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Portfolios for learning, assessment and professional development in higher education

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This article focuses on the use of portfolios for learning and professional development in Higher Education (HE). Recent research findings related to learning and assessment help to contextualize the study. The use of portfolios for summative assessment and development of teaching and reflective practice dominates the literature. What is lacking is research that provides insights into how a portfolio for learning can be used in HE to develop understanding into one's own learning, assessment and professional practices. The action research findings related to portfolio use for learning purposes identified in the three case studies include: the importance of establishing the purpose of the portfolio; the impact of portfolio use on the approach to learning, to teaching and to professional development; the changes to professional practice brought about as a result of the learning; and the need to consider issues related to ethics and confidentiality.

Portfolio use in HE

Portfolios are found in all phases of education and professional development for learning, assessment, promotion and appraisal. Definitions of portfolios emphasize the collection of work which includes a reflective commentary (Arter & Spandel, 1992; Forster & Masters, 1996; Baume, 2001). They are used particularly for the purposes of developing teaching skills and reflective practice from pre-service teaching through to teaching at postgraduate level (Hutchings, 1998; Lyons, 1998; Lyons *et al.*, 2002).

Often in HE the portfolio is used to demonstrate evidence of achievements for summative purposes (Baume & Yorke, 2002; Brown, 2003; Nystrand *et al.*, 1993). Research that has been conducted on the use of portfolios has focused on issues related to summative assessment and reliability (Nystrand *et al.*, 1993; Baume &

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Yorke, 2002). There has been very little research conducted on the use of portfolios for formative and learning purposes at postgraduate level (Hutchings, 1998).

The purposes of portfolio use and key assessment concepts that need to be considered are outlined in Figure 1. This framework (Figure 1) also illustrates how important theoretical constructs (such as co-constructivist and dialogic learning) underpin the phases of portfolio development and their link with the formative and summative purposes of assessment. It was the relationship between the learning and teaching concepts and the development of the learning portfolio that we sought to explore in our action research.

In England the Quality Assurance Agency has provided HE with a code of practice and standards frameworks that emphasize teaching, learning and assessment. An outcome of the self-review and auditing process has been a rethinking of assessment and teaching practices. To illustrate, Yorke (2002) urges colleagues in HE not to neglect the importance of formative assessment, claiming:

> … formative assessment … is at risk not only from the requirements of curricular structures, but also from rising student/staff ratios and the need for staff to be 'research active' and entrepreneurial. Yet it is at the heart of the educational process. (Yorke, 2002, p. 13)

There has also been a call for the use of portfolios in HE particularly for assessment that is designed to be practice-oriented (Brown, 2003). Brown (2003, p. 7) argues for 'a range of small tasks throughout the learning programme to ensure that participants are actively engaged in learning activities that can culminate in the final assessment'.

However, to use portfolios to support professional development, learning and teaching requires tutors to understand some key assessment concepts such as the link between learning objectives and success criteria, the use of rich questioning and the role of feedback in a pedagogy focused on learning, self- and peer-assessment
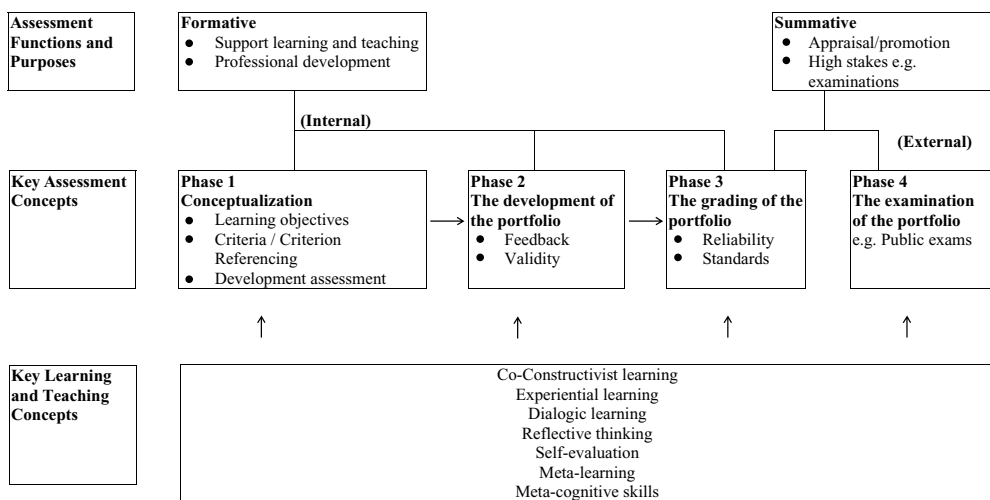

Figure 1.   A framework for using portfolios for learning and assessment

(Klenowski, 2002a; Black & Wiliam, 2003). The questions and methods used for assessment purposes too often are not discussed with other tutors in the same department or faculty in HE and assignment tasks are not critically reviewed in relation to what they actually assess. These related issues inspired the action research on which this current paper is based.

