practice and/or mutual enterprise (Barab, Barnett, & Squire, 2002). The key indicators of social capital include social relations, formal and informal social networks, group membership, reciprocity, trust, and civic engagement (Bailey, 2005, p.75; Office for National Statistics, 2001). Social capital is generally understood as "*the property of the group rather than the property of the individual*" (Office for National Statistics, 2001, p.4). The defining characteristics of communities of practice are mutual engagement of the members around a joint enterprise, encompassing a shared repertoire of communal resources that includes:

Routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions, or concepts that the community has produced or adopted in the course of its existence, and which have become part of its practice (Wenger, 1998, p.83).

More than this, the community is defined by its practice in which explicit and implicit knowledge, or curriculum, are negotiated; that is, meaning is constructed through what the community actually does. According to Dewey (1916), no thought can possibly be conveyed as an idea from one person to another. Learners need to interpret the idea in light of their current interests and understandings if they are to have any thoughts (ibid, p.188). Thus, it is impossible to make sense of new ideas without linking them to existing concepts because then, and only then, will knowledge become visible and useful. Essentially, learning occurs through observation, experimentation, reflective practice, and making errors.

The curriculum of the community of practice can be divided into its official and unofficial aspects. The official curriculum is primarily the knowledge, skills and understanding that teacher educators *intend* PETE students to acquire. The unofficial curriculum consists of what PETE students learn from their participation in ITE but which is not planned in the official curriculum. The unofficial curriculum exercises a profound influence on PETE students. It can be a vehicle for achieving both desirable and undesirable ends (Hargreaves, 2001, p.494), yet it can be overlooked. Therefore, the real impact of ITE lies in how the images of teacher, learner, knowledge, and school curriculum are subtly communicated to prospective teachers through the processes of the unofficial (and sometimes hidden) curriculum of teacher education programmes (Bartholomew, 1976; Ginsburg, 1988; Giroux, 1980; Popkewitz,

1985). T.S. Eliot's description of the 'shadow' captures this notion of the juxtaposition of official and unofficial curriculum:

Between the idea

And the reality

Between the motion and the act

Falls the Shadow ...

Between the conception

And the creation

Between the emotion

And the response

Falls the Shadow ... (The Hollow Men, T.S. Eliot, 1961)

Clearly, the unofficial curriculum, or 'shadow' of ITE, operates in tandem with the official curriculum.

Situated Learning and Teaching Practice

Situated learning theory is the theoretical framework underpinning the concept of Community of Practice. It implies that learning is social in nature and it occurs throughout our daily lives (Lave & Wenger, 1991) in a process during which newcomers and old-timers learn from each other in a multidirectional process within the community of practice. The notion of Legitimate Peripheral Participation explains the movement of newcomers from the periphery of the community of practice to become full participants at its amorphous core, and how newcomers move in and old-timers move out in 'reproduction cycles' as the community of practice evolves (Lave & Wenger, 1991). Thus, this movement from the periphery to the centre means becoming progressively more engaged and active in the practice of the community. If Legitimate Peripheral Participation is the process by which newcomers become old-timers, newcomers must realise that they have to negotiate formal access to

the core, and also earn access to the concealed transcript of the back stage. As Goffman (1959) argued, the newcomer craves access to front and back stage. In this metaphor, knowledge of both the 'front and back stage' represents full participation in the community of practice. Heaney (1995) pointed out that the newcomer exercises individual agency, choosing to move on the periphery of the community of practice. In essence, he asserted that learning in this context is defined as *"an individual's ongoing negotiation with communities of practice which ultimately gives definition to both self and that practice"* (p.2). Clearly, therefore, studies which adopt a situative perspective must focus on:

The individual teacher (including the teacher's biography, values, goals and capabilities); the act of teaching; the physical, social and cultural school environment
(Rovegno, 2003, p.296).

Legitimate Peripheral Participation within Teaching Practice

Legitimate peripherality is a complex concept, implicated in social structures involving relations of power. Thus, peripherality can be a 'place of power' as the newcomer moves toward more intense participation (Heaney, 1995) or where *"one is kept from participating more fully – a disempowering position"* (Lave & Wenger, 1991, p.36). Heaney (1995) describes peripherality as having the *"dynamic and at times chaotic energy which is experienced on the edge where the frenzy of transformative learning is more likely to occur"* (p.3). As Mezirow (1991, p.167) argued, transformative learning occurs when learners change their *"meaning schemes...and engage in critical reflection on their experiences, which in turn leads to a perspective transformation"* However, as has already been intimated, legitimate peripheral participation is not always a positive experience. It can also be:

Disempowering, decentering, and dehumanizing in the conflict across borders and within communities as various constituencies compete on an unequal field of power (ibid, p.3).

