



McNally, Jim and Blake, Allan and Reid, Ashley (2009) The informal learning of new teachers in school. *Journal of Workplace Learning*, 21 (4). pp. 322-333. ISSN 1366-5626 , <http://dx.doi.org/10.1108/13665620910954210>

This version is available at <https://strathprints.strath.ac.uk/26319/>

Strathprints is designed to allow users to access the research output of the University of Strathclyde. Unless otherwise explicitly stated on the manuscript, Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Please check the manuscript for details of any other licences that may have been applied. You may not engage in further distribution of the material for any profitmaking activities or any commercial gain. You may freely distribute both the url (<https://strathprints.strath.ac.uk/>) and the content of this paper for research or private study, educational, or not-for-profit purposes without prior permission or charge.

Any correspondence concerning this service should be sent to the Strathprints administrator: strathprints@strath.ac.uk

McNally, Jim and Blake, Allan and Reid, Ashley (2009) Informal learning of New Teachers in School. Journal of Workplace Learning, 21 (4). pp. 322-333. ISSN 1366-5626

<http://strathprints.strath.ac.uk/26319/>

Strathprints is designed to allow users to access the research output of the University of Strathclyde. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. You may not engage in further distribution of the material for any profitmaking activities or any commercial gain. You may freely distribute both the url (<http://strathprints.strath.ac.uk>) and the content of this paper for research or study, educational, or not-for-profit purposes without prior permission or charge. You may freely distribute the url (<http://strathprints.strath.ac.uk>) of the Strathprints website.

Any correspondence concerning this service should be sent to The Strathprints Administrator: eprints@cis.strath.ac.uk



The informal learning of new teachers in school

Jim McNally, Allan Blake and Ashley Reid
University of Strathclyde, Glasgow, UK

Received 18 July 2008
Revised 13 December 2008
Accepted 5 January 2009

Abstract

Purpose – The purpose of this paper is to present what the study of the experiences of beginning teachers and their informal learning says about the process of learning to teach, and to discuss the main emerging themes in relation to a wider literature.

Design/methodology/approach – The design of the paper is essentially ethnographic and building of grounded theory, based on an accumulation of data derived from interviews with beginning teachers and connecting to extant theory.

Findings – The findings are that a focus on the informal learning of beginners in teaching leads to the notion of learning as becoming that is predominantly emotional and relational in nature with the emergence of teacher identity.

Research limitations/implications – The research is limited in its exploration of the cognitive dimension of professional learning, a dimension which may be elicited using a more tightly focused and structured method.

Practical implications – The implications are that learning to teach is not determined by a professional standard and that a revised standard would need to take account of these findings.

Originality/value – The value of the paper lies in the pursuit of informal learning as a research area in teaching to reveal a greater complexity of learning in that specific professional context; and showing how the understanding of learning to teach can be enriched through a wider appreciation of the school as workplace, workplace learning and connections to a wider philosophical literature.

Keywords Work identity, Ethnography, Schools, Teachers, Scotland

Paper type Conceptual paper

Introduction

The importance of informal learning in a professional context became clear in small-scale research with colleagues in the early 1990s (McNally *et al.*, 1994, 1997). Individual and small group interviews with some 40 beginning secondary school teachers (student teachers and those in their first year of teaching) about their experience of learning to teach revealed that they valued the feeling of support from colleagues. There were very few examples of explicit learning, of anything particularly cognitive such as subject knowledge, curriculum content or teaching methods, let alone “learning” connections to any specific formal contacts or activities. Although the friendly, supportive manner of some with formal roles in the school could be described as informal, it was clear from our narrative base of evidence that there was something happening outside the formal structures and systems – such as official standards, arranged development meetings, appointed mentors – that was closer to the reality of the lived experience of beginners. So we took the view that we needed to investigate further the informal learning contexts of the beginner’s experience in school.

