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- **Q6** The following reference The Nursing and Midwifery Order (2001) is given in the list, but not cited in text. Kindly check.

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Work based, lifelong learning through professional portfolios: Challenge or reward?

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Abstract

As the world of work changes, UK pharmacists are increasingly required to recognise and articulate lifelong learning. College of Pharmacy Practice (CPP) portfolios were made available to 25 pharmacists in a single Workforce Development Confederation area. The evaluation reported here formed one strand of a larger study exploring CPD activity in the NHS. This strand aimed to describe and consider the ways in which pharmacists used the CPP portfolio as a vehicle to articulate their acquisition and use of practice based knowledge. Data were obtained through semi-structured interviews with nine pharmacists before and after using the portfolios (n = 18 interviews) and were analysed using "framework technique". Key emergent themes were "socialised learning" and "learning amplification", in particular the findings emphasised the importance of recognising:

• the advantages/disadvantages of work based (socialised) learning approaches; and

the environment in which learning takes place and ensuring that learning can be "amplified" for the individual and the organisation.

Keywords: Continuing professional development, work based learning, professional portfolios, pharmacists

Introduction

Professional groups, the organisations in which they work and workforce planners are re-evaluating the way in which they think about learning at work. The drive towards a modernised NHS has identified continuing professional development (CPD) as being pivotal in the way knowledge is used effectively at work (Liaschenko & Fisher, 1999; Nuttley & Davies, 2001) and emphasises the promotion of lifelong learning amongst employees (Department of Health, 2001b). This has created a new set of challenges for pharmacists who have found that:

...it is difficult to keep up with all the latest knowledge...patients go to their doctor armed with information gleaned from the Internet and the consequences of error are increasingly great. Pharmacy, no less than medicine or nursing is a profession in which lack of care can result in patient harm... (Anderson, 2002: p. 392).

CPD for pharmacists, therefore, needs to be viewed against the backdrop of a modernisation agenda that requires NHS Trusts (UK terminology for an NHS hospital) to become effective learning organisations which foster lifelong learning (with positive outcomes for both staff and patients). In tandem with this, the government has also strengthened professional regulation to raise standards and protect the public, so requiring the establishment of systems of mandatory updating. In this context, the following need further elaboration:

- the development of CPD for pharmacists;
- the nature of CPD;
- professional portfolios and reflection for CPD; and
- the development of professional practice in learning organisations.

In 1981, the College of Pharmacy Practice (CPP) was established to promote professional and personal

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development through education, examination, practice and research. As part of the ongoing drive to ensure that professionals maintain current awareness, the Royal Pharmaceutical Society of Great Britain (RPSGB) recently advocated a mandatory requirement for all members to provide annual evidence of having undertaken at least 30 h of CPD. Initially, this requirement only applied to managers and tutors with responsibility for pre-registration pharmacy students undertaking supervised practice in the pharmacy setting. As registration with the RPSGB is a legal requirement for all in order to practice pharmacy, CPD is increasingly becoming a significant feature of pharmacy practice (College of Pharmacy Practice, 2001). To facilitate this a pro forma portfolio from the CPP can be purchased by members and used (in paper or electronic format) for self-appraisal, discussions with employers/potential employers and for college membership submissions.

The nature of CPD

CPD is a term that encompasses a variety of activities.
A useful definition to consider is that of Freidman et al.
(23) (2000) (cited by Lawton & Wimpenny, 2003)

...the systematic maintenance, improvement and broadening of knowledge and skills and the development of personal qualities necessary for the execution of professional and technical duties throughout the individual's working life.

Continuing education (CE) and continuing professional education (CPE) are frequently used synonymously to describe CPD (Lawton & Wimpenny, 2003). The authors imply that these two terms express a narrower view of CPD relating to mandatory requirements rather than the broader, lifelong learning view. This reflects Sadler-Smith, Allinson, and Hayes (2000) typology of CPD, which identifies the "survival role" necessitating the individual demonstrating ongoing competence, the "maintenance role" promoting ideas of lifelong learning and the "mobility role" facilitating the individual's employability.

Although motivation is a key factor in CPD participation (Furze & Pearcy, 1999), Cervero (1988) suggests that mandatory CPD has been designed particularly with "the laggards" in mind who would not otherwise undertake CPD. Carpenito (1991) in fact argues that mandatory schemes are at odds with the principles of lifelong learning and are no guarantee of a change in performance or competence. Clyde (1998: p. 14) when considering CPE for accountants states:

Somewhere along the way mandatory CPE for CPAs (accountants) ceased to be associated with learning.

CPE became "hours I get to keep my license"; learning became "what I do to survive".

Clyde goes on to suggest that mandatory requirements have resulted in compliance and an "inputs based" model rather than an "output evident" model.

However, a key aspect of mandatory CPD relates to public protection and the importance of health care professionals demonstrating that their practice is current. This raises issues about how competence and knowledge is maintained and monitored. Some authors (for example Clyde, 1998; Eustace, 2001; Waddell, 2001) suggest that profession-wide schemes cannot monitor competence at the level of specificity necessary for particular areas of practice and therefore, local systems may need to be developed, with the involvement of employers. Lawton and Wimpenny (2003) offer a useful framework for mapping the range of activities that may contribute to CPD. This framework allows for the personal/professional and the structured/unstructured aspects of CPD and depicts four CPD foci relating to:

- benchmarks and competency;
- broadening knowledge and expertise;
- self and others; and
- self development.