Clearly, being positioned at the border or on the periphery describes a space and time dimension of tremendous potential energy, yet this can be both constructive and destructive. Where there is destructive energy, newcomers can experience difficulties in accessing the community of practice. This is something more than simply the initial 'benign community neglect' which allows them to acclimatise to the periphery of the community of practice (Lave & Wenger, 1991, p.93). Instead, Becker (1972) describes detrimental happenings when structural constraints in work organisations limit or prevent apprentices' access to the full range of activities of the job, and hence to possibilities for learning.

Lave & Wenger (1991) assert that control and selection, as well as the need for access, are inherent in communities of practice. Thus, access is open to manipulation, giving *"legitimate peripherality an ambivalent status"* (ibid, p.103). Importantly for this study, Merriam, Courtenay & Baumgartner (2003) describe how the trajectory of participation mutually reinforces the learning trajectory (Lave & Wenger, 1991, p.36). Along this learning trajectory, the *"interplay of conflict and synergy is central to all aspects of learning in practice"* (Lave & Wenger, 1991, p.103). It is important to recognise that conflict may have a stifling effect on learning at the periphery, thus curbing the trajectory of learning into the core of the community of practice.

Clearly, viewing learning from a community of practice perspective has implications for views on how teachers can be trained effectively. Ideally, new

teachers (newcomers) would be members of overlapping communities of practice comprising peers, supportive work colleagues, mentors, and their university peers and tutors. Within such a community, there would be ongoing discussion, sharing, and collaboration on commonly valued issues and concerns (Mawer, 1996). Newcomers would, then, engage in a process of meaning-making to form both their personal and pedagogic identity (Zukas, 2006). It is evident that the newcomer needs to be both self-motivated and supported by old timers to harness the potential energy at the periphery and thus move along the learning trajectory from legitimate peripheral participation to full participation in the community of practice.

Teaching Practice in PETE

With the more recent understanding of learning shifting to a more social, situated and contextual view, the existing literature on PETE programmes suggests that TP, or clinical experience is a central aspect of quality PETE programmes (Behets & Vergauwen, 2006). In spite of this, TP placement is often based on convenience rather than other considerations with schools sometimes providing difficult contexts for the PETE student e.g. poor facilities, untrained mentors (McIntyre, Byrd, & Foxx, 1996). It is through TP that the PETE student learns the 'rub between theory and practice' solidifying teacher' professional knowledge, encompassed in the generic term PCK (Amade-Escot, 2000). McCullick (2001) emphasises the importance of teacher educators having a clear and shared understanding of the curriculum of ITE and their role in promoting this on TP.

Existing research in teacher education indicates what differing parties in the process want or identify as good practice. This study attempts to address the situation from an Irish perspective by analysing the school-university partnership in TP from the perspective of all the parties involved and, in particular, the impact on student learning in specific areas. This research examined the nature and quality of PETE student learning within a community of practice framework during a seven-month TP placement and was lead by the following questions:

1. How are PETE students supported to learn effectively during TP within the existing partnership model?
2. How do teacher-mentors and university tutors view their roles and the nature of learning within the current model of TP supervision?
3. What is the nature of the PETE student learning that takes place on TP?
4. How does school-based learning link to other strands of the teacher education programme in supporting student teacher competence?

This paper reports one key finding that is important in all four questions

Methodology

The study from which these data are drawn analysed one umbrella case (university and PETE students and the schools) which comprised five individual cases: five tetrads of PETE student, CT, UT and SP. Through this vehicle, the phenomenon of how PETE students experienced learning support from CTs, UTs and SPs during TP was studied over a seven-month period. There were *five* individual case studies. The case studies were selected, initially, by offering all seventeen Graduate Diploma students (fifteen females

and two males) on a one-year Graduate Diploma in Education (Physical Education) programme at Greendale University, an opportunity to participate in the research. These PETE students had completed a five-year non-teaching degree programme at Brightwater University in Health, Fitness and Leisure Studies. Thereafter, they enrolled on the one-year Graduate Diploma in Education (Physical Education) programme at Greendale University. Five female PETE students volunteered to take part in this study. The UT, CT and SP assigned to each PETE student on TP then became part of each case study, resulting in five individual case studies each comprising of four individuals: PETE student, CT, UT and SP. Pseudonyms were used to protect the identity of the participants. It is important to recognise at the outset, therefore, that the PETE students [Aoife, Barbara, Carol, Dara and Edel] at the core of each case study were self-selected research participants.

