

Informal Learning by Professionals in the UK

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Abstract

Schön's research and publications on reflective practice have had a major impact on thinking and practice concerning the development of professionals in England, and in most developed countries around the world (Schön, 1983 and 1987). Indeed, for certain professions, such as teaching, nursing and social work, initial professional development programmes in England (and the UK more widely) include formal teaching and learning about reflective practice. However, there has been much less effort expended on determining how professionals in practice carry forward their learning and development beyond the initial qualifying period. Empirical research by Cheetham and Chivers was conducted in the late 1990s, involving a large number of professionals in England reporting on their informal learning following their entry into the relevant profession. This paper offers some reflections on the significance of the findings from this research for the field of professional lifelong learning.

Interviews with 80 professionals from 20 different professions, and a questionnaire survey of 372 professionals from six selected professions have revealed that English professionals learn by a whole variety of informal methods (Cheetham and Chivers, 2001). Indeed, beyond initial qualification, usually via a combination of formal education and structured training, most professionals evidently progress their professional learning via informal and incidental learning, with little if any emphasis on formally organised learning.

Although many professionals can identify learning from reflection on practice, they are often equally or more aware of other informal methods of learning, which have not received nearly so much attention from researchers and practitioners in the field of initial or continuing professional development. These methods have been identified and classified by Cheetham and Chivers to form the acronym PROFESSIONAL, as follows:

- P Practice and Repetition
- R Reflection
- O Observation and Copying
- F Feedback
- E Extra-Occupational Transfer
- S Stretching Activities
- S Switching Perspectives
- I Interaction with Coaches, Mentors, etc.
- O Osmosis – Unconscious Absorption
- N Neurological/Psychological Devices or Techniques
- A Articulation
- L Liaison/Collaboration

The research has revealed that while these informal learning methods are well established and widely used, many individual professionals have pro-actively employed only a small number of them. This paper will explore the implications of these research findings for further research, and for the field of professional lifelong learning more widely. There is clearly a need for professional developers, mentors and advisers to be more aware of the importance of these informal learning methods. Ways in which learning about these learning methods, and experiencing them, can be included within the formal education of professionals and future professionals will be considered. In many cases these less considered learning methods can be combined effectively with reflective practice learning to produce powerful approaches to professional learning at every stage of the professional's career progression.

In other cases the wide range of effective informal learning methods identified can be brought into consideration for professionals who have had difficulty in learning from reflection on practice. The paper will also consider the implications of the research findings for the design and delivery of initial professional education and training programmes.

Introduction

A previous paper co-authored by Graham Cheetham and myself (Cheetham and Chivers, 2001), provided an opportunity to review the literature to the beginning of this millennium on how professionals learn. While this literature is now extensive, it is rather fragmented, reflecting particular schools of thought about adult learning, vocational learning, formal versus informal learning, learning on and off the job, etc.

In terms of this paper, the seminal work of Marsick and Watkins, (1990) on formal, informal and incidental learning in the workplace is significant. More recent research by Eraut et al., (1997) into the development of knowledge and skills in the workplace should also be acknowledged. This latter study included some professional occupations, although it was not specifically focused on professions; but rather on higher level workers in three occupational fields; engineering, healthcare and business.

Eraut's team conducted semi-structured interviews with managers, technicians and a number of professionals from each sector. The interviewers established the nature of the interviewee's job, then sought to identify 'learning episodes' which had helped them acquire necessary knowledge and skills.

This research identified nine broad types of learning episodes as follows: working for qualifications; short courses; special events; access to learning materials; organised learning support; consultation and collaboration within the work group; the challenge of work itself; consultation outside the working group; and life outside work (Eraut et al., 1997, pp 9-10).

This study did not include any quantitative element, therefore the researchers were unable to consider the relative importance of different types of learning episode or confirm their general applicability. Nevertheless, this research revealed once more that higher level workers, including professionals learn a great deal by informal (and

incidental) methods at work (and even outside work), and do so in a wide variety of ways. This study also pointed up the benefits of asking workers themselves about their vocational learning, rather than relying on others, such as their managers, and training and development staff to explain the how, what and why of their learning.

