PebblePad: Personalising the Curriculum

A collection of case studies from PebbleBash 2014

Edited by Alison Poot
PebblePad: Personalising the Curriculum

A collection of case studies from PebbleBash 2014

Edited by Alison Poot
Introduction

PebblePad: Personalising the Curriculum - Improving learning and development through thoughtful learning design by Colin Dalziel

Part One - Research papers

Education

1. Taking their skills with them: Seeking to find out whether eportfolio skills transfer from degree programs to the classroom
   *Jennifer Munday*
   
2. An eportfolio environment to enhance reflection in pre-service teachers: What worked, what didn’t and why?
   *Pauline Roberts*
   
3. Talk the talk: Finding the language of the eportfolio
   *Heather Pate*

Part Two - Case studies

Computing

4. Moving from paper to PebblePad: Connecting students, practicum supervisors, and instructors
   *Yusuke Ishimura*

Education

5. Practicums, philosophies and learning design
   *Lilian Austin*

6. Moving paper based reflective practice to a sustainable future
   *Kymberley Barbary*

Health

7. Educators at the core of lifelong learning
   *Lucy Stone*

8. Using PebblePad in Health Sciences units: A comparison of design and support approaches during a pilot phase.
   *Astrid Davine*
9  Midwifery students’ experiences: Real time, real benefit, real deal
   Helen Godwin, Jacqui Patten ................................................................. 85

10 The use of eportfolio in pre-registration clinical practicum, professional
development and recertification processes in the New Zealand Osteopathic
Profession - beyond curriculum to capability
   Stiofan MacSuibhne ........................................................................... 89

11 Introducing eportfolios into the Bachelor of
Occupational Therapy (OT) program
   Christine Slade, Keith Murfin, Anita Hamilton ................................... 93

12 Master of Midwifery: A postgraduate program’s first use of eportfolios
   Christine Slade, Keith Murfin, Michelle Gray, Kendall George .......... 100

13 Utilising the workbook to scaffold reflective practice skills and add
   professional meaning for Diploma of Nursing students
   Bec Watt ............................................................................................... 109

14 Moving midwifery placements online
   Terry Young, Michelle Newton, Sarah Hay ........................................ 119

   Institution-wide ................................................................................... 123

15 The short and the long of it: Sustaining workbooks from three weeks to
   three years
   Susan Atkinson, Mark Henderson, Jo Lockwood, Ruth Weeks ........... 125

16 From training to learning: Using PebblePad to enhance
   professional development
   Pamela Basden .................................................................................... 135

17 The ‘Unfold’ project – enhancing the Personal Tutor System with the use of
   reflective templates
   Robert Chmielewski, Prof. Ian Pirie ...................................................... 139

18 Eportfolio competitions: Everyone’s a winner
   Jacqueline Patten ............................................................................... 146

19 Implementation of an ePortfolio Early Adopter Phase: Processes and
   outcomes
   Christine Slade, Keith Murfin ............................................................ 152

20 PebblePad: Enhancing learning delivery by extending the capability of
   existing educational technologies.
   Ross Yates ............................................................................................ 156

Index ........................................................................................................ 165
Introduction

PebblePad: Personalising the Curriculum

Improving learning and development through thoughtful learning design

In preparation for this year’s conference I was looking through some old design specifications for the very first version of PebblePad. With a very ambitious timescale of 6 months for the creation of PebblePad 1.0, the design specifications were completed, although maybe not very detailed, by the end of March 2004. The coding started in early April 2004, making PebbleBash 2014 almost 10 years to the day after the first few lines of code were written and the first features started to appear. With just 3 people working on the development we somehow managed to get a version ready for 160 students to pilot at the University of Wolverhampton by the 1st of October.

At the time we didn’t really know what we had built, and to be honest we have changed our minds a few times over the years. We set out to build an eportfolio system because that’s what people were interested in, but looking back with the benefit of hindsight, we had built what was possibly the world’s first Personal Learning Space. Our structured wizard approach was there from day one, with the aim of supporting the recording of experiences, the creation of plans, and the demonstration of abilities. The ability for learners to audit their own skills and reflect upon those skills was all part of the first version. The difference with PebblePad, in comparison to other eportfolio systems, was that the software was designed to support learning in the system not just linking to learning that happened elsewhere as was the case with other tools. This foundation has carried through to today, where we now see some fantastic examples of supporting learning in the system through the use of subject specific custom templates and rich workbooks that bring together tutor authored content and student evidence and reflection in one place. These tools allow for learners to have a much more personal interaction with the course materials and allow for a longer term connection with the materials than usually available in other learning technologies.