Our notion of the informal was as raw as that, based on interviewing technique influenced by ethnography (Spradley, 1979), within an overall approach guided by the



grounded theory of Glaser and Strauss, 1968; and Glaser, 1978, subjecting the transcribed interviews to close scrutiny, coding and categorisation. Perhaps we had presaged the advice of Berg and Chyung (2008) to “pay attention to this hidden phenomenon in workplace learning and use ethnographic research methodology to uncover variables that may be crucial to developing a learning organization”. The main emergent themes within our ethnographic study of informality were the concept of a natural mentoring environment (McNally, 1994), beginning teaching as an affective transition governed by relationships with colleagues and children taught (McNally *et al.*, 1994). Further, more focussed interviews about the informal experience of beginners yielded the grounded concept of “relational conditions”, governed largely by departmental colleagues and existing between extremes of “total abandonment” and “rigidly controlled, stifling support” (McNally *et al.*, 1997)

Vague as it was, our notion of informal learning as something important that lay outside the formal, led gradually into a broad, if not quite systematic, search of the literature. Though our use of the term in the world of teaching, increasingly regulated by the competences and planned experiences of official policy (comps from 90s), was somewhat novel, and received initially as slightly subversive, it was certainly not new in a more expansive sense of learning. Informal, everyday learning is acknowledged most explicitly as a long tradition in anthropology in, for example, “The necessity of informal learning” (Coffield, 2000), in which it is also concluded, from studies of learning across different contexts, that informal learning is more significant than previously recognised, but tends to be absent from policy making:

There is a strong tendency for policy makers, researchers and practitioners to admit readily the importance of informal learning and then proceed to develop policy, theory and practice without further reference to it (p. 2).

Gorard *et al.* (1999) have also observed that lifelong learning had become rather narrowly focussed in the literature in excluding the learning that takes place outside of formal instruction. Others too (e.g. Eraut, 1994; Williams, 2003) have recognised that informal experiences are important in understanding how teachers learn; Williams and Prestage (2001) actually found that informal discussion was the most highly valued induction activity by newly qualified teachers.

Some draw a distinction between the informal and the non-formal. For Smith (2003), for example, the informal is the learning from everyday experience throughout life and the non-formal is organized education outside of the formal system. However, Colley *et al.* (2003) favour more understanding of learning as a social practice across different contexts before attempts to categorise and define. As Straka (2004) argues, informal learning is problematic and lacking in empirically grounded valid evidence. Such evidence was gathered in the Early Professional Learning (EPL) Project (full title “Enhanced competence based learning in early professional development”), funded by the Economic and Social Research Council of the UK (RES-139-25-0122), through their Teaching and Learning Research Programme (for full details see: www.ioe.stir.ac.uk/research/projects/epl/index.php).

The aim of the project was essentially to develop an in-depth understanding of the early professional learning of new teachers in school. The main method was to use six practising teachers as researchers in schools. From 40 applicants, 32 were interviewed

once and 13 a second time. Criteria for selection were essentially concerned with credibility as a teacher, respect from school teaching colleagues, critical engagement with policy and experience in beginning teaching. They were in effect insiders carrying out the interviews, supported in ethnographic interviewing by specialists in the research team, but also making their own distinctive contributions to research output, including the research process itself (e.g. Walker, 2007; Smith *et al.*, 2009). Broadly speaking, use of the teacher researchers on this scale enhanced our preliminary notions of novice learning through greater focus and insight, but also breadth of understanding. Though some indicators of new teacher learning were developed, the overall methodological paradigm was naturalistic (Lincoln and Guba, 1985). An intended outcome was that the data from a thorough exploration of informal learning in this professional context would be used to enhance the competence-based model of the professional standard.

Interviews were conducted by the teacher-researchers every few weeks over the first year with 28 new teachers altogether in their own schools, and then three times in the following year with 82 new teachers in 14 other schools. They probed new teachers' experiences with the purpose of gaining a detailed picture of their early learning – who and what was important, and why. There were two schools from each of seven local authorities (of which there are 32 in total), allocated to us from the local authorities following their negotiations with schools. We had little scope for controlled selection of schools but Scotland does have a national comprehensive education system and all the schools were secondary comprehensive schools. Nor did we select the new teachers. They are allocated following qualification to local authorities who then allocate them to schools. Numbers varied from three to 12 per school across a range of teaching subjects and we decided to invite all 82 new teachers across the 14 schools to participate. This paper draws on the data collected within the EPL project from a total of 110 new teachers in 20 secondary schools across Scotland. All were interviewed at least once with the majority providing three interviews each, providing over 200 interview transcripts. Each of the 12 members of the research team read a sample of transcripts before a full team conference and then further reading and coding of all the transcripts, guided by the grounded theory approach of Glaser and Strauss, 1968, and Glaser, 1978). We present here the main themes emerging from the study, illustrated using typical quotes from interviews or field notes, propose that the early experience of teaching is largely informal with strong emotional and relational dimensions associated with identity formation, and conclude with a consideration of future directions for research.