In considering the Eraut et al. list of learning episodes, it is also notable that learning by reflection on practice does not explicitly appear. Given that the study included professionals in the sample of interviewees, and given the generally very strong emphasis on Donald Schön's work on reflective practice when considering professional learning and development, this result may seem anomalous.

There is no doubt that Schön's research and publications have had a major impact on thinking and practice concerning the development of professionals in the USA, the UK and many other countries around the world (Schön, 1983 and 1987). Indeed, for certain professions in England, such as teaching, nursing and social work, initial professional development programmes include much formal teaching and learning about reflective practice. It has seemed to me for many years that learning largely arises from reflection upon experience (including the experience of being formally taught), and that the workplace provides a huge variety of experiences from which to learn. However, to sum up these 'learning episodes' or 'learning experiences' as just an arbitrary aspect of the over-riding importance of 'reflecting on practice' seems unjustified, whether for professionals or for other workers. Having supported the learning and development of many professionals, younger and older, across a wide range of professions, I am certainly aware that many of them were quite unaware of the concept of learning by reflection on practice, and were learning well at work without any overt attempt to follow any 'recipes' for learning from reflection on practice.

This is not to state that professionals do not learn from reflection on their practice. Indeed, again with Graham Cheetham, I have argued that this process is the key driver of improvements in individual professional competence (Cheetham and Chivers, 1996 and 1998). The Cheetham and Chivers model of professional competence acquisition and professional learning, with reflection on performance, its essential motor has gained widespread credence in the UK.

This paper reports briefly on empirical research conducted to investigate the validity of this model, and to determine in detail how experienced professionals in England have in fact developed their professional competence through learning (especially their informal learning) since qualifying.

Literature Review

The literature on informal learning at work generally is now extensive, and a full review would be beyond the scope of this paper. Marsick and Watkins, (1990) have made distinction between formalised learning in the workplace and what they call 'incidental learning'. Reber, (1993) also recognized the existence of an implicit process that leads to the acquisition of knowledge without conscious effort or any explicit awareness of what has been learned. Indeed this learning generates the tacit knowledge, understanding and skills on which workers draw, for example to make decisions, apparently intuitively.

Marsick and Watkins, (1990) went further to argue that while the workplace provides opportunities for learning, there are personal characteristics which, if present, make work-based learning more likely to take place, or take place more extensively. These are:

1. Pro-activity – a readiness to take the initiative in situations.
2. Critical reflection – a tendency to reflect, not just on events, but on underlying assumptions.
3. Creativity – to enable a person to think beyond their normal point of view.

Mumford, (1995) has identified four broad approaches to learning used either tacitly or deliberately:

1. Intuitive approach-learning is unconscious and a consequence of experience.
2. Incidental approach – involves learning by chance from activities that cause a person to reflect on them at the time or soon after.
3. Retrospective approach – looking back over time over what has happened and reaching conclusions.
4. Prospective approach – involves retrospective elements, but focuses on planning to learn from events before they happen. Future events are seen as important, not just in their own right, but as opportunities to learn.

Mumford suggests that different people may be inclined to one or other of these approaches in much the same way as they lean towards a particular learning style.

While informal learning at work is seen as worthy of encouragement by these authors, and by those concerned with or promoting organisation learning and the learning organisation (e.g. Argyris and Schön, 1978; Fiol and Lyles, 1985; and Jones and Hendry, 1992). Zuboff, (1988) cautions that much work-based learning is likely to be context-specific. This means it will not transfer readily to other work environments.

Research concerned with professional development has until recent years largely focused on specific professions. Research into continuing professional development (CPD) has tended to focus on formal learning, and particularly on the requirements of particular professional bodies (Becher).

Gear et al., (1994) reported that up to the 1990s there seemed to have been a dearth of research which was cross-professional rather than profession specific, and which had a significant focus on informal learning.

Gear et al., (1994) themselves carried out an investigation across seven professions in regard to 'informal learning projects'. Informal learning methods involved included: reading, visits, meetings, practice, audit and conversations.