We put so much of our effort in the initial designs into creating the personal space that we didn’t really think about the assessment side of things. There were no tools to support student submission; it was a case of the student sharing an asset with their tutor. Thankfully this came up as an issue very soon in the initial trials. The problem emerged when a fairly small group of students, about 20 or so, shared 5 different assets with their tutor. It was obvious that the volume of work involved in just viewing and sending comments meant that something more practical was required to manage the group and their work. So we developed an assessment management facility, Gateways, which was greatly enhanced with the release of v3 in the shape of ATLAS.

Like many people in the elearning world 10 years ago, we believed that all we had to do was show students PebblePad and they would see the benefits of using the software and want to use it to support all their learning activities. They would want to continue using it life-wide and life-long and everyone would be happy. Of course the reality is
quite different. Like any learning resource, PebblePad needs to be used in a meaningful way with real purpose. How that plays out on any given course depends upon a number of factors but fundamentally for success, students need a clear purpose and any technology used has to be embedded into the learning design. For some students the benefits of using PebblePad over traditional options may need to be highlighted, as clarity of purpose will help foster engagement.

Students understand assessment, well hopefully the need to try to pass them. Where PebblePad works best is when it is a core part of the curriculum and as a key element in assessment processes. With good learning design and appropriate use of the tools, students will be able to identify the possibilities of the system from required initial use and will see the potential for PebblePad to support other things they do, even when not assessed. Some students may need more support to help them make the connections between what they are doing as part of their course and the potential to use PebblePad independent of instruction to support their learning and development.

As PebblePad has grown over the last ten years what might have once been recognised as the eportfolio functions of the system have become the core of a much larger and more sophisticated toolset. PebblePad has evolved from being totally focused on being a Personal System into being a Personal Learning Space and Assessment System. Whilst the focus has shifted towards assessment driving institutional use, importantly the personal privacy is as essential today as it was in our first draft plans. It is still impossible for anyone to look at another users’ PebblePad account or view their assets unless the owner submits or shares something. Some people say that a Personal Learning Space should not be involved in assessment. I would suggest this is a naïve view. What is important is that the user is in control and they decide what others can see. It is really just like my laptop where I have lots of files including Word documents, Excel spreadsheets and holiday photos. The whole collection is private to me and I would never share everything with anyone. However particular audiences get to see selected items when it is appropriate. This privacy is a vital part of PebblePad and a fundamental feature of a personal system. If users are going to engage beyond their required activities they need to be confident that they have privacy and control over anything they record in the system.

Assessment is arguably the most powerful driver for learner engagement. Good learning design with well aligned assessment, should result in assessment processes that don’t just test the learning but support and enhance it. PebblePad provides the opportunity to do this really well by supporting the recording and reflection of practice. This enables not just the final outcomes of an activity to be apparent, but also enables students to highlight the learning journey they have undertaken. The opportunity to evidence the knowledge gained and the abilities developed are all very powerful learning activities in their own right, particularly where used to draw together theory and practice.

We now believe that the eportfolio side of the system is just a small part of what PebblePad offers. We know that people will still call PebblePad an eportfolio system, mostly for historical reasons, but we like to think of PebblePad as a Personal Learning Space and Assessment system.
So on to the matter in hand, PebbleBash 2014. This is the third PebbleBash and we are delighted to be running it in Australia. With the highly active community in Australia we are really looking forward to the conversations and discussion around PebblePad and finding out more of the details about the interesting ways people are applying the technology in practice.

We chose the theme Improving learning and development through thoughtful learning design for this year's PebbleBash because we firmly believe that learning design is central to good learning. Where done well we know that a thoughtfully designed learning activity can have an impact way beyond the subject knowledge gained. We have seen many examples over the years where well thought through programmes have energised both staff and students alike and delivered outstanding results. We know that PebblePad offers a range of unique features that can open up new possibilities for learning designers. For us one of the joys of releasing new versions of PebblePad into 'the wild' is the unexpected and innovative uses people find for it. I am particularly delighted to see a number of papers in the programme which highlight the possibilities for newer features such as workbooks and worksheets, as well as interesting ways to use the long established elements of the system. We continue to be impressed by the range of ways in which people are experimenting with PebblePad. We know being innovative in teaching and learning can be a challenge and is certainly not always the easiest approach, but the rewards are often well worth the effort. If nothing else the way people use PebblePad impresses the staff back at Pebble HQ!