The emotional dimension

From even before they start teaching classes in their first job, the narratives of new teachers are couched in emotional terms. They speak of “butterflies”, “nerves, panic”, “waking at two or three” in anticipation of the first day. The first week is experienced as an emotional “roller coaster”:

Ann described her first week as a “roller coaster” and “bizarre” experience. Over the summer she thought about her classes a lot. What if they are really bad? What if I can't control them? What if I feel horrible about myself? Can I handle classes? She has been waking up at 2 or 3 in the morning thinking about the quieter pupils she hasn't spoken to.

The main source of anxiety is the class(es) of pupils that are actually taught by the new teacher. The reality of their responsibility for these young people is suddenly upon them. The formal standards and support systems (which we see as part of the structural dimension of learning) do not appear in the narratives. Any presumption of a smooth and continuous application of previously “learned” knowledge or skills is undermined in this transition into teaching. When the experience improves, it is again expressed in affective terms, for example “pleased” and “liked”, or moving from “disheartened” to “happier”:

After her first observed lesson . . . during which four boys had dominated the class Ann felt “pretty disheartened about the whole thing”. By the following week she wasn’t so totally disheartened because she realised there were lots of strategies to try . . . and if she could turn round two pupils it would be a good class and she would be happier.

She has been pleased at the pupils’ response to her lessons and she liked being recognised by them in the corridors.

Interestingly, the corridor as a formal space in the school as workplace is also a space in which informal learning by the new teacher occurs. Being recognised in the corridors is part of becoming a teacher, a sign of a new identity in formation.

Beginning teaching can indeed be conceptualised seen as a kind of emotional labour. It is how one inexorably has to begin life as a teacher, an initiation in which there is little option but to make an emotional commitment. The roller coaster extremes may lessen with time but the emotional dimension does not fade away. Hargreaves (1998), for example, sees emotions in the lives of teachers as “not just a sentimental adornment . . . (but) . . . fundamental in and of themselves”. Eraut (2004) too, based on his research on informal learning in the workplace, claims that the “emotional dimension of professional work is much more significant than normally recognised”.

The relational dimension

Even when considering the emotional separately as shown previously, it is clear that the relational is frequently associated if not integral. An environment that hinders affective and relational engagement, according to Lohman (2000) actually inhibits informal learning, giving further weight to the integral and interdependent nature of these constructs. What tends to happen in pursuing the question of specific examples of learning with beginning teachers in interview is that they revert very quickly to the relationships they value. Examples of what we might describe as cognitive, rather than emotional or relational, are rarely articulated, even when probed. Responses are characterised by their apparent vagueness, for example, “everyone’s got something different to say”. What is clear, however, is that the social environment in the school as workplace and the range of specific relationships that emerge for the new teacher are of central importance:

. . . great atmosphere in the school dept and classroom – one teacher has taken me under her wing and is very supportive. At the end of the day I was relaxed and very positive about the future.

I had been nervous and not sleeping well. The PT had given me his home phone number so I called him on Monday night. He put me completely at ease. I felt he was friendly and supportive. I still didn’t sleep well but felt more relaxed about my first day.

Such unplanned support – giving out your home telephone number or taking someone under your wing – all informally volunteered, is characteristic of the early experience. It is a feeling of being supported, rather than the acquisition of specified bits of professional knowledge, that seems to matter most. Yet, though rarely specified, this vague sense of support is accompanied by assistance as and when it is needed:

I was taking over from a teacher ... [and] ... we were just getting to know each other ... and she was able to give me insider information on the pupils ... so ... that in itself was really good in that it built up a friendship as well, it built up a bit of a relationship ... she became someone I could really go to for a bit of help if I didn't want to go to the mentor or the PT. It just gave me another person which is really good and it's through things like that you actually feel part of the department so that you actually feel yourself becoming more of a teacher ... it just goes to cementing and making you part of the department ... it's something that's organic and it grows and it's just a natural process of getting to know each other.

Eraut (2004) too found that “informal support from people on the spot” was more important to the beginner than help from formally designated mentors.

