Case Study

ePortfolios for developing trainee teachers' professional learning though reflection

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The background context

The Department of Education provides high quality Teacher Education (ITE) programmes in secondary English, Mathematics, ICT, Physical Education, History, Modern Foreign Languages and Science as well as Middle Years Science and English.

> The fundamental purpose of ITE is to help students (trainees) develop the skills of critical reflective practitioners.

Central to the training is the Professional Development Portfolio (PDP) which supports the development of trainees' progress in relation to the Standards set by the Teacher Develop-ment Agency (TDA) for the award of Qualified Teacher Status (QTS).The PGCE is a 10 month programme which caters for approximately 160 students. It is an intensive experience and train-ees are often challenged by the need to shape new professional identities as they move be-tween school placements and University study. Typically there is little time to meet all assess-ment and monitoring requirements which adds pressure to tutors, trainees and their work based mentors.

The Department of Education trialled the imple-mentation of eportfolios using the PebblePad platform in 2008/09 with 80 trainees and five

tutors from three subjects within the PGCE programme. In the current year most subjects have opted to use eportfolios with their trainees and an additional platform has been added with the ICT group choosing to use a Web 2.0 approach.

The current practice

Previous practice required that trainees compile and present a paper based PDP of evidence of their professional practice for summative assessment. This process was supported and assessed by mentors (school based) and tutors (university based).

> Critical reflection was and is an essential part of the process. When in school reflective conversations are stimulated by mentors' observations of trainees' teaching.

These contribute to fortnightly action planning discussions, where trainees are encouraged to review their progress and set priorities for development based on recent performance. When studying at the University trainees are set reflective tasks that encourage them to make connections between theoretical aspects of the course and their professional practice.

Compiling a paper based PDP presented administrative and pedagogic problems for both trainees and their tutors including:

- collecting and keeping track of paper based evidence (trainees)
- the difficulty of identifying and selecting appropriate best practice evidence from multiple sources of evidence; trainees tended to file large quantities of evidence 'just in case' (trainees)
- text and paper constrains the type of sources that can be used for evidence (trainees)

- physically accommodating large numbers of substantial folders of paper (tutors)
- focussing on the product (presentation of evidence) rather than the process (of meaning making through review of the evidence) (tutors & trainees)
- access to work in progress for monitoring and giving feedback (tutors & mentors)

The paper portfolios produced by trainees tended to appear as a collection of evidence rather than as a narrative of development exemplified through evidence. The stimulus for trainees' critical reflection largely came from their tutors and mentors, with paper pro forma as the basis for their audit trail. Taking ownership of the process was hard for some trainees and some found it difficult to make connections with experiences in school and at the University.

The challenge

We were particularly interested in exploring whether and how eportfolio tools and principles can:

- encourage trainees' orientation towards assessment for learning specifically through taking a greater responsibility and ownership for their learning

- balance the 'conflicting' requirements of learning through reflection and meeting TDA Standards
- encourage trainee reflective learning, critical thinking and creativity
- encourage trainees to identify and select best practice evidence to demonstrate

- progress in respect of Standards
- further facilitate a reflective community of learners (peers and tutors)
- demonstrate and experience the use of an e-learning tool and understand its potential for use in schools with students.

Primarily this project was motivated by a desire to improve our ITE provision by researching eportfolio tools and principles appropriate for enhancing trainee teachers' professional learning during their PGCE and beyond. We were particularly interested in encouraging a movement away from a 'tick box' approach to meeting the QTS and stimulating a more reflective engagement with professional experience.

The approach

This research adopted a participatory approach to the development of a set of practical eportfolio based tools and guidelines for supporting the development of the trainee teachers' professional learning during ITE. A key feature of our methodology was regular 'show and tell' events for trainees where they presented and discussed their individual approaches to the eportfolio work.

Phase 1:

The project began in July 08 with an initial design workshop comprising representatives from all stakeholder groups (trainees, University tutors, newly qualified teachers (NQTs) who undertook ITE at Bath) who scoped and specified a tool set which was later developed by 2 tutors.