I hope that you take as much inspiration as I have from the case studies in this book and can see how some elements may be applied to your own practice. For me they represent a celebration of good teaching activities that are supported well by PebblePad. We are always humbled to see how people are making a real difference to their students with thoughtful use of our system. So I would like to end by saying thank you to all the contributors to PebbleBash 2014. Without your hard work there would be no case studies and no conference so thank you for being part of our community and for allowing us to present your stories of PebblePad in this book.

Colin Dalziel
Chief Operating Officer and Founder
Pebble Learning
April 2014
Part One

∞

Research papers
Education
Taking their skills with them: Seeking to find out whether eportfolio skills transfer from degree programs to the classroom

Jennifer Munday
School of Education, Charles Sturt University, AUS

Abstract

ePortfolios are being used in Higher Education, not just for use in single studies, but are embedded into entire programs, so students can demonstrate the development of their skills and learning, and to value becoming a reflective practitioner. This paper describes a pilot research study that sets out to investigate the skills postgraduate students acquire and practice from producing an eportfolio as part of their degree program, and also if the skills continue to be used in the graduate’s professional work. The participants in the pilot study are graduates of the Master of Education, since many of them are already practicing teachers. After completing their degree, graduates are invited to allow their eportfolios to be analysed, and agree to be interviewed regarding their eportfolio skills and learning. The eportfolios and interview transcripts are being analysed using qualitative content analysis. This paper discusses some early observations made during the data collection, including participants’ attitudes to the final product, difficulties experienced by students in the design process, and the attributes of teachers more likely to carry their skills into the school classroom. After the data analysis is complete it is expected the outcomes of the study will inform the improvement of pre-service teacher and graduate teacher preparation through the refinement of the eportfolio embedment in degree programs, and to provide more information about the professional teaching practice of graduates of Higher Education. The ultimate goal is to have more information about the transference of positive learning skills from graduates to their professional work environments, many of which are school classrooms.

Introduction

ePortfolios are increasingly used in teacher education to help develop students to become 21st century self-reflective practitioners. However, little is known about whether the skills students gain in the process transfer to professional or school contexts. The study that is the subject of this paper began an investigation into whether the skills gained in creating an eportfolio by students in a teaching degree program transferred to their professional suite of skills as a reflective teacher, as well as for their work in the classroom.
Background

A recent advancement in the learning and development of children and adults is the advent of eportfolios to replace hard copy or paper-based portfolio creation. Adult and child learners are increasingly required to create eportfolios to demonstrate understanding of learning content and showcase achievements of development. More and more, academic teachers in Higher Education are requiring pre-service teachers to engage in reflective practice through the arrangement and production of an eportfolio. Also, professional organisations are beginning to expect portfolio evidence of achievement for professional standards. ePortfolios are seen to be a vehicle by which the maker uses intellectual and organizational skills to arrange artefacts of self-understood achievement to convince a viewer of their successful development in teaching and learning.

Discussion about eportfolios is becoming far-reaching in Higher Education, and longitudinal studies of their use in degree programs are starting to be reported as students and academics recognize the value of collecting artefacts of learning and reflecting on practice over time (Wetzel & Strudler, 2006). Gerber, Lewis and Northover (2009) describe a study of student perspectives to the introduction eportfolios into a degree program in New Zealand, which will survey students six times over a three year degree. Their early findings reinforce that we know many students struggle with the technology of the eportfolio, and some find it difficult to understand the learning value attached to eportfolio as an assessment ‘tool’. Chau and Cheng (2010) have warned similarly, that we should ensure we clearly state our theories of learning and the rationale for including eportfolios in our pedagogic practices.