Criticism, and our own need to interrogate the data, tended to be based on a degree of incredulity about whether being friendly and supportive was an adequate basis for a professional induction. Corroboration in the literature, moving outside the rather restricted reference base and often policy-driven literature in teacher education, was not so difficult to find. The importance of informal relationality in human development is well established in philosophy, for example, in terms of friendship (e.g. White, 1990) and human bonds (e.g. Almond, 1988). There is more to informal relationships at work than mere friendship. Hinchliffe (2004), for example, describes an ethical nexus that is inscribed in workplace relationships and that this ethical dimension of relationships at work is important for the quality of work and for human flourishing. The relational nature of beginning teachers' development is thus more than just a means or a context in which professional learning takes place; it is an integral to becoming a teacher. This relationality is many-fold, often including other beginners:

Ann has been my lifeline. There's been days when you've just finished work and think, “this was awful, this was terrible” and we've also had the experience where we actually have the same class, so that has been really useful in that, “do they do this in your class?”. And on the whole yes they do. It's exactly the same behaviour so you know it's not something wrong with your teaching style or that you're not interesting them. It's just that that is their behaviour so I always kid them on and say they've got the weakest bladders in Scotland because it always seems they are needing to go to the bathroom but Ann has the same problem so I guess they really do.

... we came to school together, especially at the very start and we didn't know anyone else in the school we had each other to rely on, so that was good and it was just seeing that friendly face and that familiar face it just gave you bit of confidence that you didn't feel ... and because Ann also has her own classroom, whereas I don't, it's a good sanctuary for me sometimes just to go up there and because it's a totally different department and there's a different feel up there ... I don't want her to move(to another school).

... we can have a good bitch if that comes into it yes. And also even sometimes “how do you find this person in the school” or “how do you find this person” you know and because sometimes you don't know if you've offended them.

Pupils taught comprise a major set of relationships and here again the initial anxiety over pupil “behaviour” tends to be absorbed into a more mature sense of understanding individual personalities:

I find it easy to relate to them now it’s just because I’m beginning to know their personalities . . . I’m beginning to know a lot of pupils much better, what kind of music they’re into you know . . . the quiet ones in the class I’m trying to get round and have a wee blether to them.

Pupils also carry their impressions to others as a kind of informal assessment. New teachers know that “teachers get a feel of what teachers are like from the kids”. How you relate to pupils in a new school largely determines how the novice settles in and becomes accepted as “their” teacher. This can mean making adjustments to teaching:

Rachael noticed that the pupils here are less streetwise than in Dundee and she found this refreshing. She is already adapting her lessons plans because the pupils have a wider use of language than she had been used to. She also noticed their topics of conversation were different i.e. horses not clubs.

What is being learned?

This is the recurring question in the matter of informal learning because, at first sight of the data and argument, it appears that nothing specific is actually being learned. Attempts to probe behind the screen of informality are not often fruitful as they tend to lead back into the robust theme of informal relationality:

I think just starting to get more into a routine. They know they come in and take their jackets and bags off and they know that when I say right settle down, working, they know. You’re also starting to build up a relationship with the kids. They stop and say hi to you in the corridor and they know you and recognise you and they speak to you outside the class. It just helps.

Some examples of a holistic kind of learning were traced – “making kids want to do well for you”, “what works for one does not for another”, “easier to lighten up than tighten up”, “learning from mistakes”. These were triggered by probes on observation of another teacher teaching but then connected to other sources or even almost casually as “learning on the job”. Occasionally, the question is even reframed by the interviewee in terms of personal qualities, e.g. “my diplomacy is becoming really good”, or in comparison to another teacher’s performance. There is a general sense of personal adaptation and self-discovery, of ineluctably developing an identity as a teacher:

I observed a lesson given by one of the younger teachers but very experienced and the way she was with the kids but she had discipline . . . she makes the kids want to do well for her . . . I think I had the attitude of you can go in and not be friends but on an equal wave length with them and my PT said to me it’s easier to lighten up than to tighten up and that’s probably the biggest thing I learnt . . . tightening up has been quite a steep learning curve for me and a lot it’s been making pure mistakes and making massive mistakes and learning from that . . . Trying to push a kid into doing something and they’re just not going to do it . . . what I’ve learnt over the past six weeks has been generally on the job, making mistakes and trying to . . . change things for next time.