It has been argued that the over-riding purpose of case study research, is to study a small number of cases in considerable *depth* (Hammersley & Gomm, 2000). This is in contrast to, for example, social survey which investigates many cases (individuals) and gathers a comparatively small amount of data on each. In this study, an in-depth, detailed analysis of five cases was undertaken. In so doing, the researcher built an insightful picture of each case to ascertain how each of five PETE student teachers was supported to learn within TP. In this study, therefore, generalisability does not derive from the representativeness of the sample, but from the way in which the concepts and experiences are likely to be applicable to, and shared by, relevant other settings and groups. A major aim of the qualitative approach employed in this study was depth in data collection and detail in reporting, this offering deep

insights into the cases. More importantly, perhaps, the data analysis process (outlined below) was systematic and transparent, allowing the reader access to the researcher's reasoning.

In order to add to the depth of understanding of the research questions, a variety of data collection methods and approaches were used. The process of triangulation (Begley, 1996) allows the researcher *"to determine how various actors in the situation view it"* (Strauss & Corbin, 1998, p.44). More recently, the image of crystallisation (Richardson, 2000) has been used to capture this notion. The methods used in this study, to allow such crystallisation (ibid) within the case study framework were Open Profile Questionnaires, recording key events through participant observation, focus groups, collection of artefacts, in-depth interviews and reflective journal writing (as an aide memoir for the researcher).

It is important to note that in this study, the researcher (X) had an *"insider/outsider status"* (Minichiello, Aroni, Timewell, & Alexander, 1995, p.182) because she had studied as an undergraduate in similar circumstances and currently has a professional role in teacher education. Thus, it was, that concerns about the ability of key personnel to support PETE student learning led to an interest in the research. In other words, she cared deeply about what and whom she was studying (Toma, 2000, p.177). Strauss & Corbin (1998) claim there are positive things to say about this complex inter-connection of the personal and the professional in research:

Choosing a research problem through the professional or personal experience route might seem more hazardous than doing so through the literature route. This is not necessarily the case. The touchstone of one's own experience might be a more

valuable indicator of a potentially successful research endeavour than another more abstract source (Strauss & Corbin, 1998, p.38).

The argument, essentially, is that having acknowledged the “*insider/outsider status of the researcher*” (Minichiello et al., 1995, p.182), a case can be made that reflexivity “*where researchers engage in explicit, self-aware analysis of their own role* (Finlay, 2002, p.531) can acknowledge and mediate for the bias in the study. Through a reflexive process, the researcher’s humanity is accepted and celebrated. After all:

Researchers are not information gatherers, data processors or sense-makers of other people’s lives; rather they are expected to be able to communicate with individuals and groups, to participate in appropriate cultural processes and practices and to interact in a dialogic manner with the research participants (Bishop, 2005, p.120).

Added to this was the independent insight of the second author (X) which was utilised at each stage of the research.

The data analysis was undertaken using Strauss and Corbin’s (1998) Grounded Theory (Strauss and Corbin, 1998) which, according to Charmaz (2000), spearheaded the ‘qualitative revolution’ in research. Grounded Theory is an inductive process of discovering theory from data (Pidgeon and Henwood, 2004); essentially the qualitative researcher has “*grounded their theory in data and validated their statements of relationship between concepts*” (Strauss & Corbin, 1998:5). This process provides the researcher with a systematic and structured analysis, generating transparency in the process and confidence in any conclusions drawn.