Professional portfolios for CPD and reflection

Portfolios have been used for many years, in different occupational settings, to help articulate the level of skill attainment and therefore, the potential of individuals to undertake particular tasks. Modern day use of the term "portfolio" is often linked to marketing, suggesting that there are benefits and Q3 rewards to be gained from the portfolio (Cannon, 1992 cited in Alsop, 1995a; Klenowski, 2002). Portfolios are ideally used as a dynamic record of evidence of CPD to demonstrate the continuing acquisition of skills, knowledge, attitudes, understanding and achievement. They can provide both a retrospective and prospective account and can serve as a reflection on the individual's current stage of activity and ongoing development (Neades, 2003). In particular, portfolios can make explicit the way in which an individual and their employer may gain mutual benefit from learning.

CPD should be a partnership between the individual and the organisation; its focus should be the delivery of high quality NHS services as well as meeting individual career aspirations and learning needs...by April 2000, the majority of health professionals staff should have a personal development plan NHS executive (1999).

This drive for "personal development plans" resulted in pharmacists from one region developing a

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support strategy for developing CPD in the workplace that includes an objective to encourage staff to compile and maintain their own portfolio of CPD activity (Brackley et al., 2003). However, it is widely recognised in the literature (Challis, 1999; Driscoll & Teh, 2001; Storey & Haigh, 2002) that portfolio development and use is still a new and evolving skill in most of the health care professions.

Nevertheless, there is increasing evidence that credible learning can take place at work (Casey, 1999; Boud & Garrick, 1999; Swallow, Chalmers, & Miller, 2004a,b), that learning derives from experience in the workplace (Piercy, 2004; Coates & Mellon, 2004) and that a portfolio is a vehicle through which that experience can be harnessed and articulated in a meaningful way (Gillson & Brooksbank, 2004). Alsop (1995b) identifies the following potential types of experience that can be used in this way:

- problem solving with patients, developing and practising new skills;
 - convening, attending or presenting a paper at a conference;
 - acting as a member of a committee;
- undertaking an audit, service review or a work based project;
- participating or collaborating in research;
- taking on a new role such as a mentor, fieldwork educator or steward; and
- being involved in service development.

The uniqueness of the individual's experience has tremendous potential for learning as they gain deeper understanding of the practice experience using a variety of strategies that which enable them to examine both the context and the experience of informal or non-formal learning and possibly most importantly, to value this learning.

Informal learning should no longer be regarded as an inferior form of learning whose main purpose is to act as the precursor of formal learning; it needs to be seen as fundamental, necessary and valuable in its own right (Coffield, 2000).

The translation of formal or informal learning into meaningful evidence in the portfolio depends to a large extent on the practitioner being able to identify their own learning outcomes, explicitly state the learning that has occurred for them in meeting (or attempting to meet) those learning outcomes and provide evidence (in the portfolio) to demonstrate that learning. This means that practitioners need to develop and use the skills of reflection in order to identify the learning that has taken place and to express that learning.

The term "reflective practice" is usually associated with the work of Schon (1983). Reflection is not always

an easy process either to understand or to undertake. Schon describes reflection as the means by which the complex epistemology of practice may be uncovered and emphasises the value of raising awareness of tacit or hidden knowledge. However, Raferty, Allock, and Lathlean (1996) and Smith (1998) highlight a major weakness of Schon's theory, which is that its primary focus is to gain meaning through introspection and that no reference is made to socio-political factors which may have a major impact on the context in which learning in practice takes place.

Fish and Coles (1998) suggest that individuals need to know how to observe, analyse and consider critically what has been seen, otherwise learning and refining will not occur. Guided observation (Yerxa, 1998) is one way to facilitate this process. This means that a briefing before an event helps to focus an individual's attention on selected aspects of the forthcoming experience. In this way, learning is not left to chance but attention is "guided" perhaps by a supervisor or mentor in order to maximise learning. According to Alsop (1995b), learning from experience and reflection can still be a process of discovery but strategies can help an individual to see meaning in what may otherwise be meaningless experiences.

The key according to Alsop, is for professionals to build time into the day for reflection and to regard time for reflection as an investment to be set aside purposefully in order to focus on events and to re-examine their significance. This can then lead to metacognition (learning about the learning) and might ultimately help to refine reasoning skills (Boud & Solomon, 2001). There is also much to be gained from reflecting with others (Barnett, 1994). Although we all attach our own meanings to events, reflective dialogue in a group situation can help an individual to move beyond that which is sometimes taken for granted. In order for learning to occur though, people need a belief in their ability to learn; otherwise, they may become passive participants in the constructs of others. Boud, Keogh, and Walker (1985) remind us that a belief in learning provides impetus for persevering with the process of reflecting on experience.