The tool set comprised:

- a structured webfolio designed to develop a narrative around evidence for each of the TDA standards (mandatory)
- individual blogs for personal unstructured reflection (optional)
- group blogs for reflection on University teaching sessions (optional)
- a structured webfolio for collecting reflective responses to set tasks (mandatory)
- the activity wizard for short structured reflections (guided but optional)

Tutors were supported in developing their eportfolio skills through informal on demand workshops prior to trainees' arrival on the programme in September 08. These tools were evaluated by a small group (12) of volunteer participant/researchers (trainees) and their tutors over the course of their PGCE programme ending in June 09. 'Drop-in' support sessions for trainees were provided to support skills development with the technology. All trainees (80) involved in the project were surveyed prior to their eportfolio experience and then again at the end of their PGCE. All tutors (5) involved produced a reflective report outlining their perceived benefits and challenges. As a result of these evaluations the tool set was refined and adapted to suit individual tutor's requirements. The structured webfolios remained a central component of the eportfolio but direct tutor support of blogging activity was reduced. Forms were added to gather structured reflections and support action planning. These mirrored the paper based equivalents.

Phase 2:

Trainees and tutors from three new subject areas joined the project and we narrowed our focus towards eportfolio tools and principles for enabling trainee reflection. The ICT group brought a new approach with their choice of Web 2.0 tools where each trainee set up their own blog and
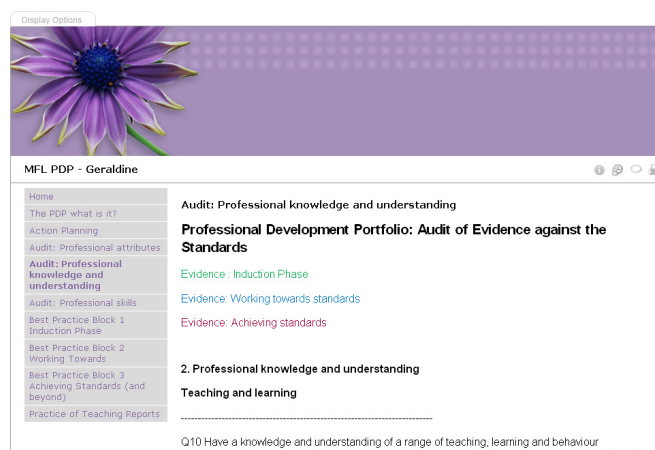
wiki connecting to each other via RSS feeds. A similar approach to the evaluation was taken (including both tutor and trainee perspectives) and featured our previously successful 'show and tell' events followed up with a focus group discussion.
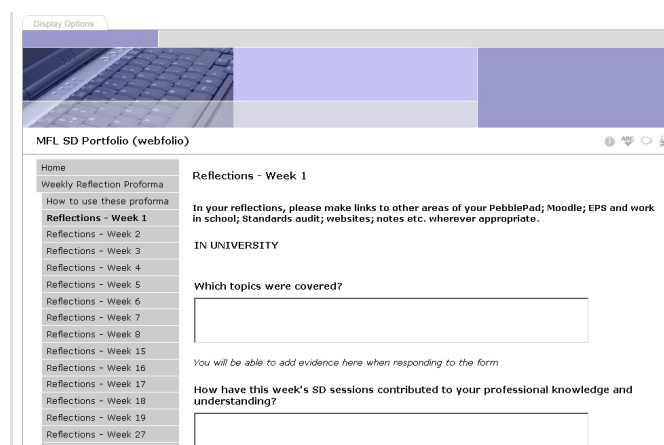
Phase two is due to conclude in Jun 2010 but there are plans to extend the project in 2011 with a focus on trainee transition to professional practice in the induction year.

The issues

During Phase 1 it was difficult to focus tutors' and trainees' attention on the processes enabled by the technology rather than the technology itself. There was much talk about how easy or not PebblePad was to use or access. Problems cited by participants included mainly technological problems (e.g. browsers, connectivity, loosing data).

Some of this might have been underpinned by levels of ICT literacy and/or tutor experience and confidence with trouble shooting trainee difficulties. There were also some issues associated with school contexts e.g. firewalls blocking access and 'paper based' cultures.

Time was also a constraining parameter both for tutors and trainees. Tutors typically had no extra time in their contracts for developments such as this. We had to purposefully fund extra time from our project budget. In a timetable already full with essential teaching sessions there was little time to add eportfolio induction and support for trainees.

The result

Taking an incremental approach and involving all stakeholders we have successfully introduced an eportfolio system (PebblePad) in support of trainee teacher professional learning across the majority (8 out of 11 tutor groups) of our PGCE programme. There is some evidence that our eportfolio processes are transferable across platforms (PebblePad and a Web 2.0 approach).