Grounded Theory is underpinned by the process of “constant comparison” (Glaser & Strauss, 1967). There are three clear stages in this process,

according to Strauss & Corbin (1990): open coding, axial coding and selective coding. Harry, Sturges & Klinger (2005) extrapolated Strauss & Corbin's grounded theory technique and proposed a six level approach, in an attempt to make the methodology as transparent and robust as possible. In this study, the decision was taken to follow Harry et al's (2005) six stages in the process of data analysis:

- *Levels One and Level Two: Derivation of open codes and conceptual categories* (i.e. Open and Axial coding) from initial interview data. Essentially, the data that were fractured during open coding are partially reassembled (ibid, p.124). It was key here to capture the essence of the five case studies in a fluid, flexible manner, so that the product is not 'clinical' (ibid, p.129). Thus, data from each case study remained true to the 'authentic setting' (Fenwick, 1999) of each PETE student's TP experience. In this step, the researcher was already beginning to abstract meaning from the data (Harry et al., 2005).

- *Level Three: Developing Themes* (Selective coding). This mechanism formed the thematic findings of the study (Harry et al., 2005). In essence, the clusters were related to each other to determine the story or theme that they told (ibid).

- *Level Four: Testing the Themes* – Here, the researcher interpreted the data and moved towards inducting theory, and engaged in member-checking (Lincoln & Guba, 1985) by viewing findings from a number of participants' perspectives. This is also known as crystallisation (Richardson, 2000) and it was important in this study because the researcher was a relative insider in the field.

- *Level Five: Interrelating the explanations* – The themes were refined to become explanations and these were examined in an effort to identify contradictory explanations. What is interesting here is that no theme or explanation can stand in isolation from other themes; they are essentially interrelated. This was certainly clear in this study because each of the three themes intersected.

- *Level Six: Delineating the Theory* – Glaser and Strauss (1967) identified two types of theory; formal and substantive. Formal theory is that which can be applied to a broad range of topics. Substantive theory implies that the theory only applies to the context being studied. In this research, it could be argued that evidence about the official and unofficial TP curriculum represents substantive theory. At the same time, evidence from the wider literature on teacher education suggests that elements of it could be developed to the level of formal theory.

Findings

In some respects, the findings in this study support those reported in other international teacher learning studies. It was found, for example, that PETE student learning was situated, occurred through legitimate peripheral participation within a community of practice framework, and was shaped by the culture of that community of practice. In particular, this study found that each PETE student learned important lessons about the unofficial and curriculum of their community of practice. The official or overt curriculum centred around the development of the PETE student as a professional, however the unofficial curriculum often conspired to undermine this by propagating a very different understanding of what it was to be a professional

in practice. Such development was based on five key premises which can be expressed most clearly in the form of five PETE professional teaching standards. Although Ireland did not have in place recognised professional standards for PETE students at the time of the study, data pointed to notional standards that were guiding official TP curricula in the research. In order to organise these findings, a hybrid set of standards was devised from existing professional standards emanating from (a) Teaching Council in Ireland; (b) the National Association for Sport and Physical Education (NASPE); and (c) the National Board of Professional Teaching Standards (NBPTS). These five standards offered a defensible framework within which to organise the reporting and discussion of findings:

1. PETE students are committed to pupils and pupil learning

This standard will be subdivided into two for ease of reporting i.e.

- a. PETE students are committed to pupils
- b. PETE students are committed to pupil learning

**2. PETE students have strong pedagogical content knowledge (PCK)
in physical education**

**3. PETE students are responsible for management and assessment
of pupil learning**

4. PETE students are reflective practitioners

5. PETE students are members of learning communities

1(a): PETE students are committed to pupils

McCullick (2001) asserts that PETE students need to have “a *genuine concern for the welfare of their students [pupils]*” (p.41). In addition, the PETE student must enjoy being around people, especially children and exhibit a gregarious personality which should encourage pupil learning (ibid). Wubbels,

Levy & Brekelmans (1997) suggested that effective teachers have strong student-teacher relationships and are empathic, but in control. The examples below support the finding that many of the study's participants recognised the importance of PETE students' commitment toward pupils.

One UT, Claire wanted to see that PETE students exhibited a strong commitment to the pupils in their care, before during and after classes:

And then their...their commitment to kids. I mean, you know, are they interested in the kids? Do they enjoy the kids? I mean it's just...do they simply enjoy being around the kids? Can you see the way that they interact with the kids? And particularly in a gymnasium when class is over or before class starts (UT, Claire, Tutor Focus Group, January 17th 2007).