Another challenge presented by the use of portfolios is that of confidentiality and anonymity. Portfolios and their content are very personal as they reflect the needs, goals and experiences of the individual concerned and sharing this information with others can lead to anxiety. One way of resolving this would be to divide the portfolio into two parts: one to be personally accessed only by the professional who owns it and one to contain evidence of achievement of learning outcomes and personal development that the individual is happy to share with others (Hull & Redfern, 1996).

It is, therefore, important to note that there is no right or wrong way to construct a portfolio, only

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principles to share with others (Driscoll & Teh, 2001). It is a live record of knowledge and practice (Neades, 2003) and can be a valid means of assessing, recognising and recording CPD.

Nature of and development of professional practice

A number of authors (including Eraut, 1994; Meerabeau, 1995) make distinctions between different sorts of professional knowledge. These often revolve around the differences between knowledge gained from written textual material and knowledge gained from experience of performing within a role. Eraut (1994: p. 107) refers to this publicly available codified knowledge as "propositional". It is shared by the profession and is often the basis of educational courses. He differentiates this from "process knowledge" (although acknowledging that the two are interrelated) which encompasses "knowing how to conduct the various processes that contribute to professional action" and identifies five interdependent types of process:

- acquiring information;
- skilled behaviour;
- deliberative processes (e.g. planning and decision making);
- giving information; and
- meta-processes for directing and controlling one's own behaviour.

Whilst these processes begin prior to qualification, the complexity of professional practice requires that they be recognised as key components contributing to CPD. They need to be considered alongside models that describe the professional's career following qualification. Dreyfus and Dreyfus (1986) identified five stages culminating in the expert who demonstrates the following characteristics:

- no longer relies on rules, guidelines and maxims;
- intuitive grasp of situations based on deep tacit understanding;
- analytic approaches used only in novel situation or when problems occur; and
- vision of what is possible.

Notions of expertness can in turn be related to the concept of tacit (unspoken) knowledge (Polanyi, 1967), which resonates with Eraut's discussions concerning process knowledge. Meerabeau (1995) describes tacit knowledge as a hallmark of skilled practice and identifies how difficult it can be to formalise and articulate. This in turn relates to dual cognitive architecture, which Boreham (1994) uses to explain professional thinking where there is movement and interaction between explicit and implicit thinking. This analysis may be relevant when

considering current approaches to deconstructing and documenting experiential learning in order to demonstrate CPD.

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The ease or difficulty that practitioners find in demonstrating, reflecting or documenting their CPD may depend on their own perception of how they practice. It may also be influenced by the favoured approaches of the professional body and employing organisation. Some practitioners and/or other parties interested in their CPD (professional regulating bodies or employers) may be functioning within a technical rational (TR) model. Fish and Coles (1998) suggest that this model is reductionist, focusing on a delivery model of care, with an emphasis on training, based on a belief that practice derives from theory. There is a focus on competency-based practice, bound by protocols and procedures, which has been adopted as a mechanism for managing risk.

The alternative is a professional artistry (PA) model that is characterised by reflective and intuitive behaviours enabling practitioners to respond to the complexity of practice. Theory may be derived from practice and education rather than training. The existence of these two models may result in conflict and provide the practitioner with dilemmas concerning CPD priorities (Lawton & Wimpenny, 2003).

It is possible to identify a connection between the PA and TR models of professional practice and "single loop" and "double loop" learning identified by Argyris and Schon (1996). Single loop learning describes instrumental learning that brings about a change that leaves the underlying values and norms unaltered and could be aligned to the TR model. The TR model will reduce the possibility of deutero-learning when individuals and organisations recognise the potential of gaining insight into how they and their employing organisation learn. Double loop learning on the other hand brings about changes in the values of theory in use as well as in strategies and assumptions. The two may change concurrently or strategies and assumptions may alter as a result of a change in values. This can be aligned more to the PA model.

Much of the discussion so far has revolved around individual learning, but the relationship between organisational inquiry and individual learning cannot be overlooked. Argyris and Schon (1996) identify structures in organisations (such as communications channels, information systems and systems of incentives) which "enable" organisational inquiry. They emphasise the importance of questioning assumptions and behaviours for double loop learning to occur as well as the need for an "open" and "co-operative" atmosphere, thus demonstrating the relationship between theories in use, the behaviour of individual members and the organisation's learning system.

However, they also note that organisational learning does not necessarily result from an individual learning and in fact, the organisations may know less than their members do. The size and complexity of an organisation needs to be taken into account and the different layers and their relationships (levels of aggregation) may have a significant influence on whether single or double loop learning occurs. Clarke and Wilcockson (2001) connect double loop learning with expert thinking and those practitioners who pioneer new practices that move services and patient care forward.

Summary

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To conclude, it appears from this review that there are a number of internal and external contextual factors that are likely to impinge upon the commissioned CPD activity in the practice of pharmacists. The constantly changing health service agenda with its increasing emphasis on public protection and raising of standards has determined a need for professional regulation through mandatory recording of CPD activity. The exact type and amount of mandatory CPD seems to vary widely between the different professions. Thus, questions are raised about whether effective monitoring of both knowledge and competence can in fact be achieved. In addition, the strengths and limitations of portfolios as tools for recording CPD activity and evaluating or interpreting the relevance of the activity in meeting mandatory requirements are discussed.

