

Case Study

Assessment of and for learning in Primary PGCE ICT Initial Teacher Training at the University of Worcester.

Moira Savage

Institute of Education, University of Worcester, UK

The background context

In 2007 Primary ICT re-evaluated the existing paper-based ICT portfolio trainees completed to demonstrate their ICT capability in relation to the Qualified Teacher Status (QTS) standards.

The traditional paper-based model had evolved into a 'scrap book' type portfolio and stakeholders questioned the value of collating such an extensive array of materials in relation to purpose, merit, authenticity and quality.

Also, assessment had been purely end of training summative assessment by tutors and lacked any substantial formative component. This pro-

cess coincided with the University purchasing PebblePad and the option of a manageable ePortfolio system becoming available.

When considering whether to revise the existing paper-based portfolio or change format, the nature of the evidence and activities trainees were engaged in highlighted that a digital portfolio (webfolio) had particular affordances. In particular, enabling trainees to digitally 'showcase' their ICT capabilities rather than just writing about them. There was also the desire to create a tool which scaffolded trainees engaging in the 'reflection on practice' process. Similarly, I perceived merit in facilitating emerging profession-

als in peer learning and review activities. My assertion being that we could take advantage of web-based hosting functionality (gateways) to share and collaborate more effectively.

In designing the eportfolio structure I felt it was imperative to bring together and embed university reflective tasks, collaborative projects, school-based activities with young learners and self and peer-review, all within the umbrella of the QTS standards. The eportfolio involved presenting a series of individual and collaborative case studies; accompanied by a narrative commentary detailing how their professional understanding of information and communication technologies, as tools for learning in the primary classroom, had evolved.

In January 2008 a pilot primary ICT eportfolio began with 20 postgraduate trainees undertaking a compulsory ICT module as part of their PGCE. This has now been rolled out across UG and PG ICT training.

- Pilot approximately 20 Postgraduate Flexible PGCE students 2007
- Phase 1: 120 Primary PGCE students 2008
- Phase 2: 120 Primary PGCE students 2009; 20 Postgraduate Flexible PGCE students 2009; 130 Undergraduate BA Hons with QTS students 2009 (Blogging tool only in year 1).

The challenge



Summary of aims for the ICT eportfolio project:

- To enable trainees to include digital artefacts including text, graphics, video and audio.
- To develop trainee's ICT capabilities as a by-product of constructing the eportfolio.

- To emphasise 'quality' rather than 'quantity' of evidence by requesting that trainees present two authentic case studies; strengthening the link between university-based and school-based training.
- To introduce a more complete 'reflective cycle' to assist trainees in relating their reflections to future professional action.
- To increase the level of formative feedback students received by building in a range of self- and peer-assessment opportunities via the gateway feature, in addition to tutor feedback.

The approach

The eportfolio template has evolved over the last 3 years. The current version can be viewed at <http://pebblepad.worc.ac.uk/webfolio.aspx?webfolioid=40766>. The template is shared as a gateway resource so that it can be copied and personalised by trainees.

The template strives to balance the tensions between being a tool for authentic assessment of professional training and a learning tool. Feedback from trainees and tutors suggests this balance is important. Our external examiner 2009 commented, "The electronic portfolio framework provided sufficient structure without negating the freedom for students to construct their own personalised responses".

A brief introduction to PebblePad has become

part of induction to ensure trainees are well supported from the outset. Further, instructional screencasts of each step have been created and are hosted on the Virtual Learning Platform to support trainees in building their ICT eportfolios. A range of audio and visual portable data capture devices were available for loan to trainees to capture data and use with children whilst on school placement (funded from 2007 TDA eportfolio research bid).

The issues

Child protection and safeguarding issues were a concern initially as video, photographs and audio needed to be hosted by external sites; for example, Flickr and YouTube.

A significant problem was that trainees were unlikely to receive school and parental consent; thereby limiting the affordance of being able to include these digital assets. In the early cycles this was overcome by using an in-house media streaming service which had high secure default settings. We are currently trialling using the PebbleTray to host audio and video, keeping everything within PebblePad and only accessible via 'login' to tutor controlled gateways where all members are CRB cleared. We also have in place detailed safeguarding protocols for all trainees to ensure privacy and confidentiality of contents.



The result

In comparison to a paper-based model, being able to comprehensively assemble digital case studies for web-based publishing allows a holistic portrayal of multi-dimensional (textual, visual and aural) picture of the primary classroom. I feel it has led to a more compelling connection between a primary aged child's ICT learning, the practitioner and fellow professionals, including the assessor.

From a trainer perspective, the opportunity to have media rich content, dynamically hyper-linked with narrative and reflective commentary has brought a greater clarity of insight and understanding into emerging professional's practice and in turn, informed my teaching. Fortunately our external examiner agreed,

“ICT's use of an electronic portfolio was particularly impressive. Use of multimedia data collection of children's learning in school not only provided examples of the impact of the students' teaching, but also exemplified how the students' own use of ICT software had developed...”
(PGCE External Examiner 2008-2009).