However in reality, Mr. Noonan (SP) worried that PETE students did not seem to have a duty of care toward their pupils: for example if a school tour bus returned ten minutes before the final school bell, PETE students would not supervise the pupils and would let pupils “wander off home” (SP, Mr. Noonan, Interview Principal, February 16th 2007).

Data, in this study, confirmed that PETE students also valued the skill of caring for pupils, but they were clear that this key aspect of professionalism had not been taught at university.

1(b): PETE students are committed to pupil learning

O'Sullivan (2003) asserts that schools and universities involved in the preparation of PETE students need to connect teacher education with pupil learning. In this study, Claire, UT, described how she wanted PETE students

to display a curiosity about their teaching and how it impacted on pupil learning:

I mean are they...are they curious and interested in...in what they are learning about their subject, you know, are they...you know, did I...did I teach that right, did I copy the right stuff? Did I use the right progressions? Did I ...you know, did I deliver that in a way that was you know aligned with...so...so a curiosity and a set of questions about...about that (UT, Claire, Tutor Focus Group, January 17th 2007).

Agreeing with Claire's (UT) sentiments, Joan (CT) suggested the PETE teacher needed to learn to be:

Motivated, competent and ensures that learning is taking place and a teacher whose students [pupils] enjoy learning (CT, Joan Questionnaire, September 2006).

It could be argued that PETE students moved through Fuller's (1969) Concerns-based model when learning to teach; thus, they moved from (i) concerns about self to (ii) concerns about tasks to (iii) concerns about students [pupils] and the impact of teaching. It seemed that both UTs and CTs had an expectation that these PETE students would move through the three phases quickly to focus on pupil learning. So, overtly, the TP curriculum contended that pupil learning was very important, yet the unofficial curriculum did not actively educate these PETE students in how to progress pupil learning. As a result Dara (PETE student) was keen for pupils to have fun during the class:

I want to get them enjoying it. I don't care how many times it bounced or anything, for some of them. Just once they are able to get a few rallies going (PETE student, Dara, Post lesson conference, December 4th 2006).

PETE students, therefore, learned that keeping pupils active and enjoying class was imperative Placek (1983, p.49) and was more highly valued than progressing pupil learning.

2: PETE students have strong pedagogical knowledge (PCK) in physical education

Dara described how Greendale University admitted the PETE students on to the Grad Dip in the belief that they had learned PCK in all seven strands during their undergraduate degree programme in their previous institution. Therefore, the programme at Greendale University included very few practical courses (PETE student, Dara, Interview 3, February 16th 2007). Four CTs in this study appeared to expect PETE students to have adequate PCK when starting TP, perhaps because they believed that TP was an opportunity for PETE students to practise PCK, not to learn it. This finding supports Kay's (2004) study, where CTs showed a lack of empathy for PETE students who did not have adequate PCK. It seemed that CTs believed it was the role of the university, not the school, to teach PCK to the PETE students. There was evidence that the schools felt their role in teacher training was secondary to their responsibility to pupils (Williams & Soares, 2002, p.105). As a result of these circumstances, PETE students struggled with their level of PCK on TP. The following two data excerpts illustrate this point:

- Aoife (PETE students) displayed crucial gaps in her basketball PCK and knowledge of safe learning environments. Therefore Louise (CT) was reluctant to allow Aoife to teach gymnastics (CT, Louise, Interview 3, February 2007).

- John (CT) described how Barbara (PETE student) couldn't plan for the optimum amount of content in her soccer class and was too “*ambitious*” (CT, John, Interview 3, February 12th 2007).

Overall, in this study, four CTs were either unable or unwilling to support their PETE students in their PCK learning, so students Carol, Edel, Aoife and Dara turned to reference books and the Internet for this knowledge. Aoife) described her mechanisms for bolstering her PCK by spending hours preparing for classes and learning her PCK through books and the Internet using the technique of visualisation:

I do practice out the skills and I read the points and actually visualise myself doing it on a practical setting (PETE student, Aoife, Interview 2, December 2007).

Louise, her CT noticed this, but did not offer to help Aoife learn PCK.

In effect, both CTs and UTs abdicated responsibility for teaching PETE students PCK. So, while the overt curriculum asserted the importance of high quality PCK, the unofficial curriculum encouraged PETE students to learn PCK in an isolated and unsupported way using any resources they could find.