It emerges that professionals' own perceptions of how they practice may influence the way in which they articulate and record their own CPD; these perceptions may in turn be influenced by the particular philosophical approach to learning favoured by the organisation in which they work and/or the professional body they are aligned to (Clarke et al., 2004). Distinctions are drawn between the PA model and its emphasis on reflection and intuition and the TR model focussing on the belief that practice is derived from theory.

The relationship between the learning of the individual and the learning systems that exist within the organisation is noted to be significant; in particular aspects of infrastructure such as communication channels, incentives and information systems are of particular importance. Finally, it is emphasised that the size and complexity of an organisation can directly influence the type of professional learning that occurs there and that organisational learning does not necessarily manifest as the sum of individuals' learning.

Methods

The research reported here was part of a larger study that sought to evaluate three models of CPD provision funded by Durham and Tees Valley Workforce Development Confederation (Clarke, Swallow, Harden, & Iles, 2003). This strand of the study aimed to:

- analyse the nature of the knowledge gained by pharmacists using the CPP portfolios;
- describe ways in which practitioners use this knowledge in creating their own knowledge base from which they practice, informing clinical decisions and practice/service development; and
- consider the acquisition and use of this knowledge in relation to the whole systems of knowledge use and practice by pharmacists.

Sample and data collection

About 25 pharmacists from two NHS Trusts had received a CPP portfolio and were contacted by e-mail and invited to take part in the evaluation. About 10 consented to participate and nine were subsequently interviewed on two occasions (prior to and 5 weeks after beginning to use the CPP portfolio). Written consent was obtained from all participants. The pre-CPD interviews (conducted by VS and SI) were semistructured, face-to-face and lasted between 30 and 90 min. Interviews were based on a topic guide addressing issues such as: previous experience of CPD activity, factors influencing involvement with CPD and the use of CPD and other sources of knowledge in relation to decision making at work. Follow-up telephone interviews lasting between 5 and 30 min were conducted 5 weeks later to reflect on the content of the first interview and explore the use of CPD activity. All interviews were tape recorded and transcribed verbatim. Interview transcripts were allocated a number (1-9) and designated either as the face-to-face interview or the telephone interview.

Data were analysed using the framework technique (Ritchie & Spencer, 1994; Swallow, Newton, & van Lottum, 2003). This method is systematic, thorough and grounded in the data but also flexible and enables easy retrieval of data. In addition, it allows both between and within case analysis and involves a process of familiarisation with the data, identification of themes, indexing, charting, mapping and interpretation.

Ethical considerations

The evaluation was conducted in accordance with ethical requirements for research and evaluation studies at Northumbria University and the NHS Trust. Anonymity of data sources was maintained. Research Ethics Committee approval was not required. All information obtained during the evaluation was used to inform an understanding of the process and was stored securely when not in use. All data will be erased after dissemination of the findings is complete.

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Findings

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This section looks at the views of participants concerning the experience of involvement with the CPP portfolios. Descriptive data are presented with the major emergent themes (infrastructure; career trajectory, attitudes to learning) being explored. These three themes and their emerging sub themes are outlined below and described in more detail in Table I.

Infrastructure

One of the most significant findings to emerge was the role of the department head in introducing CPE into the workplace. In this project, the pharmacy manager was a driving force behind the introduction and use of portfolios by the pharmacists.

The way in which Trust-based pharmacists evaluate and record the acquisition and use of knowledge appears to be determined to some extent by the infrastructure of the individual Trust and of the pharmacy profession. There was a disparity amongst respondents in their understanding of the concept of portfolios as part of individual CPD. Some participants

Table I. Emergent themes and sub-themes

	Table I. Emergent themes and sub-themes.
580	1 Trajectory
300	1.1 Educational background
	1.2 Career pathway
	1.3 Evidence of competence
	1.4 Maintaining
	1.5 Deskilling/reskilling
585	1.6 Temporality
505	2 Infrastructure
	2.1 Facilitation/nurturing
	2.1.1 Mentorship
	2.2 Time
	2.2.1 Personal
590	2.2.2 Organisational
	2.3 Professional
	2.3.1 Role issues
	2.4 Interprofessional
	2.5 Impact
	2.5.1 Personal
595	2.5.2 Organisational
	3 Attitudes to learning
	3.1 Motivation
	3.1.1 Personal synthesis/mentorship
	3.1.2 Carrot and stick
	3.2 Valuing
600	3.3 Profit and loss
	3.4 Knowledge creation
	3.4.1 Individual
	3.4.2 Organisational
	3.5 Incidental/ad hoc learning
	3.6 Learning strategies
605	3.6.1 PBL
	3.6.2 Reflection
	3.6.3 Peer review
	3.6.4 Personal styles

perceived mandatory requirements for professional updating, evidenced by certificates of attendance, as being different from what was required in the portfolio:

if anyone were to come to me and say "show me what you have been doing" then all I would have was the evidence ...but I would not have gone through the identification that valued this (P2a).