Background

In the UK the Higher Education Funding Council for England (HEFCE) has implemented from the mid-1990s several funding initiatives in the area of teaching and learning (see HEFCE, 2001a,b, 2002). These include the Fund for the Development of Teaching and Learning (FDTL), and the Teaching Quality Enhancement Fund (TQEF). The latter provided the funds for an 'Excellence in Teaching Award' which enabled the three of us as course tutors to meet on a regular basis to develop a co-constructivist approach to our own learning about pedagogy and assessment. In this approach there is

> … a shift from a stress on individual responsibility for learning to a more collaborative view, allowing learners to identify issues in their organisation and society which affect their learning and well-being and then to act to bring about changes. Learning, in this model, involves reflective processes, critical investigation, analysis, interpretation and reorganisation of knowledge. Personal meanings and constructs are understood in their unique social and political context. (Askew & Lodge, 2000, p. 11)

The co-constructivist approach adopted is reflected in the three case studies that mirror the method of teaching, learning and assessment used in our classroom practice at postgraduate level. The action research was part of our own programme of reflective practice to help us improve both our teaching and assessment practices and to develop our understandings of the complexities of the course-participants' learning. The case studies are multi-layered in that they represent three groups of course-participants learning about the theory and practice of learning and assessment. As course-participants they are required to reflect on their learning and assessment practices as well as the processes of learning and assessment as part of advanced diploma or masters level courses. As reflective practitioners we also analyse our own pedagogy.

Methodology

The decision to conduct case studies, where qualitative inquiry dominated, was influenced by the intent to examine processes and values associated with course-participants' experiences of using learning portfolios and our own analyses of the pedagogy and learning involved. Case-study research was selected because it recognizes the importance of context, focuses on the elucidation of values, and enables in-depth analysis at the heart of process. This type of research design also allowed for flexibility which was needed to take account of the dynamics of the processes involved.

The case studies illustrate the integration of ideas around learning and assessment in three particular classroom contexts. The three sites shared the following common characteristics: course tutors using learning portfolios to support course-participants' learning; course-participants being provided with opportunities to reflect on their learning and/or assessment experiences; and sites where these approaches were being piloted.

Multiple data sources were selected: participant observation, documents (such as learning portfolios, reflective statements and self-assessments), course evaluations, questionnaires and interviews. Course-participants were the main informants through semi-structured interviews and questionnaires (mid and end of course). Course tutors made observations of learning portfolio processes in action, classroom pedagogic practices and course-participants' group work. The examination and analysis of learning portfolios, reflective statements, self-assessments, course evaluations and course tutors' records were considered important to corroborate and augment the evidence from other sources.

In the processes of data collection, analysis and reporting, systematic cross-checks were made. The validity of the case studies was established by triangulation of data through the use of multiple sources of evidence, use of multiple methods of data collection and use of multiple perspectives on the learning portfolio processes. A focus on common issues and use of consistent procedures in data collection for the three sites occurred.

Data analysis took place within the individual cases initially and then across the three when analysis of each case was completed. This paper synthesizes the cases and some emergent themes.

The case studies

We integrated a range of pedagogical styles to deal with the multi-layered nature of our activities. Current research (Askew & Lodge, 2000; Carnell & Lodge, 2002; Klenowski, 2002a; Black & Wiliam, 2003) was incorporated into course materials to inform the course participants about the subject of learning and assessment, key concepts and theories. Group work was also used to introduce the expected requirements (including student self-assessment) and standards of the course (Elwood & Klenowski, 2002).

Different nomenclature is used in each case (the professional development record or PDR, learning portfolio and learning record respectively). This reflects their different emphases. However, when writing about the themes and issues we use the term 'learning portfolio' (Klenowski, 2002b) to refer to all three cases.

Case study 1 (CS1) is situated in an Advanced Diploma, the other two in Masters courses (see below for a brief description of these three courses). Case 1 differs in the pattern of student attendance. It began with a two-day face-to-face session, with distance-learning tasks followed by a third contact day. It also focused on the development of learning in the course-participant's own work context and the PDR was designed to meet summative assessment purposes.

Cases studies 2 and 3 (CS2 and CS3) describe modules taught over one term in ten sessions.

In the case two the portfolio was developed to raise awareness of process as well as substantive concepts related to assessment for learning, such as formative assessment, peer assessment, self-assessment and feedback. It was designed to support learning in a formative way toward assignments that were assessed summatively.

In case three the learning record formed the basis for noticing and analysing learning at the core of a module on professional development. The focus was on the fundamental purpose and content of course-participants' learning.