I witnessed an experienced teacher dictating absolutely everything to the pupils, which they later regurgitated. The pupils had a poor learning experience and although he got good results the pupils did not enjoy the experience. This strategy was used partly to keep pupils

quiet and under control and partly because he was lazy. This is one role model I have no intention of emulating.

On rare occasions, reference is made to university preparation:

I think it was from my own experiences. People had said things like that but it didn't really register and it wasn't until I was putting it into practice I found what works for one class doesn't work for another it's the same with teaching things and behaviour strategies. It's all about adapting and always being adaptable yourself. Kids have all got different learning styles and I learnt that at university and I don't think I've grasped how important that is until now.

So, would it be reasonable to make the empirical deduction that learning to teach is an inherently emotional process embedded within a relational context? In the process of reaching such a succinct summation, and simultaneously treading the random pathways of collegial discussion and knowledge of the literature, an encounter with Bosma and Kunnen (2001), p. xiii) offers the very thesis that we seek to articulate. This is their concept of the development of self and identity, a theme, which is also strongly present in an overall reading of the data as a set of individual narratives of personal change. The early notion of learning as becoming (McNally *et al.*, 1994) is not only empirically progressed as an identity shift into teacherhood, but is also theoretically corroborated and re-connected to a more ethnographic interpretation of the beginner's actual experience (e.g. Eddy, 1969) than more formalised descriptions of teaching. The newcomers into teaching are joining a community of practice but this transition involves, as Wenger (1998) argues, a relationship between learning and identity in which a sense of identity is integral to the individual's feeling of belonging. The learning is transformative and is a process of becoming a new person or, in this case, a teacher.

However it may be described – learning to teach or becoming a teacher – there can be little disagreement that it is a demanding experience, perhaps no more or less so than many other occupational initiations or inductions, but special in its own way as they are in theirs (and that merits further research). On reflection, it should not be so surprising that the emotional and the relational (which we prefer to “social” as a more accurate term in this context) feature so prominently. As Illeris (2002) states:

Very special and demanding situations, often with a crisis-like character, can lead to deep and comprehensive transformative learning processes that include simultaneous change in all the three learning dimensions and have to do with the very identity of the learner (p. 229).

Overlooked in the more formal notions of learning are what might be learned from children taught (customers or clients in a more general view?). Given the thematic importance of relationships with children in analysing our earlier research, further probing was clearly required in this area. Typical responses to “What have you learnt from the kids?” are, for example, “lots of new phrases”, “kids want to be listened to”, “really want you to set boundaries in the classroom”. Informal learning in this context is thus also about the voice of children, and occasionally about the background to particular voices. Beginning teachers are “learning” about the lives of some children, where one “broke down in tears” and others are “carers in their homes”. This learning has a clear relational dimension and in part determines how pupils will see you or accept you as a teacher:

... one of my third year boys who is constantly in trouble and talking to him and taking the time to understand how he felt and his emotions and he actually broke down in tears and after that he's always been most helpful and I think it was because he knew he could trust me. So we formed that relationship ... I found out that one has a mum that works at this school so that's really good. It's all about building up my view of the pupils.

Sometimes it's (homework) not coming and you have to step back and ask why ... if you have a class that's first period and sometimes they're late and you have to ask yourself the reason why ... I found that on several occasions it's because these pupils are actually carers ... in their homes. Parents have a disability or they have younger siblings and they have to take them to school before they can come to school themselves and I think you have to be aware of that.

What about formal learning?

Most new teachers (over 95 per cent) achieve the relevant standard, the Standard for Full Registration (SFR), the main formal reference for beginners in the teaching profession in Scotland. This document is organised into three categories of knowledge and understanding, skills and abilities, values and personal commitment, with 23 separate professional "competences", supported by a further 106 illustrative statements (see General Teaching Council for Scotland (2006). No reference is made to it in interviews, however, until some four months into the first year of teaching, and only then at the prompting of the interviewers, as that is when the official interim report is due. It was seen as a bureaucratic requirement on the whole, with little bearing on their actual experience. Bearing in mind that a project objective was to explore connections between the competences of the standard and the informal learning experience, transcripts were examined for implicit connections. One of these was what might be described as a developing a sense of difference between children, a growing appreciation of their individuality. The other was the related need to adapt the same lesson to different classes:

I've learnt that no two lessons are the same, that no two classes are the same and not to expect them to be the same and though you're preparing the same work it never works out the same ... and not to be discouraged by that but I've actually enjoyed that and ... at first I was a bit concerned and I thought well maybe I wasn't teaching it correctly especially the first time I taught the lesson and there was an element of thinking that you can change this or change that but you need to know that kids are different and different things work for different kids.