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The few respondents who had previously used a portfolio included: those who had qualified within the last few years; those with responsibility for creating a Trust-based educational infrastructure for pharmacists; and those with responsibility for developing a climate which is sufficiently well developed to allow appropriate training for pre-registration pharmacists; and for their direct day-to-day supervision. The remaining respondents described a wide and varied range of involvement with CPE and CPD activity. This included attending lectures and study days relating to practice and undertaking post-graduate diploma courses and masters programmes. This seemed to vary according to where in the Trust they were based.

However, none of these latter respondents had previously been required to formally evaluate or record professional development. A recent Trust merger meant that some respondents were still uncertain about how the structure of the reconfigured Trust would affect roles and responsibilities. They appeared to feel that this may have an effect on opportunities to undertake CPD and might influence both motivation and direction of future CPD activity: respondents described a variety of factors influencing access to CPD opportunities including:

- Workload: "We don't get any time to do anything...we need protected time at work to do it (CPD), somebody allocated at work who can coordinate CPD... if there are courses available we have not got enough staff so we can't go" (P3a).
- Changing roles: "the role of the pharmacist has developed quite rapidly in ten years...a lot more clinical now ...obviously brings with it greater training needs" (P5a).
- IT resources: "If we had access to a computer at work where we could keep an ongoing record of our CPD that would help" (P5a).

Whilst, many participants acknowledged that they were prepared to invest personal time in CPD, they also thought that a proportion of work time could be used for CPD activity:

...so I think they (the organisation) need to support you but you have to, as a professional, recognise that some things have to be done in your own time (P6a).

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One respondent described the strategy being developed to maximise investment in CPD for staff across the Trust and create a supportive infrastructure:

...it is necessary to give pharmacists something structured so that they can document CPD...some sort of reward at the end of it... there are several options but the CPP portfolio does this best, acts as a focus because it is fairly structured and they can build evidence up to become full members of the CPP (P1a).

During the time between the face-to-face interviews and the telephone interviews, various strategies were described including:

...we have started up another scheme within the hospital where we arrange pharmacy department teaching sessions and ...we are trying to get them approved so they are accepted as part of CPD (P3b).

Well we have a pilot... one was just an introduction to CPD and portfolios, how we should be recording CPD including over the website, it was very well attended, we had about eight or nine pharmacists now which was good. And the second one I had organised for two speakers to ... come to that meeting and that one went very well, and hopefully the pharmacists have been recording it all in their portfolios (P5b).

Some participants thought, it would be helpful if a selected colleague had a proportion of their time dedicated to CPD facilitation:

we need someone to control the number of people and chivvy you up and say "well what you been doing this month then".... Like an educational person in the department (P3a).

It was also felt that appraisal and personal development planning could be usefully linked with CPD planning and achievement.

Participants with a range of career profiles confirmed that the role of the pharmacist had changed and developed new dimensions over recent years and is continuing to evolve:

... my job has changed...I've been in pharmacy for 30 years now so been through a lot of training schemes... we weren't involved as much clinically when we first started...then I went into the business side (P3a).

All respondents referred to an increasing clinical role and a number of participants described new initiatives they were involved with. There was a level of confusion about how information recorded in portfolio records would inform mandatory requirements and an anxiety that in fact dual recording would be required, in which case more effort was likely to be invested in ensuring mandatory requirements were

met. The geography of the Trust would always make attendance at any shared CPD sessions difficult given distances and travelling times, particularly as staff cover needed to be maintained in the respective pharmacies.

Summary

It appears that the infrastructure within which people work can be both a catalyst and a barrier to CPD activity. The manager was a major driving force that provided the impetus for staff to continue their professional development while also allowing the latitude and flexibility to identify and manage their own learning needs.

Career trajectory

Most acknowledged the importance of learning continuously at work and using knowledge to inform decision making regardless of their career stage. The need to maintain a high level of skill and show evidence of CPD was highlighted and all respondents had developed their own personalised knowledge management strategies. However, for some this involved an *ad hoc* process of memorising and/or recording:

...we continuously do things in the hospital (CPD) but you're not in the mood to go and actually write them down at the time or at the end of the week...you end up trying to remember and fill everything in at the end (P6a).

Respondents tended to describe retaining evidence of attendance, particularly in meeting mandatory requirements rather than evidence of competence:

Any sort of courses that I have been on they have gone there (into portfolio) (P6a).

It emerged that there was a potential to become deskilled if strategies were not adopted to try to retain these skills. Additionally given their varied career pathways, participants described aspects of their evolving role that required them to develop new skills:

...pharmacy is changing...pharmacists should be moving out of management roles although they'll still be managing clinical services, ...the requirements of simply being associated with clinical at the moment will be more and more, that's the way I see it anyway. So that's what I'm trying to do now...my CPD, I see it as being geared towards clinical performance (P3a).

There was a sense that respondents would appreciate an incentive for maintaining their CPD portfolio. One respondent recounted how a previous employer (non-NHS) had a scheme whereby:

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...if you achieved your 30 h CPD over the year and you had written evidence that you had achieved it you got 15 h lieu time back (P7a).

Participants identified a range of activities they perceived as CPD including:

- postgraduate and masters study;
- attendance at organised sessions which might have a pharmacy focus or which might be more generic perhaps relating to a clinical condition; and
- learning which was achieved through presenting information at in-service sessions, etc. which resulted from reflection and reading.