More recently Eraut et al., (1997) have looked at the development of knowledge and skills in the workplace. This study included some professional occupations, but was not specifically focused on professions. The study involved semi-structured interviews with managers, technicians and a number of professionals drawn from the engineering, healthcare and business sectors.

These researchers identified nine broad types of learning episode:

1. working for qualifications
2. short courses
3. special events
4. materials
5. organised learning support
6. consultation and collaboration within the working group
7. the challenge of the work itself
8. consultation outside the working group
9. life outside work (Eraut et al., 1997, pp 9-10)

These researchers also sought to identify various factors that affected learning at work, and summarised their findings as:

- confidence
- motivation
- capability/prior knowledge
- how a person is managed
- the micro-culture of the workplace
- the organisation; and
- professional bodies (Eraut et al., 1997, pp 13-14)

Poell et al., (2000) have gone further into how the nature of the work of different types of work organisation influences the ways in which workers, including professionals, seek to gain knowledge. These researchers have studied in considerable depth how some groups of professionals organise themselves to learn from so called 'learning projects'.

However, the focus of the empirical research reported here has been on how professionals learn through their careers from an individual perspective.

Empirical research methods and results

The research conducted by Cheetham and Chivers, (2000; 2001) which forms the substantial basis of this paper took the form of interviews with 80 practitioners from 20 professions, and a questionnaire survey of practitioners from six professions, which yielded 372 usable responses. The six professions selected for the survey were dentistry; accountancy; the Civil Service; surveying (Chartered), the Anglican Church, and training.

Both interview and survey respondents (N = 452) were invited to rate the importance of each of ten types of informal learning or experience (drawn from the literature) in helping them to become fully competent (on a 1-5 scale).

The ranking of the contribution of the various forms of informal learning showed:

1. on the job learning
2. working alongside more experienced colleagues
3. working as part of a team
4. self analysis or reflection
5. learning from clients, customers, patients, etc.
6. networking with others doing a similar job
7. learning through teaching/training others
8. support from a mentor of some kind
9. use of a role model
10. pre-entry experience

Significant differences were noted between professions when the results from the six surveyed professions were looked at separately. For example pre-entry experience scored reasonably well amongst clergy, whereas amongst dentists the score was much lower. The church scored highest on both the use of role models and mentors, while trainers (as might be expected) rated most highly learning through teaching others.

The empirical research methods, interviews and survey, were able to draw out a great deal of qualitative data. In each case, respondents were asked to describe experiences that had proved particularly formative for them. In the case of the interviewees, the probing went considerably further, for example by asking them about particular difficulties they had faced in their earlier practice and how these had been overcome.

The experiences reported could be grouped into a number of general themes as follows:

- Repetition, practice and rehearsal
- Over-learning
- Observation
- Role models
- Mentoring
- Learning from complex or multi-faceted problems
- Innovative and pioneering experiences
- Working above grade
- Working alongside more experienced colleagues
- Networking
- Team working
- Multi-disciplinary working
- Switching perspectives
- Learning from clients/patients/customers
- Feedback
- Learning from criticism
- Self-knowledge and self-image
- Simulation
- Learning through articulation

- Learning by linking to existing knowledge or by linking elements of new knowledge together
- Mind-set changes and ‘Damascus Road’ experiences
- Mental models, imagery and other psychological devices
- Coping with professional stress
- Reflection (including more formal reflection techniques and processes)

Discussion of Research Findings

It is clear from the above list that professionals learn informally in a wide variety of ways. By no means do all professionals learn by all these methods. It seems clear that some informal learning methods are favoured in certain professions and less so in others. The research by Eraut et al., (1977) reminds us that the circumstances of the workplace as well as the nature of the work may determine to a considerable extent which learning opportunities present themselves to particular professionals, indeed particular professions. Mumford, (1995) stresses that particular workers may prefer to learn (informally or indeed formally) by particular methods.