3: PETE students are responsible for management and assessment of pupil learning

Van Der Mars (2006) posits that teachers create opportunities for pupil learning in the classroom through both classroom management and instructional planning. During ITE the PETE student learns this skill. In addition, PETE students learn to assess pupil learning which is defined as:

A variety of tasks and settings where students [pupils] are given opportunities to demonstrate their knowledge, skill, understanding and application of content in a

context that allows continued learning and growth (Siedentop & Tannehill, 2000, p.179).

In this study, Claire (UT) asserted that the PETE student should learn a variety of skills including the planning and executing of classroom management, instruction and assessment. More than this, Claire wanted PETE students to learn to justify their planning in relation to their pupils and overall school policy:

And, I suppose, genuinely, I have very little tolerance for students who are not prepared to plan. Now they...I don't need pages. That's not what I am interested in. But have they thought about what they are trying to do and why? not just the what? but the why? And have they thought about why they are going to deliver in a particular way and why that would facilitate what they are about? So, it's not just the content. And a lot of times we get ...we get caught up in the management issues and that's fine, it's their survival. But have they given some thought and are they willing to give some thought to both the instructional aspects of it, and the why?...what am I doing and why is this school offering what it's offering in the first place? (UT, Claire, Tutor Focus Group, January 17th 2007).

However, Mr. Noonan (SP) identified that, in reality, classroom management was an area where PETE students were lacking in expertise, in particular in operating within timetable constraints. Mr. Noonan stated that as a PE teacher *"management of time is the most critical thing they have to do"* (SP, Mr. Noonan, Interview, February 16th 2007).

The PETE students received many conflicting messages on this issue. The university asserted the importance of planning, instruction and assessment of pupil learning. However, the school contended that time management was the

most important PETE student skill to ensure that school timetables are not disrupted. This was confusing for the PETE students, because it seemed to them that they had to prioritise one set of skills for the university and another for the school. This finding links to a study by McCullick (2001) who found that divergent expectations of PETE students by university and school can lead to tensions. Such conflicts have been reported to have adverse effects on student learning (Kahan, 1999).

4: PETE students are reflective practitioners

Tsangaridou & Siedentop (1995) contend that reflective practice during TP is a core element which prepares PETE students for the unexpected in the classroom. According to Behets and Vergauwen (2006), the critical role of reflection for teachers is shaped by the emphasis on reflection within the ITE programme. Effectively, the programme's view of reflection determines what PETE students learn about teaching (Sebren, 1994). In this study, three UTs, and only one SP and one PETE student identified the importance of reflection. Claire (UT) defined reflection in terms of PETE students being curious and interested in their own learning:

I mean are they...are they curious and interested in...in what they are learning about their subject, you know, are they...you know, did I...did I teach that right, did I copy the right stuff? Did I use the right progressions? Did I ...you know, did I deliver that in a way that was you know aligned with learning outcomes...so...so a curiosity and a set of questions about...about that (UT, Claire, Tutor Focus Group, January 17th 2007).

Edel, a PETE student, knew that not all PETE students found the reflective process helpful as they said “it was a drudge” although she felt it had helped her to “grow as a teacher” (PETE student, Edel, Interview 2, December 11th

2006).

So, even though the UTs realised the importance of reflective practice, and it is something that was emphasised at the university during ITE, just one SP also acknowledged its value. This SP did note, however, that he could see little evidence of it in teacher education (SP, Mr. Cotter Interview Principal, February 12th 2007). Moreover, none of the CTs in this study referred to reflective practice. This finding needs to be set in the context of Byra's (1996) assertion that the supervisory process on TP is crucial in promoting PETE students' reflective skills.

5: PETE students are members of learning communities

The concept of teacher learning communities is informed by Wenger and Lave & Wenger's work on communities of practice where their interest resided with existing professional communities and how membership, participation, and meaning are negotiated and reflected in action (Lave & Wenger, 1991; Wenger, 1998).

Claire (UT) asserted the importance of PETE students becoming members of a community of practice contending that they needed to commit to the teaching profession by being active members of the school community:

Their ability to see themselves as part of a school, as part of a commitment to a profession. Do they ask questions about that? Are they interested in that? And do they see their connection beyond the four walls of the gymnasium as in this particular case? Are they curious? Do they look...so where...where am I going to go next?
(UT, Claire, Tutor Focus Group, January 17th 2007).