Length of time since qualification appeared to be an influential factor in respondents' perception of both CPD and portfolio development. Those who qualified recently were generally comfortable with the concept of reflective practice and had experience of maintaining a portfolio, as described by the following respondent:

...basically so that I have got my own record of what I am actually doing to develop myself and develop the profession. ...I am improving my skills and knowledge and hopefully will be giving a better service (P7a).

In contrast, while appreciating the value of CPD and portfolio development, being unfamiliar with portfolios left some respondents feeling that they would need some form of mentorship or training session to help them acquire the confidence and skills needed to maintain the portfolio:

...I think part of CPD is going to meetings, which we do but again we don't sort of write it down...need to know someone is monitoring and assessing it (portfolio)? (P6a).

During the follow up interviews, it emerged that:

...we have had two of the (planned) CPD meetings, the first was an introduction to CPD and portfolios and how we should be recording it and also about recording it over the website, it was very well attended, the second about adverse drug reactions that went very well (P5b).

Some pharmacists with many years experience had mixed feelings about CPD recording and whilst accepting that there was a need to record attendance/hours for mandatory purposes, they were ambivalent about portfolio completion:

(of CPD sessions), I have got the certificates, got all the proof but I will be perfectly frank I have not put in any particular (information) on the sheets at all (P2a).

Although, few respondents had used their portfolio for recording and evaluating their CPD in the time since the face-to-face interviews, discussion in the follow up interviews suggested that those who had attended the CPD sessions were beginning to reflect upon the way they could in future use their portfolio to: redefine their personal goals; foster skills to "learn about their learning" and plan for ongoing career developments.

Summary

Regardless of the respondents' stage in their career, the majority emphasised the importance of learning continuously at work and of using that knowledge to inform decision making. All had developed their own knowledge management strategies although for the majority this was an ad hoc process that lacked structure and focus and was carried out in personal time. However, length of time since qualification appeared to determine the way they demonstrated that learning and whether they adopted a formal means of articulating their learning or not. Those who qualified most recently were generally more comfortable with the concept of reflective practice. During the post CPD interviews those who had attended the related CPD sessions were beginning to foster the skill to "learn about their learning" and use this to help in the ongoing development of their careers.

Attitudes to learning

One of the prevailing attitudes within this theme related to motivation. There were those who found the concept of a portfolio to be highly motivational, regarding it as a tool which could enable staff to uncover their own store of knowledge, reflect on this, gain a renewed understanding of where it fitted into the practice setting and use it to help them exercise judgement in the workplace.

Paradoxically, however, there was also a view that this same process could be de-motivating and that a "carrot and stick" approach might be being adopted. As stated previously, there was a declared intention to motivate staff by providing a "reward" for those who completed the CPP portfolio. However, there was also a concern amongst some staff that there might be a threatening element of "big brother watching".

This threat was evident in several responses, such as the following:

...to reflect on your practice and be honest in your reflection takes a lot of courage, to say things like "well I'm not actually very good at that", which sounds unprofessional... the issues about a portfolio and the membership being paid for by our manager...people may feel uncomfortable about a manager seeing it and it might stifle how honest they are in reflection... (P4a).

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When asked about preferred personal learning styles, respondents' views were mixed, ranging from a strong preference for problem-based learning:

...don't want them (CPD meetings) to be a simple didactic process but to be shared learning... the individual pharmacists to lead ... but for the others to contribute... do things like case studies/discussing/trying to build some problembased learning into the CPD so that it is meaningful for the pharmacists that we can bring real life problems and try and solve them... (P1a).

to an interest in peer review and *ad hoc*/incidental learning.

Some respondents had previously regarded a portfolio as a mechanistic tool, which was simply used for recording attendance at teaching sessions/ meetings. This attitude changed after attending the first Trust based CPD session at which participants received concrete examples of how a portfolio can become a dynamic tool for analysing learning in context:

I found the portfolio very useful and I do think it is something very worth continuing with and it is something that is going to be mandatory very soon so it is better to start doing it sooner rather than later (P9b).

Many participants recognised the potential value of the portfolio as a means of planning, organising and facilitating their CPD:

I think they (portfolios) are good for guiding you (P2a).

They valued it as a tool to record mandatory hours and intended to use it to gain CPC membership. However, by some it was also perceived to be an additional task that would consume more precious time, to demonstrate what they were already doing:

I mean, to some people having CPD, is, at first when it was mentioned ... our feeling is within the hospital service is "we're doing it anyway". It's going to be imposed on us that you've got to do it to retain your registration. So it's sort of just something else we've got to do to enable us to practice (P3a).

Summary

A prevailing attitude in this theme related to motivation: some respondents found the CPD opportunities to be highly motivational; others, however, appeared to feel threatened by the opportunities and appeared rather sceptical of the organisational rationale behind them. The preferred personal learning styles of respondents appeared to vary from a strong preference for "problem-based learning" to an

interest in peer review and more informal, incidental methods of learning.

Discussion and recommendations

The discussion concerns two main areas: the nature of learning involved in practice based initiatives such as those commissioned by the WDC and the environment in which this learning takes place. Two concepts of "socialised learning" and "learning amplification" are suggested as a way of understanding these issues and of explaining the outcomes of different models of learning. The process of learning, as experienced by the participants in this study, is represented schematically in Figure 1.