Though the discourses are very different, not least in the degree of formality of their register, it is possible to see the above within the following collation of statements for the SFR (General Teaching Council for Scotland, 2006):

registered teachers ... ensure learning tasks are varied in form, differentiated and devised to build confidence ... select strategies for teaching and learning appropriate to the subject, topic and interests and needs of pupils ... use and adapt materials for learning and teaching which stimulate ...

The more nuanced meanings of informal learning tend to be nevertheless closer to the lived experience of the beginner in teaching. The emotional, the relational and the process of identity formation could be viewed as complementary in conception to the more impersonal and remote language of policy. They are grounded in rich descriptions of becoming competent in a particular context, which is needed, argues

Halliday (2004), if we are to avoid the danger of rhetorical robbery in relation to “competence”. Progressively focussing on discrete competences may well yield better understanding of competence development and how standards can be translated into practice, or indeed how standards might embody a practice-based theory of professional informality.

The tension between a formal standard and the more informal nature of teachers’ experience has been identified by Carlgren (1996) who argues that teachers actually draw on their tacit, experiential knowledge in practice and that formal knowledge needs to be better integrated with this. The possibility of connecting the two apparently conflicting discourses is further developed elsewhere (McNally *et al.*, 2008) but the main question for policy makers is the extent to which formal standards and support systems might be able to accommodate notions of the emotional as well as the cognitive, the ontological as well as the epistemological, as intrinsic to the complex, personal nature of new teacher development.

Concluding discussion

The informal learning of new teachers resists easy description or definition. It is not readily articulated by practitioners as it tends to be tacit in nature and embedded in day to day activity (e.g. Eraut, 2000). However, its importance is supported by a body of empirical work and related theory. The evidence base of this paper, for example, is broadly consonant with Smith’s (2003) review of informal education, in which he identifies: the range of opportunities for learning that arise in everyday settings; the importance of relationships, people’s experiences and feelings; and the centrality of conversation. The sense of purpose implicit in the emotional-relational nature of new teachers’ learning also echoes “a concern to build the sorts of communities and relationships in which people can be happy and fulfilled”.

It is not that formal structures and systems are unimportant, though they do tend to be presented by policy makers and not infrequently received in practice, it should be said, somewhat uncritically as all embracing solutions. The disparity between official standards and actual workplace learning experiences may not be uncommon across occupational contexts. In a case study of the automotive industry (Unwin *et al.*, 2008), three experienced workers mapped their competence-based standard on to actual workplace practice, developed it further with the workers and then introduced a “professional discussion” as a bridge between the two discourses. The authors conclude that more thought needs to be given to how a competence-based model “could be adapted so as to make it much more learning-led than simply assessment-led” (p. 25).

Within the overall “Learning as Work” Project (2008), the concept of worker discretion is linked to expansive rather than restrictive learning. The inherent discretion over practice in teaching and the unambiguous identity challenge of new teachers suggest a strong empirically-based distinction between the professions or professional learning and the more routinised, directed work of some other occupations. While it tends to be professional values, codes of practice and so on that are espoused as the features of professional work, it may be that an actual distinctive feature in practice lies in the degree of discretion, the exercise of autonomy or expansive learning, within an ethic of presumed and practised commitment. It may therefore be more fruitful to pursue the understanding of learning in the workplace and avoid simplistic polarisation of the formal against the informal as fundamentally

distinct (Colley *et al.*, 2003), to see the workplace as a complex context and space where learning takes place and in which participatory practices are pedagogically important (Billett, 2004). A spectrum of expansive-restrictive learning, as used above, is one example but it will be important also that further study does not lead prematurely to a reductive typology of learning, informal or otherwise. In the process of searching literature for learning in workplaces other than the school, the wider connections of this paper could scarcely be more strikingly illustrated than in the study of paramedics and firefighters, where the authors (Taber *et al.*, 2008) conclude that there are circumstances when human beings “learn directly from their encounter with the world” and that learning in practice and from each other develops “the ability to respond to emergent situations, adapt policy into practice, and navigate through the grey areas and organized chaos of their profession”.