In this study, all five PETE students were legitimately peripheral to their respective community of practice. There were two mechanisms by which old-timers (CTs, SPs) brought newcomers (PETE students) centripetally to the core (Maynard, 2001) of their community of practice:

- (a) School Induction programmes.
- (b) UT and CT supervision of PETE students.

(a) School Induction Programmes.

Although there is no legal requirement to do so, some schools in Ireland put in place an induction programme to help orient student teachers and new teachers to the school setting. In these cases, a member of the teaching staff is usually assigned to manage the induction programme. In this study, three of the five schools had an Induction policy. In one of these schools, Barbara (PETE student) was very impressed by the programme in place and she found the Induction Coordinator to be both supportive and available:

And she came up and sat down with us and said, if you ever...if you have any problems or you need to talk or anything like that, just come look for me (PETE student, Barbara, Focus Group, March 29th 2007).

In contrast, two schools had no formal Induction programme in place for novice teachers; instead they were expected to learn as they went. The following data excerpts illustrates the situation in these schools:

Mr. Kelly (SP) in TowerHill School commented that his school did not have a formal induction policy in place. He asserted that student teachers were inducted to his school mainly by *not* being segregated and by being allowed into the staffroom: *“There is no separate room or anything like that for them. They are up in the staff room where they are with everybody”* (SP, Mr. Kelly, Interview, 13th February 2007).

In TreeTops School, Carol (PETE student) felt very isolated reporting that there was *“no induction programme for student teachers”* (PETE student, Carol, Interview 3, February 16th 2007). Carol was not even invited to the Staff Christmas Party *“I wasn’t invited, but I wouldn’t go”* (PETE student, Carol, Interview 2, December 4th 2006). Carol reported that as far as she could ascertain, no-one in the school had time for her: *“I kind of sneak off. Nobody even knows I exist...they don’t even know my name”* (PETE student, Carol, Interview 2, December 4th 2007).

The findings indicate that three UTs and three SPs were overt in their support for the notion of community of practice membership for PETE students. For these PETE students, however, being positioned at the border or on the periphery of the community of practice seemed to be fraught with contradictory energy, illustrating Becker’s (1972) concerns. As has been illustrated, for one PETE student, Carol, the energy was so destructive that she remained on the periphery of the community of practice. The remaining four PETE students all learned the unofficial curriculum of their communities which advocated resilience, resourcefulness and autonomy to enable them to survive, largely unsupported, on TP. For example, Dara (PETE student) describes her modus operandi for garnering PCK during TP:

And I feel like that I can use bits of Brightwater...maybe a bit from a book here or there and maybe a bit from Anita’s [CT] notes, and just put it all together (PETE student, Dara, Interview 3, February 16th 2007).

These four PETE students were able to harness this ‘constructive’ energy and moved centripetally toward the core of the dysfunctional community of

practice. Untrained mentors and untrained UTs represented the oldtimers who guided their course. In this study, the PETE students had learned how lack of supervision and help was part of the curriculum of this community of practice.

Discussion

Terroir is a term unique to the French language and French wine making. It refers to the sum of all the external influences on grape growing, often translated as a 'sense of place'. The interplay of soil, bedrock, sun and wind exposure, water table, climate, farming methods come together in a unique expression in the wine, which is specific to a particular region. The theory of *terroir* encompasses the almost metaphysical circle of soil, nature, appellation and human activity. Culture is etymologically related to *terroir*, as it has at its root the latin *colere*, meaning to till. Culture, therefore, is akin to *terroir*.

Lave & Wenger's (1991) 'situated' perspective on learning seems to have strong parallels with the concept of *terroir*. Just as the characteristics of wine are influenced by the *terroir* which they, in turn, influence, so too is the person by the culture in which s/he is located. The view of learning as 'situated', therefore, incorporates a number of linked theories that centre on the whole person and on the relationship between that person and the context and culture in which they learn (Resnick, 1994, p.16). This study adopted a 'situated learning' perspective in order to investigate how the culture and context that comprised teaching practice (TP) influenced PETE student learning. From a situative perspective, learning occurs whenever individuals interact which, in the case of this study, is characterised by interactions within

each case study tetrad; i.e. between the PETE student, cooperating teacher (CT), university tutor (UT) and school principal (SP). Data illustrate the ways in which the cultural fabric within each of the tetrads influenced the pedagogical identity (Zukas, 2006) of the PETE student determining how, what, where, when and from whom the PETE student learned during TP.