At Charles Sturt University (CSU) in the Faculty of Education, two degree programs have intentionally embedded eportfolio into the stream of learning for the purposes of reflection, development, assessment, and ultimately, showcasing of learning (Stefani, Mason & Pegler, 2007):

1. An undergraduate degree, Bachelor of Education (Early Childhood & Primary), which is a four-year program, with the final stage of embedding the eportfolio into each year level nearing completion. There are graduates of the degree with the embedment at the end of 2013.
2. A postgraduate degree, Master of Education. This degree takes one to two years of study, with the embedment of eportfolio completed through compulsory coursework. Students begin an eportfolio as they begin their degree, and purposefully engage with it again at the end of the program. Students began graduating from this degree with the embedment during 2013, and current student evaluation surveys support the value of the reflective nature and interrogation of professional skills gained through the use of the eportfolio. The following quotation from a finishing student is an example of the type of feedback that prompted the research study:

   The ePortfolio provided an excellent platform for reflection and I enjoyed the overall process. The learning was fabulous and I have shared many thoughts and moments with colleagues at work.

   (Student communication, 4/06/13)
The degree programs use eportfolios to enable students to engage in a learning process that allows them to demonstrate their learning and achievement to peers, academic assessors, and the profession. The eportfolios used in the two degree programs are complex ‘tools’ in an online environment where students can do a number of different things:

- Create a plan for self-directed study
- Sustain a resume of study, skills and experiences
- Collect artefacts, supporting documentation and reflective statements about their achievements
- Manipulate the collection for various audiences
- Showcase the contents in a creative way

The program or online environment used at Charles Sturt University for students’ eportfolios is PebblePad Classic – students are able to collect artefacts and create complex web pages during the length of their degree study, and for one year after graduation.

The embedment has been carefully and thoughtfully designed: students submit a representation of their collected artefacts and evidence at specific points in the degree to convince an academic assessor of their achievements for different purposes. There is an expectation by the academic designers that by embedding eportfolios in their study program, the composite skills of the creators will continue into professional practice and, ultimately, into classrooms with young children.

**Theoretical framework**

The research paradigm overarching the pilot study is constructivist, positing “change is a nonlinear process that involves the infusion of new information and increased sophistication in its use into the constructions of involved human constructors” (Guba & Lincoln, 1989, p.109). The research study data collection and analysis comprise the “discovery” phase of constructivist evaluation, since eportfolios as well as the interview transcripts of the creators, the graduate students, will be interrogated to answer “what’s going on here” (Guba & Lincoln, 2001, p.2). The “assimilation” phase will have the outcomes of the study inform the improvement of pre-service teacher and graduate teacher preparation, enhance professional teaching practice, and identify the transference of positive learning skills to the professional learning environments of the graduates.

The eportfolio embedment at CSU is based on Constructivist theories of meaningful learning (Howland, Jonassen & Mara, 2012), since students are required to consider the development in their own learning, organize and demonstrate what they have achieved, and design a way to showcase the evidence through higher order thinking and reflective practice. The undergraduate degree is a four-year program and eportfolio has been purposefully embedded at each year level considering the four main purposes (Stefani, et al, 2007):
• 1st year purposes: Development/Showcase/Assessment – Students look forward to the graduate attributes and assess the abilities they bring to their University studies; they devise an Action Plan or Learning Contract to plan for experiences and learning beyond the University; they reflect on Course Outcomes and their first year progress towards accomplishment.

• 2nd year purposes – Reflection/Assessment – Students are engaged in their first practicum with teaching responsibilities, so they document their observations of the children and the classroom, and articulate their planning and evaluation; they reflect on the progress of their Action Plan and other self-directed learning.

• 3rd year purpose – Development – Students are provided with an interactive form which lists the National Standards for Graduating Teachers. They take responsibility to collect evidence and artefacts of their learning and achievement over the final two years of their degree.

• 4th year purpose – Showcase – Students select evidence and artefacts to create a webfolio that demonstrates their potential for leadership and to convince academics, peers, and prospective employers of their suitability as a professional teacher.

Currently, there is an assumption that, since the skills of creating eportfolios for different purposes within the degree program has great benefit for the student whilst they are studying, that the student will recognize the skills they’ve learned, continue to use these skills, and because their profession is, or will be, education, they will teach the skills to young children.

The need to bridge the gap between undergraduate study and the profession has been noted in studies on attitudes towards the use of eportfolios by students and staff (Challis, Holt & Rice, 2005). In a description of the implementation of an eportfolio over a 3-year course, Wylie (2005) has emphasized the need for graduating students to ensure they can measure themselves against professional standards and demonstrate themselves to be “work-ready”. A report by the Australian Learning & Teaching Council (ALTC, 2008) on the Australian ePortfolio Project notes “the development of initiatives that focus on the goals of employability skills and lifelong learning, not only to support workforce participation and mobility, but also to encourage the ongoing development of knowledge and skills within specific professions” (p.48), as a key context for the use of eportfolios.