Case study 1 (CS1): Professional Development Records (PDRs)

Context

The Advanced Diploma 'Managing Healthy Schools Programmes' course accredited the work of Local Healthy Schools Coordinators (LHSCs), and was developed in conjunction with the National Healthy School Standard team. Thirty LHSCs participated in the course in autumn 2002 and spring 2003. These course-participants (30) worked toward compiling a PDR for summative assessment. The module aimed to develop innovative approaches to facilitate professional learning in Higher Education. The rationale and underpinning beliefs are that: professional learning is most usefully focused on professionals' practice; professional expertise and knowledge are effectively generated by individual and collaborative practitioner research; and that dialogue about learning is an essential component in generating expertise and knowledge (Shulman, 1992; Wolf *et al.*, 1995; Lyons, 1998).

The module involved distance learning and an essential feature was inter-sessional learning tasks which focused on peer learning, dialogue and feedback.

The PDR required course-participants to:

- identify a focus relating to professional practice;
- collect evidence of competencies and skills;
- reflect on professional and personal learning;
- incorporate a relevant literature review; and
- identify issues for professional practice.

Learning and the PDR

Course-participants' questionnaire responses about their use of the PDR for learning were analysed and triangulated with interview and observation data collected throughout the course. This analysis revealed that the course participants used the PDR to generate and reflect on their learning at three levels. First there was 'meta-learning' or learning about learning, second, their professional learning was enhanced and third, there was learning about portfolio development. For the tutor of this course, there was also learning about the use of PDRs.

The importance of 'meta-learning', 'standing back from the content of the learning and evaluating the processes involved' (Carnell & Lodge, 2002, p. 18) or making sense of one's own learning was highlighted in this course. PDR development reflects an approach to professional learning that encourages course-participants to take responsibility for their learning. The course-participant actively constructs understanding through reflection and dialogue with other course-participants and the tutor.

Many LHSCs support teachers in schools to develop a portfolio for accreditation as Personal Social and Health Education (PSHE) teachers. Developing their own PDR was an opportunity to reflect on the benefits and issues relating to portfolio use. To illustrate:

> It has supported my work extensively. I undertook my particular project with a view to disseminating it to other schools. It has given me an insight into the pressures that teachers will be under when I deliver the PSHE CPD so I intend building in as much support as possible. (CS1: Respondent 4)

Typical answers indicated the process of PDR development had facilitated changes to professional practice:

> I really enjoyed the project and have continued with it beyond the end of the course because various ideas were generated during the period of study. (CS1: Respondent 10)

Throughout the development of this module dialogue between the three tutors helped the tutor of CS1 to reflect on her own professional learning and identify the issues both for development of the module, and the assessment of PDRs.

Case Study 2 (CS2): Learning portfolios

Context

The learning portfolio was used in a core module, 'Assessment for Learning', for the MA in Evaluation and Assessment, in the autumn term of 2002. The central aim of this module is that course-participants learn about assessment for learning through a range of methods such as self-assessment, peer assessment and learning portfolios.

Other aims include the development of: a critical understanding of some main issues in formative assessment; extensive critical reading in the area of assessment; and competence in evaluating and selecting from a range of assessment approaches, depending on purpose and context.

The learning portfolio was introduced to the course-participants (17) as a method of gaining greater control over their learning with greater participation in learning activities and productive use of time. Specifically the portfolio aimed to focus learning in developing: analytical and critical thinking skills, and understanding of concepts, theories and issues related to assessment for learning. Suggestions about what to include were offered: the learning tasks, thoughts about own learning and/or assessments. At Masters level it is important that course-participants develop a critical capacity in their reading and writing, so they were encouraged to include critical anal-

yses of readings, plans, working drafts of assignments, evaluations of own learning, reflection on the readings and critical reviews.

Each week there were specific learning tasks some of which required dialogue, answering critical questions that acted as a guide to their reading and writing. To shift the focus to processes of learning, as well as maintaining a focus on the substance of their learning, course-participants were also encouraged to include reflections.

These experiences of developing a learning portfolio were analysed. Data was collected by questionnaires that sought course-participants' views on their learning and assessments; and self-assessments of their learning during and upon completion of the module. Evaluations of the assessment and pedagogic practices experienced were completed and interviews conducted with 16 participants.

Learning and the learning portfolio

Reflection was key with opportunities provided for course participants to develop their reflective capacity (Arter & Spandel, 1992; Klenowski, 2002a). Participants' reflective thinking comprised thoughts on issues written up during, in between or at the end of each session. These included thoughts about their own classroom practice of assessment. Such reflective practice (Schon, 1983, 1987; Elliott, 1993a, 1993b) and reflexivity (Moore, 2004) was encouraged.