From a methodological perspective, the findings and discussion of this paper are the outcome of grounded theory development within a naturalistic paradigm. Such an approach is normally associated with the need to suspend prejudice and prior theoretical knowledge. This is not entirely possible of course and a number of connections with extant theory occurred in the course of and following the empirical work behind this paper. Some were more or less systematically traced but others were not planned at all. They were more to do with impromptu discussions at work or conferences; in effect, they were learned informally. This experience is probably common amongst researchers but it is rarely reported. Most recently, for example, in a discussion about nursing and teaching, a colleague who is also a stroke victim brought our attention to Benner and Wrubel’s (1989) work on the primacy of caring. We learned that our work on grounding understanding in practice, in highlighting informal learning rather than formal theorising as integral to practice, more specifically, finds support in Heideggerian phenomenology:

... [theory] ... derived from practice is based on the Heideggerian view that practical engaged activity is more basic than, and is prior to, reflective thinking. The practical world is more complicated and dynamic than can be captured by any formal theory (p. 20).

References

- Almond, B. (1988), “Human bonds”, *Journal of Applied Philosophy*, Vol. 5 No. 1, pp. 3-16.
- Benner, P. and Wrubel, J. (1989), *The Primacy of Caring: Stress and Coping in Health and Illness*, Addison-Wesley Publishing Company, Reading, MA.
- Berg, S.A. and Chyung, S.Y. (2008), “Factors that influence informal learning in the workplace”, *Journal of Workplace Learning*, Vol. 20 No. 4, pp. 229-44.
- Billett, S. (2004), “Workplace participatory practices: conceptualising workplaces as learning environments”, *Journal of Workplace Learning*, Vol. 16 No. 6, pp. 312-24.
- Bosma, H.A. and Kunnen, E.S. (2001), *Identity and Emotion*, Cambridge University Press, Cambridge.
- Carlgren, I. (1996), “Professionalism and teachers as designers”, in Kompf, M., Bond, W.R., Dworet, D.H. and Boak, R.T. (Eds), *Changing Research and Practice*, Falmer, London.
- Coffield, F. (2000), *The Necessity of Informal Learning*, ESRC Report, Policy Press, Bristol.
- Colley, H., Hodkinson, P. and Malcolm, J. (2003), *Informality and Formality in Learning*, a report for the Learning and Skills Research Centre, EPL Project, available at: www.ioe.stir.ac.uk/research/projects/epl/index.php