The embedment of eportfolio in the Master of Education program is in a first compulsory subject, where students are required to demonstrate their acquired skills in higher degree study, including using ICTs and other technologies to facilitate their own learning and their current or future students. They also need to demonstrate their abilities to critically reflect, and they prepare and showcase their learning in a webfolio produced from a selection of their collected artefacts. Depending on the study specialization of the student, they may be required to continue to use the eportfolio in successive subjects, but all students know they will return to the eportfolio for assessment in the final compulsory capstone subject. In the final subject students engage in substantial reflection on their studies within the M.Ed and consider the contribution of this learning to their thinking as a professional educator and their progress and development within their career. They are particularly asked to consider any changes within their own practice and the profession more widely, and critically assess the issues that have contributed to these changes.
Research studies for eportfolios have usually collected data through surveys, semi-structured interviews, and case studies, and communities of practice have been organized through conferences and the national eportfolio project (ALTC, 2008). Although the embedding of eportfolios into degree programs at CSU is at an early stage, it is important to question whether the implementation is effective and providing valuable learning for students. We need to ask ourselves if we have developed appropriate methods to support learning, and can this learning be continued beyond the University degree (Dalziel, Challen & Sutherland, 2006).

Method

The study that is the subject of this paper is a small qualitative study collecting data from graduated students from the Master of Education degree. The data collection includes:

- eportfolios of students after completing their degree;
- interview transcripts of consenting participants, after the conclusion of the degree program.

The eportfolios and interview transcripts are being analysed using qualitative content analysis, which involves analyzing the content and text to understand the “motives, goals, intentions, or values” of the student authors (Gray et al, 2007). The data analysis aims to determine how the contents of the eportfolio shed light on the skills and learning of the students.

The participants are 10 graduating students who have completed the final subject of the Master of Education degree. As part of their final subject, Reflecting on education as a profession in the 21st century, the graduates were required to produce an eportfolio as a “capstone” collection and reflection of their learning throughout the degree program. Texts and images are also being analysed using qualitative content analysis method (Berg, 2001; Brandes & Boskic, 2008; Krippendorff, 2003).

Results

The analysis of the data is still underway and a deeper discussion is planned in a future publication. Early themes that are emerging are regarding participants’ attitudes to the final eportfolio; difficulties experienced by students explaining their design process; and, the attributes of teachers more likely to carry their skills into the school classroom.

Attitudes

The participants are extremely positive about the final product created as a showcase eportfolio at the culmination of their studies. This includes the process undertaken to develop the eportfolio from an early reflective tool at the beginning of their degree, which documents their development through to capstone eportfolio.
...it was really nice to have something else that I could put down my ideas [in] and bring everything together and I was quite happy with bringing this together and showing it in a different way and showing a different side to who you are... you get a different picture to [show] what your understanding [is] and it’s a different way to... express yourself and I was quite happy with using this medium... to be assessed on. I felt quite good about it...

(Graduate, A Personal communication, 18/10/13)

Look I think it’s a really good way... to demonstrate your learning... 8 subjects, there were often subjects there you’d do and you’d say “oh yea I’ve got that done”, this e-portfolio allowed me to go back and actually look at what I’d done and what I’d learnt and where the changes had occurred. So in terms of assessing my progress through the Masters I think that it was an excellent way to do that...

(Graduate B, Personal communication, 04/09/13)

Both graduates were reminded at the beginning of the interview that the study sought to find out their true feelings about the eportfolio itself, as well as the process students engaged in to create the final product.

As part of the first cycle of analysis the student’s emotions and feelings are being identified to “tap into the inner cognitive systems of participants” (Saldana, 2013). This is in order to go beyond the academic contents of the eportfolio. Yancey (2009) describes the use of eportfolio by Seton Hall University to focus on students’ development of noncognitive factors in an aid to retention. In this pilot study, graduates have used terms like “inspirational theorists”, “love to teach”, and “exciting avenues for learning” in their Introductions to the ePortfolios, which correlates to the measures of feelings of success and satisfaction referred to by Yancey.