A detailed content analysis has suggested 12 general types of learning processes can be identified from all the data collected in the Cheetham and Chivers, (2001) research. These components can be arranged into a taxonomy of learning mechanisms along the lines of Bloom’s Taxonomy of Educational Objectives (Bloom, 1956):

1. Practice and repetition
2. Reflection
3. Observation and copying
4. Feedback
5. Extra occupational transfer
6. Stretching activities
7. Perspective changing/switching
8. Mentor/coach interaction
9. Unconscious absorption or osmosis
10. Use of psychological devices/mental tricks
11. Articulation
12. Collaboration

A number of general comments were made by respondents about other factors they considered important to becoming a competent professional. Synthesising these suggests five general factors:

1. the opportunity to experience a wide range of developmental experiences;
2. the motivation to acquire the necessary competencies and to improve these continuously;
3. adequate practice in carrying out the various key tasks and functions in order to master the requisite competencies;
4. persistence in overcoming difficulties and in persevering when things are not going well;

5. the influence and support (when needed) of others.

One further point was repeatedly made in relation to more formal training. This was having the opportunity to put something into practice immediately. This finding accords with one, at least, of Knowles 'principles of androgogy' (Knowles, 1980).

The professionals researched placed little emphasis on formal learning processes in regard to their learning and development beyond initial qualification to enter the profession. However, it should be remembered that the interview and questionnaire samples included a large number of experienced professionals. These respondents may have had little opportunity, or incentive, to engage in formal learning (certainly group based learning in a training environment) in the earlier stages of their careers.

Certainly, as the newer professions emerged in the 1970s onwards, there would have been few qualified to take forward the development and delivery of relevant training courses. For the older professions there will have been some formal CPD courses offered during the career span of relevant respondents. However, take up may well have been quite low due to lack of encouragement from employers of professionals, or any demands from professional bodies to undertake CPD.

In the light of the Cheetham and Chivers, (2001) research, I have begun some research into the learning being achieved by a younger generation of professionals undertaking part-time postgraduate, post-experience qualification courses in my own University (Chivers, 2006). The research involves analysis of email and postal correspondence with professionals undertaking postgraduate study in the field of occupational risk management. Preliminary results indicate that the learning challenge for many of these professionals is to achieve or develop further the meta-competencies of the Cheetham and Chivers professional competence model (1998). These include creativity, problem definition and problem solving, analysis and synthesis, communication, understanding how best to achieve self development, etc.

In brief, this research in progress suggests that for many professionals there is still not sufficient challenge in their day-to-day work to require them to step up their learning levels so that learning at the meta-competence level is constantly taking place. Equally this research suggests that for most professionals informal learning at work is not sufficient to enable them to become competent at the highest levels to which a professional may aspire.

Conclusions and practical implications

The results of the Cheetham and Chivers, (2001) research attest to the wide variety of ways in which professionals acquire their competence. They suggest that much of the learning required to attain full professional competence actually takes place after the completion of formal training to enter the profession. Until recent years opportunities, and incentives, to undertake formal training once established on the career track have been limited. This conclusion highlights the critical importance of informal learning.

However, the results also suggest that different individuals find different kinds of experience formative, and this should caution against being too prescriptive in respect of 'best practice' learning methods. Indeed, these results show up the limitations of any single theoretical perspective in fully explaining the complexities of learning. They counter against too rigid an adherence to any particular theoretical approaches and the development of practices these may have generated.

Developers should start by explicitly recognising the key contribution of informal learning to the acquisition of full professional competence. Conversely, they should accept the limitations of formal programmes and acknowledge that much of the necessary learning will be beyond their control.

At the very least they should concentrate within formal programmes of study on imparting core knowledge (including widening and updating knowledge) and basic professional skills, and very importantly on developing a range of learning skills, especially those linked to informal learning.

In planning development methods beyond formal courses, developers should avoid too much reliance on a single approach. Mentoring, for example, may well work for one professional but not another. Developers should encourage trainees to recognise, seek out and fully explore as wide a range of potential learning opportunities as possible. Indeed they should encourage trainees to view all experiences as potential learning experiences. Developers should encourage and help professionals to become self-directed learners who are skilled at getting the best out of learning opportunities.