The tutors' perspectives

Tutors were convinced of a significant change in the quality of trainees' reflections (and reflective writing) and of this being evidenced earlier in the course. One tutor identified much earlier in the programme where trainees were unable to reflect and they were able to intervene and feed this back to trainees in comparison to a much later stage in previous year(s).

"Being really reflective… (this is) good quality" and in terms of quality and volume "it's so much better now (this year)."

"Trainees' feedback via blogs is far more reflective than I expected it to be … that has astounded me."

"At this stage of the programme trainees' eportfolio is more comprehensive and more complete than previous years."

"Trainees, typically, are engaged with the standards for QTS at a much earlier stage as a result of increased involvement with their eportfolio."

"Trainees have reflected explicitly on the significance of the evidence offered (this was particularly lacking in paper portfolios)."

Trainee perspective

Trainees reported organisational benefits from using an eportfolio system, e.g. ease of keeping track of work, flexible access via the internet, and the facility to search and review. There were a variety of views with respect to reflection for example:

"… doing reflective writing makes you think about it and consider the importance of something (rather than it be easy to file things and think that you have digested it)."

"[It's] easier to get an overview of how far I've come and what I still have to do."

"The technology tends to record the reflection rather than develop it."

"When uploading assets I try to put a couple of lines on the Reflection tab – this helps to think about how useful the asset was!"

Blogging clearly had an impact on some trainees:

"The blog allows me to constantly see where I am and where I am going in a very easy and structured way. This keeps the thoughts in my mind and allows more critical reflection on further entries."

> **"** I feel that it's helped me to reflect a lot on what I'm teaching and I think if I'd … written it on paper I would possibly not have bothered, ... It sort of helped me think about what lessons I've learnt each week. **"**

However there were differences of opinion regarding the role of the eportfolio system in professional learning.

"The real learning how to become a teacher happens in the workplace … PebblePad isn't really where that happens. It's just doing your best to put that in a format that other people can assess."

"I am really trying to use it as a learning tool rather than something I have got to do to pass the test, … I'm learning more from doing it this way"

The learning

For us the introduction of an eportfolio system was an evolutionary process which required time to adapt existing practices and adopt new ones. This can be demanding for tutors who are typically time poor.

Our development was supported by the director of ITE and championed by two tutors who had a vision about the potential benefits of eportfolios. They were keen to drive the eportfolios project forward and this aided uptake by other tutors.

Many factors seem to govern effective trainee use of eportfolio tools and principles e.g.

trainee skills and prior experience, access to technology/connectivity, tutor and mentor attitudes and beliefs about professional learning and work place cultures. The trainee 'show and tell' events were successful in sharing and amplifying good practices developed by the trainees themselves. Some trainees have experienced clear benefits connected with engaging with the process of portfolio development as supported by eportfolio tools and principles notably through stimulating critical reflection.

There were tensions associated with providing technical support for trainees in Phase 1. Some tutors wanted to take on the responsibility of technical support while others felt less confident. The lunch time drop in support sessions (run by the e-learning officer) were clearly valued by those trainees who attended but queries relating to the requirements of the programme were sometimes raised which could not be adequately addressed.

Ultimately trainee teachers need to demonstrate that they have met the standards for Qualified Teacher Status through supplying appropri-

ate evidence. A focus on the presentation of evidence can constrain the form of the trainee portfolio and thus the tools and principles implemented to support its development.

This focus may conflict with approaches appropriate for stimulating reflection and thus more conducive to developing critical reflective practitioners. Some trainees have been able to use their eportfolios to strike a balance between efficiently presenting evidence that demonstrates that the TDA standards have been met and learning from their experiences through reflection on their emerging professional practice.

In brief

- ePortfolios have the potential both to develop the quality of some trainees' reflections and to act as a vehicle to present evidence that formal professional requirements have been met.
- Tutor beliefs, levels of confidence and the nature of the support provided for learning through reflection can influence the trainees' effective use of eportfolio tools and principles for professional learning.
- Work place cultures and practices in the placement schools can influence the trainees' effective use of eportfolio tools and principles for professional learning.
- The demands of the TDA to meet specific standards can create tensions by encouraging a focus on outcomes rather than the process of development.

Acknowledgements