Difficulties in expressing meta-reflection on design

During their study and the creation of the final eportfolio, the students are not given templates to fill, rather they are required to reflect on various aspects of their learning over the entire degree and provide evidence and artefacts to support their perceived development. They are provided with guidelines, a model of previous student work, and online tutorials on how to assemble a webfolio, the web eportfolio tool in PebblePad Classic required for submission. Students are encouraged to think about how best to present their work, and presentation has equal weighting with other criteria for assessment of their eportfolio.

Some participants have difficulty explaining their design process, since it requires meta-reflection during the interview. One of the questions being asked of participants is to talk about their process of designing their eportfolio. The responses to this aspect of the eportfolio are variable, with some students giving great detail regarding the plan, practice, research and design they did, while others struggle to articulate any ideas they recalled having when at the design point of creating the eportfolio.
In a recent study on meta-competence in Social Work students undertaking fieldwork practice, interviews were undertaken after students were engaged in a practice scenario (Bogo et al, 2013). The study found there was a great variation in students’ meta-competencies on three dimensions of their practice, which could be “described as exemplifying different levels of reflective capacity that ranged from in-depth, rich, textured discussions to those that were more superficial, scant, and concrete (p.268).” Similarly, the graduates in this small eportfolio study are showing variable abilities to meta-reflect on their decisions regarding the design process and aesthetic choices made in the planning of the eportfolio, even when meta-reflection on other aspects of the eportfolio are deep and thoughtful.

In a study specifically looking at the design practices for eportfolio by undergraduate teachers, Hartmann & Calandra (2007) describe a process where the pre-service teachers improved their design abilities by sharing work and seeing how other students solved problems of presentation and communication. Since students create the eportfolios in this study by studying at a distance and online, no consideration has been previously given by the academic teachers to providing opportunities to share work during the assembling period of the webfolio.

Teacher attributes for transfer of skills

Teachers more experienced in using technology in their teaching appear to be more aware of the higher order thinking afforded through the more complex online or mobile technologies or environments, and are already transferring those skills to their classrooms by having children use similar forms of learning in their daily work.

... those big powerful skills and behaviours like... what does it mean to be a collaborator or what does it mean to be a good thinker... we do set goals in terms of that kind of model... what does it mean to be a self manager, what does it mean to be a good neighbor, what does it mean to be a researcher; those types of things are really important... and they self assess themselves on that for sure. So yeah... they are using those critical thinking skills and we're trying to bed it into the majority of our units... through that enquiry... process.

(Graduate A, Personal communication, 18/10/2013)

This participant demonstrated a high level of accomplishment with the use of technology by embedding videos, images, and audio clips into the submitted eportfolio – including videos created with classroom children engaged with technology. The quotation shows the participant draws parallels between their own learning and the learning of children in the classroom.
Through online meetings, forum discussions and chat room dialogues, I have been engaged in informal learning opportunities and have gained very rich knowledge that will remain with me forever. More importantly, this learning will benefit my practice in teaching and leading, ultimately providing students with an enhanced opportunity to be successful.

(Graduate C, Student ePortfolio, 13/9/13)

This participant quotation reinforces the findings of McNair & Marshall (2006) that the process of construction and the eportfolio itself develops confidence. Now that the graduate has experienced different forms of technology in their own learning and recognized their value, they have the intention to bring more of these teaching strategies to their own classroom.

Discussion

Even though the eportfolio takes a lot of work and effort by the students throughout the Masters degree program, early indications are that the students believe it is worthwhile and have a positive attitude towards expending the time and energy to produce a high quality product. The two quotations from the two participants in the section on ‘attitudes’ above are representative of the views of other interviewees. Mildly negative attitudes have been noted from one or two participants with regard to limitations afforded by the format or virtual environment in which students are required to submit their eportfolio, but the process and product have been regarded in an overwhelmingly positive way.

The difficulty some participants demonstrated in meta-reflections on the design process of the eportfolio may have been due to the length of time elapsed between the creation of the eportfolio and the interview, since other aspects of the reflection in the interview yielded deep thought and articulation. If this outcome proves to be more prevalent throughout the remainder of the data analysis process, consideration may be given to re-interviewing some of the participants to seek more knowledge regarding this anomaly. The research study by Boga, et al. (2013) does suggest that students may have different depths of meta-competence and meta-reflections on different aspects of their learning and experience, and this may indeed be the explanation for this early outcome of the data collection. Academic teachers of the M.Ed students will also seek ways for students to share their progressive work in eportfolio creation – more models of possible design and sharing of ideas may affect future participants’ abilities to reflect on this aspect of the eportfolio.