Portfolios were used to record ideas, including the premises for arguments, beliefs and positions taken on issues, and to organize the structure and content of written assignments. The responses to questions designed to help course-participants read critically were included, but the notes on readings and personal thoughts recorded during the sessions were the most helpful.

> The portfolio put order into chaos. It prompted me to structure my learning and build a book that enabled me to access all readings, thoughts, pre-session preparation and reviews easily. When it came to writing an assignment I was able to travel through all the ideas presented and use these as sources … There it is, a book of all my thoughts… (CS2: Interviewee 2)

Writing in the portfolio helped to clarify thinking and helped connect theory to practice:

> I can see that there were lots of gaps in my thinking. And I hadn't really considered the role assessment had on learning. …The portfolio has allowed me to build the steps in pushing my own learning on and now I see those steps. (CS2: Respondent 5)

Another of the key roles of the learning portfolio was to provide a record of learning that course-participants could use to assess and evaluate their progress over time to gain an insight into meta-learning. When asked to assess the extent to which their learning had progressed a course-participant suggested:

> It is like a spiral as I seem to always return to previous issues from a slightly different, more learned perspective, which gives deeper understanding of both the concepts and the way in which my thinking was unfolding. (CS2: Self-assessment 4)

When tutors devise questions to inspire discussion and reflection they often focus on content rather than the learning process. The portfolio shifts the focus back onto the learner in their learning context. The process helps empower course-participants in their own learning and provides a vehicle for learning. For example, when course evaluations were analysed the following were found to be typical: 'it has developed my ability to be more reflective' or 'I was able to take more ownership of the learning I was doing'.

Case Study 3 (CS3): Learning records

Context

This investigation, began in the autumn term 2002 and focused on the learning of a group of course-participants (seven teachers, three from primary and four from secondary schools) who attended an MA module 'Understanding Teachers' Professional Development'.

The concept of a learning record was introduced by the tutor as an ongoing process of learning rather than as a summative form of evaluation. Learning records require gathering and interrogating increasingly complex insights about learning, over an extended period of time, through individual reflection and collective dialogue (Carnell & Lodge, 2002; Klenowski, 2002a). The learning record demonstrates progression in recording and analyzing learning experiences. Evidence of change is included in the record for the course-participant and, where appropriate, changes to their classroom practice and the effects on young people. A learning record:

- avoids the trap of gathering a 'collection' of data; the emphasis is on noticing and analysing learning;
- allows participants to examine their own learning and meta-learning strategies;
- has a role in helping participants reflect on how they support others' learning;
- does not form part of coursework or evaluation but may be drawn on within coursework to illuminate learning, allowing participants freedom to record whatever they feel is appropriate.

Learning and the learning record

The tutor facilitated the first entries and in this way encouraged course-participants to 'notice' their learning (Carnell & Lodge, 2002). During sessions course-participants would stop and step back from the issues of the course and record responses. For example:

- What strikes you as important about the session so far?
- What sense are you making of your experiences?
- Have there been any surprises?
- What have been your contributions to the learning of the group?

There was a gradual shift in giving course-participants responsibility for developing their own questions about their learning, for example, 'What questions do you need to ask yourself at this point?' With practice the entries became an unprompted part of their learning repertoire. Later in the course the tutor encouraged some analysis of the first entries—a meta-level account. For example:

- What do earlier entries tell you about your learning at that point?
- In what ways can you see the entries changing?
- In what ways can you link the different conceptions of learning that we have been discussing with your own view of learning?

The process of constructing a learning record was extended by weekly conversations, self-assessments and questionnaires. These occasions prompted dialogue; the learning record and the data from these sources became the content of the module.

One course participant became particularly enthusiastic in the use of the learning record. She had introduced learning records to the young people in her class and talked to them about her experiences and what the difficulties were in keeping a learning record. During the weekly discussions it was useful to hear how she approached the conversations with young people and what was emerging for them.

The learning record evolved very differently for the course participants. They used concept maps, diagrams and other forms of recording. Course participants were also asked about the ways they could see how their own learning had developed through keeping a learning record.

> When I understood myself as a learner was a specific moment that led to a shift in my conceptions of learning. (CS3: Self-assessment 5)

This self-assessment seems to indicate that the learning record can be a highly appropriate technique to demonstrate to the learner what they are noticing about their learning and how that matches different conceptions of learning. The process of noticing, interrogating and self-assessing learning adds a meta-learning dimension.

It appears that the most significant impact of the learning record was on participants' understanding of their own learning:

> Understanding how I learn as an individual and using that to help pupils learn has changed my approach when pupils struggle to grasp concepts and ideas. (CS3: Respondent 7)

While the tutor wanted the record to be the course-participant's own and private account she also wanted them to share their insights and new understandings. Conversations with other course-participants encouraged co-construction, developing new insights and new understandings collaboratively. Through meta-learning dialogue generated from the construction of learning records course-participants create conditions to make their own and young people's learning more effective.