The research in progress on learning from higher education qualification courses suggests that formal learning may play an important role in the achievement of the powerful meta-competences necessary to perform at the highest professional levels (in any profession). However, this assumes that the core competences upon which any effective professional performance are based have already been imbued by earlier formal and informal learning. It does seem that developers should be looking to help professionals learn via a well thought out mix of formal and informal learning methods. The 'practicum' or practical work placement period which features in many undergraduate, postgraduate and other professional development courses is of course a recognition of this need.

Whether in initial professional development programmes, or in subsequent post-qualifying progression or CPD courses, any placement period should preferably be through real work situations involving specific projects. As wide a range of such placements as possible should be organised. Within these, the learning sought should be clearly identified (possibly through a learning contract), and a strong emphasis should be placed on the development of workplace competence.

Work placements require effective supervision to ensure time is not wasted through trainees not being offered suitable development opportunities. During placements regular feedback should be offered to trainees. Practice orientated development should also be sought through the use of project based learning methods, which include substantial elements of team working. Programmes should seek to achieve a smooth integration of theory and practice, both in terms of coordinating the timing (so

that trainees get a chance to practice something they have just learned about in theory) and in making suitable links before and after placements.

Trainees should be encouraged to give presentations and to articulate and defend their work. The effort to explain and justify professional thinking, decisions and practice is a major driver of professional competence development, especially at the meta-competence level.

When mentors are used within programmes, they should be carefully selected to ensure they have the necessary qualities and should be adequately trained. Where practicable mentors should be matched to trainees or, better still, selected by trainees themselves to ensure compatibility. Too often people are asked or encouraged to take on a mentoring role without adequate explanation of what is expected of them, let alone any mentor training.

There is much merit in organising 'reflective practice interviews' on a periodic basis where one professional can talk at length with another experienced professional (or human resource developer, or learning facilitator) about their learning achievements and challenges (Chivers, 2003). The potential power of peer mentoring and collaborative learning should not be overlooked. Trainees can learn a lot from each other and this should be encouraged.

In assessing practical competence, a variety of assessment methods should be used. These should be as close as possible to real professional practice. A number of real life examples are given by Cheetham and Chivers in their recent book on 'Professions, competence and informal learning' (2005, p 223).

Most professional development providers will already be doing many of these things. However, our experience suggests that few will be doing all of them. This is often because certain approaches have grown up by trial and error in particular professional development fields, but not in others

There is a great need for the sharing of good practice in regard to both informal and less formal professional learning practices across the professions. Inter-professional conferences, seminars and meetings are important in this respect. However, there is a need for cross-professional trainer training courses or seminars, in which professional development providers can be exposed to development methods used in other professions with which they may be unfamiliar.

Newly trained professionals should embark on their careers recognising that the greater part of their professional learning is still to come. They should not shy away from daunting or stretching tasks, in the knowledge that some of the best learning can come from these. Where possible, trainee professionals should collaborate with others in their learning, sharing what has been learned and comparing experiences. They should reflect regularly and systematically on recent experiences and what these have taught, seeking where possible to codify and articulate the lessons learned.

Individuals should also endeavour to:

- find out from their peers and/or more experienced colleagues the sorts of things that are particularly important for them to learn;
- ask more experienced colleagues about their tacit skills leading to mastery of the profession, and their personal tips for effective performance;
- make mental links between their informal learning experiences and any relevant theory or principles they have been taught through their formal learning or follow up reading;
- formulate their own theories of excellent professional performance, discussing these with peers and more experienced colleagues and testing them against future experience;
- discuss their learning processes, learning achievements and learning needs with relevant work colleagues;
- regularly and systematically take stock of what they have learned, and how it can be used to improve performance. Draw from all known reflective practice techniques to support their learning from performance.

All professionals should also accept that they have a professional obligation to facilitate the learning of other professionals (not just new professionals). They should be aware that their own practice and behaviour may, possibly unknown to them, be proving particularly formative to others. Indeed, other professionals and potential professionals may be observing them closely, even seeing them as a role model.

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