With regard to the transfer of skills, early indications are that the more experienced the graduates have become with using the tools of technology in their own work, the more aware they are of the affordances for deeper learning with young children in their classrooms. The responses shown in the data reinforce the findings of Yancey (2009) that it is now a “research-based claim: that creating, evidencing, connecting, and reflecting involved in electronic portfolios engage students in new and beneficial ways”, and this current study is beginning to show that the skills gained do indeed transfer to graduate teachers work with young children in the classroom.
Conclusion

The contribution of this project is in advancing the success in learning and teaching at three levels: in pre-service and graduate teacher preparation; in the professional teaching practice of graduates of Higher Education; and the provision of more dynamic learning for children in classrooms. The final outcomes of the study will shed light on the skills gained in more complicated authentic and enriching tasks like eportfolio creation and design, and whether and how teachers recognize what they know will enable children in their classrooms to learn in a similar way.

Because this study engages participants who have been students, and are teachers, the outcomes of this study will provide an opportunity to inform practice in the near future. A more comprehensive and longer-term view will be possible when the current graduates of the undergraduate degree have moved into the teaching profession - a similar study with these participants may provide broader and more varied responses due to the longevity of the embedment of the eportfolio into their study.

As Doig et al (2006) remind us, “...we cannot expect that the mere availability or provision of an eportfolio within a structured environment will enable all students to write reflectively.” Likewise, we cannot expect that graduates of undergraduate teaching degrees will necessarily transfer the skills of creating an eportfolio for different purposes into their teaching with young children, and this needs to be explored.
References


To view this research paper in an electronic format please visit this link: www.pebblebash.co.uk/2014/resources/pdf/pb2014rp01.pdf
An eportfolio environment to enhance reflection in pre-service teachers: What worked, what didn’t and why?

Pauline Roberts
Faculty of Education, Murdoch University, AUS

Abstract

This research paper details some results of a doctoral study that was designed to enhance reflection in pre-service teachers by scaffolding an action research project within the eportfolio-based learning environment. It reports on a unit level implementation of the PebblePad eportfolio platform in a Western Australian university, and focuses specifically on the levels of student engagement when guided by prompts placed within PebblePad as part of a scaffolded learning environment. The paper also examines the barriers to engagement that were identified through the data collection. The key findings indicate that the students were most engaged with the prompts that had a direct link to assessment tasks, followed by the activity tasks that specifically focused on reflective writing. The primary barriers to engagement were identified as the students’ unfamiliarity with the platform and the timing of the introduction of the eportfolio. The research identified some recommendations for future implementation of such environments, specifically including a more integrated approach to the use of an eportfolio from the beginning of students’ degrees.

Introduction

Reflection is a difficult construct to define and develop, yet it is central to many courses in higher education, particularly those in the field of humanities that include teaching. For decades, pre-service teachers have been asked to reflect, typically using written formats, on both literature read as part of their courses and practical experiences gained whilst completing school-based placements. For students, reflection has been portrayed as an important tool for forming links between theory and practice as they complete their teaching degrees (McBride, Xiang, & Wittenburg, 2002).

Despite the ongoing focus on reflection, recent research has labeled the current attempts to develop the reflective abilities of pre-service teachers as superficial (Barton & Ryan, 2012). It has been identified, by several sources, that new methods to enhance reflection are required within higher education settings (Atherton, 2011; Boud, 2006). The advances in eportfolio platforms may offer a solution to this requirement, as they have the potential to be utilised as electronic learning environments. The PebblePad platform is designed as an individually-based learning environment and offers the templates and structures within the program that have reflection embedded within them. The platform has the capability to provide an integrated learning approach for students within which they can collect, collate and reflect upon a range of artefacts they collect throughout their degrees. It was this capability that led to PebblePad being trialed within this research study.
This research report details a unit-based application of the PebblePad platform that targeted the enhancement of reflection in pre-service teachers in a Western Australian university. The unit required the students to complete an action learning project in a topic area of their choice. The student projects were scaffolded via a series of prompts through an eportfolio-based learning environment within PebblePad. These prompts were placed within a Gateway Blog and provided (1) examples for the assignment submissions, (2) opportunities for the students to interact with one another, and (3) additional activities aimed at the development of reflective skills. The three areas of examples, interactions, and activities were implemented as an Enculturation Teaching Model proposed by Tishman, Jay, and Perkins (1993). The Enculturation Teaching Model was developed to promote higher order thinking abilities of students after it was identified that a disposition for thinking was required, rather than merely a set of skills. This work by Tishman and others (1993) on higher order thinking draws parallels with reflection, in that while students may understand and acquire the skills required for reflection, many may not be able to reflect effectively as they are not disposed to higher levels of reflection.