- Eddy, E.M. (1969), *Becoming a Teacher*, Teachers College Press, Columbia University, New York, NY.
- Eraut, M. (1994), *Developing Professional Knowledge and Competence*, Falmer Press, Brighton.
- Eraut, M. (2000), "Non-formal learning and tacit knowledge in professional work", *British Journal of Educational Psychology*, Vol. 70 No. 1, pp. 113-36.
- Eraut, M. (2004), "Informal learning in the workplace", *Studies in Continuing Education*, Vol. 26 No. 2, pp. 247-73.
- General Teaching Council for Scotland (2006), General Teaching Council for Scotland, available at: www.gtcs.org.uk/Publications/StandardsandRegulations/The_Standard_for_Full_Registration.aspx (accessed 5 January 2009).
- Glaser, B. (1978), *Theoretical Sensitivity*, Sociology Press, Mill Valley, CA.
- Glaser, B. and Strauss, A. (1968), *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Weidenfeld & Nicolson, London.
- Gorard, S., Fevre, R. and Rees, G. (1999), "The apparent decline of informal learning", *Oxford Review of Education*, Vol. 25 No. 4, pp. 437-54.
- Halliday, J. (2004), "Competence in the workplace: rhetorical robbery and curriculum policy", *Educational Philosophy and Theory*, Vol. 36 No. 5, pp. 579-90.
- Hargreaves, A. (1998), "The emotional politics of teacher development", Keynote address, Annual Conference of the American Educational Research Association, San Diego, CA.
- Hinchliffe, G. (2004), "Work and human flourishing", *Educational Philosophy and Theory*, Vol. 36 No. 5, pp. 535-47.
- Illeris, K. (2002), *The Three Dimensions of Learning*, Niace Publications/Roskilde University Press, Leicester.
- "Learning as Work Project" (2008), Learning as Work Project, available at: <http://learningaswork.cf.ac.uk/outputs.html> (accessed 16 July 2008).
- Lincoln, Y.S. and Guba, E.G. (1985), *Naturalistic Inquiry*, Sage Publications, Los Angeles, CA.
- Lohman, M.C. (2000), "Environmental inhibitors to informal learning in the workplace: a case study of public school teachers", *Adult Education Quarterly*, Vol. 50 No. 2, pp. 83-101.
- McNally, J. (1994), "Students, schools and a matter of mentors", *International Journal of Educational Management*, Vol. 8 No. 5, pp. 18-23.
- McNally, J., Blake, A., Corbin, B. and Gray, P. (2008), "Finding an identity and meeting a standard: connecting the conflicting in teacher induction", *Journal of Education Policy*, Vol. 23 No. 3, pp. 269-80.
- McNally, J., Cope, P., Inglis, W. and Stronach, I. (1994), "Current realities in the student teaching experience", *Teaching and Teacher Education*, Vol. 10 No. 2, pp. 219-30.
- McNally, J., Cope, P., Inglis, W. and Stronach, I. (1997), "The student teacher in school: conditions for development", *Teaching and Teacher Education*, Vol. 13 No. 5, pp. 485-98.
- Smith, C., Curwen, K., Dodds, D., Easton, L., Swierczek, P. and Walker, L. (2009), "Teachers as researchers in a major research project: experience of input and output", *Teaching and Teacher Education* (forthcoming).
- Smith, M.K. (2003), available at: www.infed.org/i-intro.htm (first published May 1997, last update December 2003).
- Spradley, J. (1979), *The Ethnographic Interview*, Holt, Rinehart & Winston, New York, NY.
- Straka, G. (2004), "Informal learning: genealogy, concepts, antagonisms and questions", occasional paper, Universität Bremen, Bremen.

-
- Taber, N., Pumb, D. and Jolemore, S. (2008), "'Grey' areas and 'organized chaos' in emergency response", *Journal of Workplace Learning*, Vol. 20 No. 4, pp. 272-85.
- Unwin, L., Fuller, A., Bishop, D., Felstead, A., Jewson, N. and Kakavelakis, K. (2008), "Exploring the dangers and benefits of the UK's competence-based approach: the use of vocational Qualifications as learning artefacts and tools for measurement in the automotive sector", Research paper no 15, Learning at Work, Cardiff School of Social Sciences, Cardiff University, Cardiff.
- Walker, L. (2007), "Working with researchers: the practitioner's perspective", paper presented at TLRP Technology-Enhanced Learning (TEL) Programme Invited Seminar on Developing Research Capacity, Dynamic Earth, Edinburgh.
- Wenger, E. (1998), *Communities of Practice: Learning, Meaning and Identity*, Cambridge University Press, Cambridge.
- White, P. (1990), "Friendship and education", *Journal of Philosophy of Education*, Vol. 24 No. 1, pp. 81-91.
- Williams, A. (2003), "Informal learning in the workplace: a case study of new teachers", *Educational Studies*, Vol. 29 Nos 2/3, pp. 207-19.
- Williams, E.A. and Prestage, S. (2001), "Individualism to collaboration – the significance of teacher culture to the induction of newly qualified teachers", *Journal of Education for Teaching*, Vol. 27 No. 3, pp. 253-67.

Further reading

- Hodkinson, P. and Hodkinson, H. (2004), "The significance of individuals' dispositions in workplace learning: a case study of two teachers", *Journal of Education and Work*, Vol. 17 No. 2, pp. 167-82.

About the authors

Jim McNally is Professor of Teacher Education at the University of Strathclyde in Glasgow, Scotland and is a former secondary school teacher. His research and publications are in the field of teacher education and practice and are mainly based on the use of grounded theory. Jim McNally is the corresponding author and can be contacted at: j.g.mcnally@strath.ac.uk

Allan Blake was a research fellow on the ESRC project on Early Professional Learning and is now a researcher at the University of Strathclyde, Glasgow, working on a range of projects in the field of professional development.

Ashley Reid is a Lecturer at the University of Strathclyde, Glasgow and a former Head of Geography, with research interests in Geography Education, particularly in relation to professional development.