Cross-case analysis

Although there were differences in the emphases and contexts of each case there were some common emergent issues and themes. Participants are likely to bring with them

their own perceptions of what a portfolio is and why it is used. It is essential that the tutor clarifies these perceptions and indicates that a learning portfolio is not simply a collection of evidence but is a way of coming to understand and record learning. This is not always a straightforward process. The clarity of purpose of the portfolio becomes central. Figure 1 highlights the assessment, teaching and learning concepts that need to be considered when using portfolios for formative and summative purposes. The approach to learning will influence the way in which assessment is conceptualized and is very much linked to one's view of teaching. These issues are discussed next. A discussion of the impact of learning portfolios on professional development and practice follows. The important issues related to ethics and confidentiality when using portfolios for learning purposes conclude the discussion.

Discussion

Clarity of purpose

A key issue to emerge is the need to identify clearly the purpose of the portfolio at the outset. As identified by Forster and Masters (1996) there is no one portfolio, but many portfolios appropriate for different educational contexts (Klenowski, 2002a). The use of a portfolio for learning purposes predominated and required a shift in emphasis from the collection of evidence (Arter & Spandel, 1992; Forster & Masters, 1996) to a focus on the analysis and integration of learning.

In CS1 the learning portfolio was used for summative assessment and focused on course-participants' professional practice through supporting practitioner-research. There was a need to explore with course-participants the different approaches to professional development and to learning and the beliefs and values that underpin them. Fullan (2001) stresses the need to find new forms of professional development that recognize the complexity of professional practice and enable professionals to learn 'on the job'. In CS1, course-participants reflected on learning about their own professional work practices and on the connections between practice and theory.

In CS2 the key purpose for the learning portfolio was formative. Course-participants were given an opportunity to understand their learning by reflecting on it and by annotating and analysing it over time. Course-participants were involved in making connections, summarizing their understanding of key issues and drawing these out from their learning portfolios for summative assessments which took the form of written assignments.

In CS3 the concept of a learning record rather than a portfolio focused on an ongoing process of learning rather than summative evaluation. The emphasis was on noticing and analysing the processes of learning enabling an examination of meta-learning strategies.

A significant discovery to emerge is that course-participants took ownership of their learning in different ways. The conceptions course-participants had of learning influenced the purpose they attached to the learning portfolio, how and when they used it and what they recorded. This is illustrated from each case:

> … reading through the portfolio, … it did surprise me the way I was thinking and it made me work out what kind of learner I am generally, in that I like to do things, I can see the relevance … after it's been done rather than while I'm doing it and I found out an awful lot about me as a person and that's come about from doing the portfolio. (CS2: Respondent 7)

> Understanding how learning takes place and that people learn in different ways did not form part of my early education and was not personally applied. … My most successful examples of learning were when I had good motivation, choice and control over the process and a means of gauging success before others were able to judge my efforts. (CS1: Respondent 8)

The following statement from a course participant in CS3 also echoed Hebert's view (2001, p. xi) and reinforced the point that early conceptions of learning can be deeply entrenched:

> At times I have been a bit worried about giving my ideas and not knowing whether they are right or wrong but have begun to realize that this is not an important factor. I think I might have felt like this because of the way I was taught in school and as an adult, in a very formal way with right and wrong answers. I have often judged myself against others and how they perform. The process has helped me see that this is not the way to look at my learning. That learning is an ongoing process and that seeking to learn by taking risks is a much better way of approaching your learning. (CS3: Respondent 3)

As the learning portfolio needs to capture the uniqueness of the learner's story there is no single method or structure for its writing. This may cause anxiety for course-participants, especially at the beginning. In CS3 and CS2 course-participants read articles on the use of learning portfolios (Sandford, 1988; Voss, 1988) or assessment for learning (such as Black & Wiliam, 2003). This allowed comparisons of the articles together with the course-participants' own responses to the use of the learning portfolio and/or assessment for learning. This process of combining teachers' own experiences with published academic research seemed to add richness to the discussion and justified its value. To illustrate:

> I included reflections on what I was reading, on the way it was relating to my own beliefs and to my experience. Connections I would make with other readings; reflections on my reflections even disparate words that would reflect my thoughts and reactions as I was trying to understand what was behind them. Everything I considered was helping me understand the concepts and the way in which I was going about understanding them. (CS2: Respondent 12)

Emerging from the cases is the question: what can a learning portfolio represent? We have learned that a learning portfolio needs to have an internal coherence, providing evidence of learning, something that the learner constructs rather than is dictated externally. Learning portfolios need to be seen as a generative process extending the course-participant's learning rather than merely being a collection of unconnected thoughts. This is linked with the practice of a generative curriculum that is open ended so that there are opportunities for course-participants to explore their understanding of particular theories and concepts in their own professional contexts.