Professional learning in practice—"socialised learning"

Respondents reported finding the use of portfolios as beneficial, in some cases there is evidence of respondents being enabled to move beyond the adaptive, single loop learning toward more generative, double loop learning (Clarke & Wilcockson, 2001). According to Beckett (1999), life at work is typically experienced as an integration of thinking, feeling and doing, with problems and issues filling the day, this goes on typically in a social setting with a peer group of other workers nearby. It is the appreciation of this informal process of learning that is beginning to be appreciated as being as valuable a form of learning as more conventional formal methods (Coffield, 2000). This appreciation is paving the way for new ways of delivering and engaging with learning, such as the practice based forms of learning associated with portfolio development.

These new ways of engaging with learning are resulting, therefore, in a redefinition of the environment of learning. Within the context of typical working life, organic learning brings an awareness of what is learned in the doing of the work. By building some problem based learning into the CPD so that it is meaningful for the practitioners, introducing real life problems and trying to solve them and playing with previously untried possibilities, there is evidence of creative double loop learning occurring, with staff being helped to bring to consciousness what knowledge they have and are continuing to learn. For example, the findings suggest that although few respondents in this strand of the study had completed their portfolios in much detail between the first and second interviews, several respondents indicated that since attending the Trust based portfolio session(s) they were starting to interpret experiences they had encountered in a more meaningful way and were thinking carefully about documenting their "new learning".

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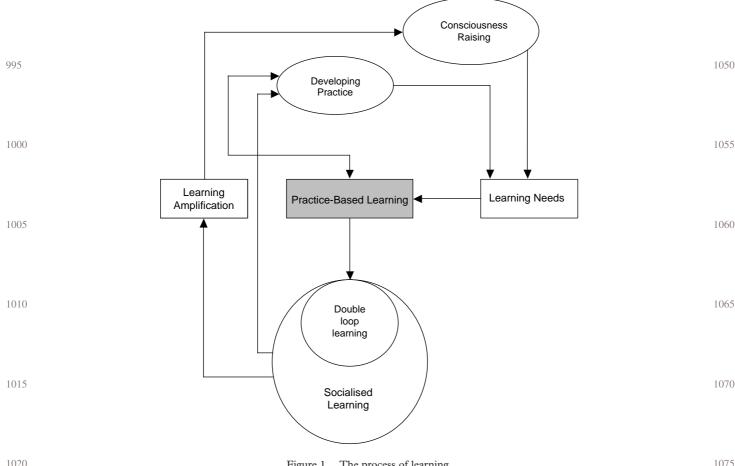


Figure 1. The process of learning.

This recognition of the dynamic process of learning within the individual's immediate context was described by Vygotsky (1978) who claimed that the context in which an individual lives or works (zone of proximal development) is the arena that provides challenges. According to Vygotzky, the individual's consciousness is the product of learning, as the previously internalised learning becomes a set of tools for new thinking and learning. In this way, the process of learning produces further learning capability. Activities such as the portfolio can be seen as a vehicle to facilitate this consciousness raising (although it is probably essential that pharmacists are reassured that the portfolio and its contents are confidential and they only need to show their manager and the CPP evidence of having completed 30 h annual CPD).

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This learning in context or "in situ" forms a key aspect of work based learning and in the context of this study at least can be referred to as "socialised learning". Whilst, socialised learning may have a more rapid payback into practice and its application in practice may be more apparent, it remains to be seen whether the assumptions of a practice area and professional group are de facto carried into socialised learning and remain unchallenged. If this is so, socialised work-based learning may prove to be a more

difficult way to achieve double loop learning albeit more effective at providing single loop learning. What socialised learning may achieve effectively, however, is a blurring of prepositional knowledge (the basis of educational courses) with process knowledge (that contributes to professional action) (Eraut, 1994), in turn creating the potential of the expert or tacit knowledge described by Meerabeau (1995) to be codified—that is given a language with which to express itself outside the individual who owns that tacit knowledge.

Arguably, "tacitness" (or the inability to articulate), it is not a hallmark of expertise but simply the inability to conceptualise and to allow knowledge to be codified either verbally or in writing, in which case such forms of learning enable hidden bodies of knowledge to surface and make them accessible to others (Eraut, 1994; Easen & Wilcockson, 1996). Furthermore, tacit knowledge is characterised by an inability to link an idea or action to the source of that knowledge, the disadvantage being that there are gaps in the ability to audit the decision making of practitioners. Socialised learning should aim to create the space for double loop learning so that assumptions in practice can be challenged and should allow tacit knowledge to be codified.

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One cautionary note about practice based learning though, is the need to ensure opportunity for learning as a social event; that is, through human interaction. For example, several pharmacy respondents identified the need for a mentor to be available to support and guide their portfolio development. This could be either an informal or a formal arrangement depending on local circumstances but is entirely consistent with recommendations in the published literature (Yerxa, 1110 **Q3** 1995; Alsop, 1995a). In addition, the nature and quality of the mentoring relationship is fundamental to the mentoring process. When this is based on partnership and mutual respect, the outcome is effective clinical learning (Earnshaw, 1995; Spouse, 1996). Neary (2000) suggests that an effective mentor will support the professional as: a teacher and assessor, an advocate, a friend and a facilitator.