From an anecdotal perspective, I have felt that the often cited developmental processes ascribed to portfolio assessment; selection, collation, rationalization, evaluation and revision of artefacts, is carried across with an eportfolio. Assessing reflection is a controversial topic

but something trainers are required to do by the TDA; the eportfolio reflective commentaries have provided the trainers with useful insights into evolving ICT professional pedagogy as the project has a chronological structure. Twenty of thirty-one trainees (64.5%) from the 2008 cohort agreed that, 'writing the reflective commentaries for each case study helped them deconstruct and unpick their pedagogical beliefs about using ICT to enhance learning'. Perhaps underlining the fact that the 'power', or learning potential, lies in the task hosted by the technology and not just the latter. In the words of a trainee,

“The eportfolio has been a new learning experience for me. It has provided a useful, cohesive process to facilitate self-reflection and professional development”
(2008).

A significant affordance of web-based eportfolios has been the ease of access and asynchronicity for tutors and trainees alike. This enabled a more flexible approach to peer-to-peer sharing, discussion and feedback than had been possible with existing temporal and spatial limitations. Feedback from 55 PGCE trainees (2009 cohort) to an online evaluation questionnaire provided some surprising insights; for example, 96.4% of trainees felt that completing the peer review asynchronously via the PebblePad gateway had allowed them to ‘think through their comments more fully’ (40% strongly agreed and 56.4% agreed). 54% agreed that they were ‘more honest giving peer feedback online than face to face.’

One possible explanation lies in that 76.4% of the group agreed that by ‘carrying out the peer review activity online a useful emotional distance was created where they didn’t have to monitor the reactions of the person and possibly modify what they said’.

Also, 96.4% agreed that carrying out the activity this way meant the ‘evidence’ had to stand on its own merit.

Beyond the scope of the directed peer review activity many trainees mentioned that the gateway allowed them to ‘check how their work compared to others’ reducing anxiety but also, hopefully cross fertilizing ideas.

“Reviewing some one else’s work made me think about my own from a more objective position” (2009 trainee).

The gateway feature extends the opportunity for these processes beyond what is possible in the classroom alone.

Nudging reluctant trainees to engage with new technologies to complete the eportfolio has been a useful strategy from a trainer viewpoint. Likewise, the ICT pioneers have been able to showcase their capability more effectively. For example, 31 trainees (2008 cohort) were asked whether completing the two eportfolio ICT case studies on school placement had encouraged them to be experimental in their use of technologies, either in what they use or how they used it. Only 1 trainee stated they ‘only used technologies they were already familiar with’. The remaining 30 trainees stated that they had tried one or more new things; 64.5% ‘I tried 1 or 2 new things’ and 32.3% ‘I tried lots of new things’.

From an academic perspective it has provided a rich insight into primary learning technology trends across partnership schools and led to some interesting exploration of emergent themes about the nature of trainee teachers’ thinking on this topic.

2009 cohort responses when asked:

Will you continue to use the group gateway to view the progress of your peers? N=55				
1	Yes, to see how others are getting on but not comment.:		21.8%	12
2	Yes, to see how others are getting on and comment.:		29.1%	16
3	Yes, to check that I am doing everything correctly.:		30.9%	17
4	No:		18.2%	10

The learning

Overall, the eportfolio approach was popular with trainees and tutors. However, beyond the technological affordances, for example, in facilitating peer evaluation, the primary benefits are derived from the nature of the activities trainees are required to undertake with ICT in the primary classroom for the assessment.

One aspect that seems to have worked particularly well was the capacity to carry out peer reviews of case study 1 via the shared gateway. This enabled everyone to receive early formative feedback and simultaneously view and consider the work of others.

In a trainee's own words:

"PebblePad has helped me to reflect effectively upon my successes with ICT and has also helped me to identify areas for improve-

ment in my practice. I did find it difficult to use at first and so was saving everything onto my memory stick as I went along rather than putting it straight onto PebblePad. I then use copy and paste to add the commentaries to PebblePad. However, looking back now I should have become more familiar with how to use PebblePad before Christmas as now I am used to it I find it very manageable, easy to use and a really helpful resource" (2008).

In brief

- Sound pedagogy is as important as the technological tools available - probably more so.
- Keep it simple - initially I had webfolios embedded within webfolios...= too confusing!
- Carefully embed within assessment and module/curriculum - it has to be 'worth' the effort from a learner and tutor perspective.

References

Moira Savage, 2009. *Moira's Primary ICT eportfolio 2009* [Online] (Updated 28 September 2009) Available at: <http://pebblepad.worc.ac.uk/viewasset.aspx?oid=40766>. [Accessed 03/2010].

Acknowledgements

Case study by Moira Savage
All images courtesy of University of Worcester