In England, at HE level, there is an increasing emphasis on the development of skills such as communication, scholarship and critical analysis (Department for Education and Skills [DfES], 2003). An awareness of such skill development by the individual requires an innovative approach to learning, teaching and assessment. We argue these cases reflect such innovation in practice that supports learning through an emphasis on learning processes. The learning portfolio enables inquiry into learning by the learner through integration of understanding from active engagement in dialogue and collaboration with the tutor and other course-participants followed by reflection on these processes. Self-assessment is an integral process to such learning. The learning processes are of paramount importance and course-participants benefit from explicit detail about the purpose of the learning portfolio and how others have made use of it for learning.

Approach to learning

Our experience highlights the need to be explicit about the approach to learning on which the portfolio is based. It requires a shift from a receptive-transmission model in which the teacher is an expert in a particular field and gives information to a passive recipient (Askew & Lodge, 2000, p. 3), to a constructivist and co-constructivist approach. In the constructivist model knowledge is constructed through activities such as participatory learning, open-ended questioning, discussion and investigation. Facilitation helps learners construct their own schema for internalizing information and organizing it so that it becomes their own (Costa, 1991).

In a co-constructivist approach, students construct knowledge that has meaning in their real worlds so that their study is intrinsically significant and does not just consist of evidence that they can do well in university examinations. This model is based on subjective reflection and action for change and incorporates the stages of the action-learning cycle (Watkins *et al.*, 1996) and meta-learning dialogue (Carnell & Lodge, 2002, pp. 131–132; see Figure 2).
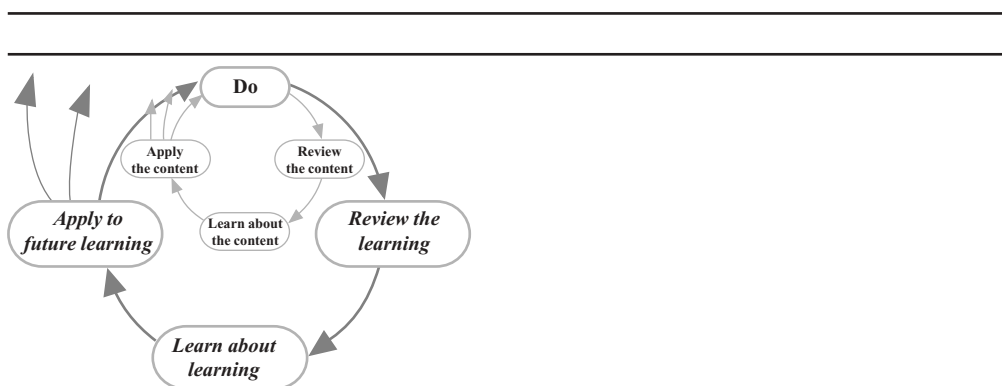

Figure 2.   Promoting meta-learning involves adding another cycle (Carnell & Lodge, 2002, p. 39)

Participants construct meaning and understanding from reflecting on their experiences. One of the crucial processes of any portfolio is reflection (Jarvinen & Kohonen, 1995; Bailey & Guskey, 2001; Lyons *et al.*, 2002; Klenowski, 2002b). But as the cycle suggests (Figure 2) reflection alone is not sufficient for learning to occur. Course-participants need to identify new insights and understandings (learn) and bring about changes (apply). In the context of teaching portfolios, Lyons *et al.* (2002, p. 17) state:

> Through reflections, a teacher revisits and inquires into his/her own teaching, assessing what succeeded or failed and why. In this reflective interrogation, teachers uncover the meanings and interpretations they make of their own practice. Through portfolio documentation they can make this knowledge public and open to scrutiny. Thus the portfolio can be both the means of inquiring into teaching and a way of recording the results of that process.

In the three cases course participants extended this reflection on practice by focusing on their own learning and came to understand and know the complexities of their own learning. This shift of focus to attending to learning contributes to knowledge about portfolio use in HE.

In this process, dialogue is fundamental as 'the responsibility for learning shifts from individuals to emphasize collaboration in the construction of knowledge' (Carnell & Lodge, 2002, p. 14). Some course-participants found the learning portfolio difficult to construct as it required a shift in their conception of learning and their view of learner responsibility. For example:

> Looking inside yourself was hard as I hadn't worked in that way before. That sounds odd because it is so important to do. (CS3: Respondent 6)

Weekly dialogue seemed to increase the course participants' confidence in talking about, celebrating their own learning, and viewing themselves as learners. Examples to illustrate this finding are drawn from CS2 and CS3.