> A second area of recommendation concerns support for innovative learning methods that increase access to learning for staff and that integrate learning and practice, such as were sought with the portfolios of professional practice. Specifically, there is a need to recognise the distinctiveness of such approaches from conventional learning (that of an individual in a setting remote from their place of practice). This socialised learning brings the advantage of integration and the opportunity to surface and codify tacit practice knowledge, but also a note of caution in that fundamental assumptions of the practice area may be less likely to be challenged and so double loop learning less likely to be achieved.

The context of CPD learning endeavour— "learning amplification"

There were a number of ways in which learning could be maximised for the individual and amplified through the organisation. The development of work based learning required staff to adjust their perception of education provision, away from the conventional classroom based learning experiences to a range of alternative methods. In doing so, it is necessary for staff to be orientated to the outcomes of study rather than the process by which it is achieved. This orientation to output does require some continual work to reinforce the purpose. For example, some pharmacy staff approached the implementation of professional portfolios as a mechanism for professional accountability rather than a process of learning (particularly those longer established staff who has less prior experience of portfolio completion). Inevitably, the assumed purpose of the former interpretation is to maintain professional registration whilst of the latter, it is to expand the individual's knowledge base. It is this tension between the mandatory nature of maintaining registration and concepts of life-long learning that Carpenito (1991) and Clyde (1998) have expressed concern about. It

may be very pertinent for the Workforce Development Confederation and other commissioners to consider the spectrum of their provision in relation to Lawton and Wimpenny's (2003) quadrants that were discussed earlier in the report (benchmarks and competency; broadening knowledge and expertise; self and others; self-development) as they all have a role to play in CPD provision.

Deployment of these quadrants to frame the learning outcomes of activities may be beneficial in emphasising the intended focus and outcome of the learning, such that portfolios as a means of maintaining registration would fall into the quadrant of benchmarks and competency, whilst, portfolios as a process of learning would fall more into the quadrants of broadening knowledge and expertise and selfdevelopment. A programme of activity from the WDC or any other commissioner could ensure spread across all quadrants.

Participants spoke of the importance of managerial support for the implementation of learning opportunities (such as promoting the portfolios) and for allowing staff flexible access to learning. Specifically, this concerned the need for:

- workload negotiation, staff citing lack of time as a significant barrier to learning;
- responsiveness to the changing role of staff (Anderson, 2002), such that the implication for ongoing learning needs to be met was addressed;
- negotiation of access to learning resources such as IT.

The need for this to be mutually agreed between the individual and the manager was noted, as was the contribution and commitment of the individual personally, perhaps in a way that is similar to Alsop (1995b) call for learning through reflection to be embedded into day-to-day activity. There is a critical need too to link learning activity with appraisal systems and personal development plans, as found by Cook, Forster, and Clarke (2003) in relation to the learning of non-professionally qualified staff. The infrastructure was also highlighted as important to the ability to access and utilise learning, as was the need to engage with learning with an open enquiring mind despite any personal challenge and discomfort. This is a very different approach to influencing organisations through an individual's learning to that found in conventional educational processes, in which the agents of change (the learners) are temporary to an environment. These "tourists for change" are placed in a very vulnerable position, lacking any of the social infrastructure of support to allow them to challenge in a meaningful way and the mentor relationship could be characterised as that of a tour operator displaying the remarkable sights of the clinical area but expecting

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and receiving no long term commitment from the

Finally, the staff spoke of their learning in relation to their career trajectory, combining the need for it to be relevant to their work demands with the need to recognise and build on the style and level of prior learning. Some staff also spoke of working as a team and that meant that each individual would share their learning with others in the team, thus maximising learning for the whole team and transferring the knowledge through the immediate team workers. On the other hand, a few staff reported on their history of educational experiences, citing occasions when their learning wishes had not been supported by the organisation. This ability to feed learning back to a team of co-workers means that this study would suggest that in addition to Sadler-Smith et al. (2000) CPD typology of survival, maintenance and mobility roles, there is also a role for CPD in promoting the learning culture of an organisation (the deuterolearning that Argyris and Schon (1996) refer to).

Inevitably, staff looked for very direct payback of education into their own practice and were not solely driven by the organisation's identification of workforce need. This personal motivation to learning is essential for it to succeed and is where sensitive deployment of marrying personal and organisational needs can be very fruitful (indeed one staff member spoke of how they now "love" their job as a result of educational activity). A third area of recommendation therefore concerns the importance of locating educational opportunities in a managerial and cultural context that will allow the learning to be maximised and used to best effect.

Conclusion

Clearly, the CPP portfolios have the potential to meet the government agenda for the place of education in the workplace and in the development of healthcare (Department of Health, 2000; 2001a,b). This study indicates that education commissioners will be able to gain best benefit by being attentive to:

- The strengths and disadvantages of work based (socialised) learning approaches.
- The environment in which that learning takes place, ensuring that learning can be amplified for the individual and the organisation.

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