This study provides support for Fenwick's (1999, p.1) warning that the situated view of learning encourages participation in the existing community of practice: 'it provides no tools for judging what is deemed 'good' in a particular situation'. It is, thus, important to acknowledge that the mere existence of a community of practice does not mean that the community is a well-functioning social entity, or a positive catalyst for effective learning; it can also be dysfunctional in ways that subvert the quality of learning (McLaughlin & Talbert, 2001; Wenger, 1998). Wenger (1998) outlined how the core characteristics of a community of practice can be dysfunctional:

Most situations that involve sustained interpersonal engagement generate their fair share of tensions and conflicts. In some communities of practice, conflict and misery can even constitute the core characteristic of shared practice...A community of practice is neither a haven of togetherness nor an island of intimacy insulated from political and social relations. Disagreement, challenges and competition can all be forms of participation (p.77).

The community is defined by its practice in which explicit and implicit knowledge or curriculum can be official or unofficial. In this study the unofficial curriculum was very powerful. Each of the five PETE students experienced the rhetoric of TP (official curriculum) but, because the CTS, SPs and UTs either did or expected something different, they learned the unofficial

curriculum in order to survive.

It can be argued that effective ITE programmes possess a range of key characteristics, one of which is placing value on the strength of the school-university relationship in supporting PETE student learning (Darling-Hammond, 2006). McCullick (2001) discovered that conflicts between school and university personnel are related to the curriculum of the school and university which are often developed through misunderstandings about learning to teach. Findings in this study supported this.

Focusing particularly on the role of old-timers in the community of practice, the literature on mentoring in education suggests that mentors (oldtimers) must have excellent interpersonal skills and emotional intelligence (Cothran et al., 2008), be well known as scholars and professionals (Manathunga, 2007), have secure PCK expertise (Cothran et al., 2008) and should be selected on the basis of suitability for the role, in respect of both disposition and expertise; a concept which is captured in Huberman's (1989) professional career cycle model (Zukas, 2006). However, findings in this study showed that oldtimers (CTs and UTs) were not trained as mentors and often were lacking *both* the expertise and disposition to support learning. As a result of this, all five PETE students moved toward the centre of their respective dysfunctional communities of practice, 'guided' by mentors and UTs who had limited training for a TP supervision role. If the fundamental unit of Irish PETE is a dysfunctional community of practice which does not support PETE student professional learning during formation of their pedagogic identity (Zukas, 2006), this has clear implications for the quality of PE teacher being educated

for Irish classrooms and ultimately for pupil learning. More worryingly, just as theories of social reproduction intimate, CTs who had themselves experienced unsupported learning on TP reproduced this practice when they became CTs. For example, John (CT) describes his own CT's level of support on his first TP:

They were very good if anything, even the smallest problem, be it equipment or if there was a difficult kid. They'd be straight in to you to give you the technique to work it but they wouldn't sort out your problem for you. They'd go away again (CT, John, Interview 1, October 9th 2006).

As a result of this experience John did not advocate that the “*teacher [CT] would be stuck in a lesson with them [a PETE student]*” (CT, John, Interview 1, October 9th 2006).

Conclusion

This paper highlights the potency of the unofficial curriculum of teaching practice. It has illustrated the ways in which students become members of a dysfunctional community of practice through (a) the absence of trained mentors and university tutors and (b) as a result of hostility between the university and the teaching practice school. It is argued that in order to support PETE student learning more effectively in Ireland, UTs and SPs, and universities and schools need to work together to:

Unconceal what is hidden, to contextualise what happens to us, to mediate the dialectic which keeps us on the edge, that may be keeping us alive (Greene, 1967pp. 5-6)

In this respect, Clark (1988) advocated that teacher educators should take the “risky and exciting step” of systematically studying their own practice in relation to their own beliefs and implicit theories regarding teacher education.

Only through this interrogation can teacher education be improved as a mechanism for producing high quality professional learning. This paper argues for the need to select mentors and university tutors on the basis of expertise and disposition so that PETE students can be supported in their professional learning to learn the intended or official curriculum of TP. Such a change would be underpinned by the revised maxim: 'Do as we say *and* as we do'.

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