> I enjoyed and learned a lot working and talking with my colleagues. … I liked the diversity of the group. … I enjoyed assessing others' assignments … All of it had a real positive impact on my learning. (CS2: Respondent 15)

> Working in a group or pairs and supporting each other helped to develop my learning further. I was very surprised at how beneficial this was as I had underestimated the importance of working like this. The different experiences and strengths that individuals bring to the group tasks were valuable. (CS3: Respondent 2)

Portfolios are increasingly being used as part of continued professional development at a time of change in the education system. Constructivist approaches to some extent, and co-constructivist approaches to an even greater extent, require course-participants to perceive themselves as learners. Writing about professional learning and frequent dialogue with peers in the process of recording learning, provides course-participants with the opportunity to practice noticing their learning. They become more experienced in thinking about their learning, writing about their learning and creating new strategies for recording and providing evidence of their learning.

Approach to teaching

With the use of learning portfolios the tutor's responsibility shifts from being an expert, in a one-way communication to the student, to a guide and facilitator. Her role is to ensure course-participants understand the purpose of the portfolio and how to construct it. It emerged that it was important to discuss with course-participants the values and beliefs about learning and about professional development that underpin the portfolio. The tutor is also responsible for facilitating dialogue through posing questions about learning. Analysis and reflection are integral and ongoing processes that are facilitated by tutors carefully constructing questions that push the learning through the cycle of doing, reviewing, learning and applying that understanding (Carnell & Lodge, 2002) (Figure 2).

In CS1 course-participants were asked to write and reflect on learning at two levels: learning about their working practices, and learning about learning. Some course-participants found it difficult to make learning explicit at both levels and this raises the question of how the tutor facilitates learning about both professional practice and meta-learning on a regular basis.

There is an issue around the discovery of own agency. For example, in CS3, a course-participant commented:

> I now know how to make what I am learning mean something. I don't feel powerless or passive anymore. (CS3: Respondent 5)

This course participant became aware of a paradigm shift in learning: from a passive recipient to an active learner responsible for her own learning. This was in contrast to another course-participant from CS3 who confessed after the first session, 'I don't like writing. I thought you would be doing all the work'; an expectation that is in line with the instruction, or 'transmission' model of learning in which learner agency does not have an active place.

Tutor support needs to be provided, particularly in the earlier stages to shift from a transmission to a constructivist or co-constructivist model. In all cases, it emerged that the construction of learning is more effective when learners participate socially, engage with ideas in the group context, and construct their own meaning and understanding through dialogue. Course-participants preferred to engage in dialogue that was facilitated by the tutor about their learning with peers. For example, in CS1, the tutor set up peer-learning partners, and set tasks which necessitated collaborative learning, while in CS2 the tutor encouraged collaboration through portfolio pedagogy which included peer and self-assessment. In CS3 conversations with course-participants encouraged co-construction, developing new insights and new understandings collaboratively.

In co-constructivist approaches the tutor is responsible for actively establishing a learning community—a context in which peers are collaborative partners. She may also emphasize and facilitate co-research. Co-research reflects the concept of 'situated constructivism': knowledge is constructed socially, though everyone has different social experiences in multiple realities (Kanuka & Anderson, 1999).

Tutors are imbued with authority, they are expected to have answers, to impart theoretical wisdom and be the arbiters of academic rigour and standards. In the portfolio approach the course-participants are the experts, they have practitioner wisdom and knowledge about their subject and their own learning. The tutor's role must shift from theoretician to facilitator; a role which may be unfamiliar, leading to possible discomfort and perplexity to course-participants. This raises questions for professional development in HE, particularly in a discipline such as education, which is essentially concerned with practice and the application of theory.

The learning portfolio requires course-participants to be open, trusting and prepared to be vulnerable which raises issues about the relationship between course-participants and with the tutor. Tutors should not ask course-participants to be open if they are not prepared to take the same risks themselves. A willingness to explicitly expose, their strengths and areas for development, is required. If this is possible, then there may be the opportunity for the development of a real community of learners (Watkins, 2000); this relationship challenges the traditional, hierarchical status between tutor and student.

The amount and kind of support required differs to that on a traditional academic course, where support may be limited to ensuring course-participants have information about course requirements, can submit draft work and receive feedback. The relationship between tutor and course-participant on the learning portfolio route is more equal. Feedback in this case is not seen as a 'gift' (Askew & Lodge, 2000, p. 5) from tutor to course-participant, but is in the form of a 'dialogue' in which both tutor and course-participant are learners.

Approach to professional development

Weimer (2002), in her examination of learner-centred teaching, has identified five important considerations. In our study the focus on the professional learning raises parallel concerns. The focus on learning promotes shifts in the:

- balance of power. As learners construct their learning portfolios they make decisions, identify what is important for their learning and influence the programme. They are encouraged to assume responsibility for their own learning.
- function of content. Content is used and extended as the learning portfolio is constructed. Knowledge is created through dialogue. Learners make sense of their experiences by engaging with the content.
- role of the facilitator. Facilitators are guides, facilitators, and designers of learning experiences. The focus is on the learner. The facilitator shares their learning and supports learners by offering guidance, critique, and encouragement.
- responsibility for learning. Learning portfolios are driven by learner agency so effective learners take responsibility for their own learning. Through the learning portfolio participants monitor and review the effectiveness of approaches and strategies for their own goals and for the context.

● purposes and processes of evaluation. The learning portfolio is drawn on as a way of promoting learning in coursework evaluation. The learner draws on their record to demonstrate understanding, shifts in learning and meta-learning processes. The learning portfolio helps participants understand their learning and assists the planning, monitoring and reflections on learning.

Course participants became more aware of the complexity of learning from realizing the complexities of their own learning, relationships with other learners, reactions and blocks to learning, and the complex contexts in which they work. The course-participants moved from the intuitive to the explicit. A sense of empowerment experienced by the course-participants demonstrates the liberating potential of the construction of learning portfolios. To illustrate:

> It was when we were asked to reflect on our reflections that I really keyed into these and started to truly reflect on the change on my learning. (CS2: Self-assessment 2)

> I have learned that my own learning does have an impact on my teaching and I now think more about the learning of my pupils. (CS3: Respondent 4)

The course participants' learning was developed through meta-learning dialogue. In all cases Dennison and Kirk's (1990) learning cycle (Figure 2) was used as a suggested way of organizing writing and reflecting on learning on two levels. The first of these levels relates to learning about content or practice, and the second relates to learning about learning. The tutors facilitated learning about both content/practice and meta-learning on a regular basis.

This expanded perspective of professional learning matches Sockett's definition of teacher professionalism (1996): recognizing oneself as a learner; using that learning-centred spirit to transform schools into learning organizations; and reasserting one's own moral autonomy to provide space and time for serious, reflective thought and study.

Particularly striking is a CS3 course-participant's comment: 'I am more able to persevere and move though uncertainty'. The process of constructing a learning portfolio seems to have provided her with an understanding of her own learning and confidence. It is our hunch that such responses indicate a use of language that focuses on learning in a new way. As course-participants become more confident they are able to create a different language for the learning portfolio. New language signals new thinking that in turn generates new language (Hebert, 2001, p. xix). Concepts that are new need a new discourse.

Learning leading to change in practice

In all cases we were struck by the number of times in which course-participants spoke about the effect the process was having on their own practice (teaching, assessment or professional). For example, in CS3, course-participants talked about having more understanding of their children's learning and how to support their learning, in CS2 course-participants indicated greater awareness of their assessment practices, and in

CS1 course-participants indicated a change in professional practice and a desire to continue with research about the impact of this change on their own students' learning. For example:

> The research has given me a thirst to do more. I am now finding funding to allow the project to continue in school so we can do research into behaviour change of children. (CS1: Respondent 2)

We also noticed that the act of constructing the learning portfolio activates creative and energizing feelings. To illustrate:

> I am more willing and motivated to learn than I have ever been in my life. I know where my learning needs to go now. Before I had no direction and didn't realize this was the direction I could take. I am now much more positive and willing to persevere in learning. (CS3: Self-assessment 2)

Ethics and confidentiality

The importance of ethics and confidentiality in the learning process should not be underestimated. There is a need to respect the learner and respect his or her need to keep some learning experiences confidential, particularly in relation to feelings. For example:

> It was liberating that no one was going to read it. I enjoyed the writing as there were no set boundaries it felt free. (CS3: Respondent 1)

Learning rarely takes place in a vacuum and a learning portfolio stresses the importance of co-construction. This means that others in the learning context may be referred to in the portfolio. It is important to discuss the issue of confidentiality with course-participants and to remind them that the learning portfolio may be read by others—this was true of CS1 which was for summative assessment. It may be necessary to anonymise information.

Conclusion

These cases signify a shift from the traditional view of a portfolio (a collection of 'work' selected and organized by the student, with a written justification and self assessment) to a learning portfolio that focuses attention on the subject of learning and how the course-participant is learning, the purposes, effects of context and emotional and social elements.

If learning portfolios are to be used for assessment there needs to be an explicit and ongoing discussion with course-participants about why they are being used, and the model of learning and professional development on which they are based. The learning portfolio shifts learning from a focus on substantive concepts, themes and theories to include an understanding of the way learning happens.

The construction of learning portfolios with an explicit focus on learning brings about important changes for course-participants. As they become more aware of their own learning, through a process of meta-learning, they are able to support others'

learning. The construction of the learning portfolio is, therefore, an effective form of professional development.

The learning portfolio is congruent with particular beliefs about effective learning and beliefs about effective professional development. Because of this it cannot be an 'add-on' to a course but must be at its very core.

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