The implementation of the research followed the cyclic model of the eLearning lifecycle developed by Phillips, McNaught, and Kennedy (2011). This model was designed to provide a framework by which to develop and review electronic learning environments, and as such was applicable to the eportfolio-based learning environment implemented in the research study being discussed in this paper.

The focus of this research paper is the suitability of the prompt-based approach within the eportfolio-based learning environment for the scaffolding of reflection in pre-service teachers. It identifies the level of engagement within the platform based on the data collected through a mixed methods approach, and includes discussion of the barriers the students identified to their engagement with the platform. From these barriers, recommendations are made for the improvement of future implementations of this and similar ePortfolio-based learning platforms.

**Literature review**

In a conceptual review completed by Rogers (2001), no fewer than 15 terms were found within the literature to describe reflection. The concept of reflection can include reflective thinking (Dewey, 1933), reflective learning (Boyd & Fales, 1983), reflective teaching (Bailey, 1997), critical reflection (Mezirow, 1997), or mindfulness (Tremmel, 1993) depending on the focus of the author. There are some similarities across these ideas: most involve a sequence of levels or hierarchy of reflection, and most discuss the process as being based on a review of practice or experience. In researching reflection, it is important to clarify how the term ‘reflection’ is defined and identified at the commencement of the investigation.

For this research study, the key definition that was used came from the work of Dewey (1933) who defined reflection as “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions which it tends” (p. 9). A later definition that was also useful was that proposed by Tripp and Rich (2012) of “a self-critical, investigative process wherein teachers consider the effect of their pedagogical decisions on their situated practice with
the aim of improving those practices” (p. 678). These two definitions highlight reflection as a complex and active process based on the review of knowledge and experience within a given situation or setting.

The complexity of reflection has been identified as a contributor to the difficulties faced by institutions that aim to develop reflective practitioners. In education, reflective practice is seen as “important to preparing thinking practitioners who show that they can adapt” (Parkes, Dredger, & Hicks, 2013, p. 99). Teachers are educators whose role includes an expectation that they will transform young people, and to do this they “must possess the dispositions to teach the person” (Wenzlaff, 1998, p. 564, 565). This requires the ability to adapt to the increasing complexity of their roles (Hawkes, 2001) in “the rapidly changing knowledge society” (Gikandi, 2013, p. 8).

Despite the importance being given to reflection, the development of it within teacher development programs “fall[s] short in allowing opportunities for reflection” (Barak, 2006, p. 133). Many teacher education courses also do not always allocate enough time to effectively teach the required processes (Ryan, 2011).

Some researchers have identified the need for a significant change to the practices surrounding the development of reflection. They claim that, perhaps, what is needed is a complete review of how reflection is ‘taught’ within education settings. Atherton (2011) argues that the focus of reflection as an individual act is detrimental to learning as it does not encourage students to access possible ‘better ideas,’ and also reduces the attention to detail applied in the process of checking evidence. He concludes that reflection requires much more knowledge and experience than pre-service teachers possess and so is more suited to experienced practitioners (Atherton, 2011). A more balanced approach to the changing of reflective practice in higher education came from Boud (2006) who proposed that “the idea of reflection should be relocated in the context of practice” (p. 2). This viewpoint is supported by others who have identified the need for opportunities to be offered for authentic reflection that is based upon the students’ practice. Both of these perspectives suggest some form of disruption to the current practices towards the development of reflection.

One possible solution that could have positive effects is that of the electronic portfolio or eportfolio. Much of the research conducted to date on the use of eportfolios has focused on the platforms suitability for assessment purposes and demonstration of skills and evidence against required competency standards (MacEntee & Garii, 2010; Moran, Vozzo, Reid, Pietsch, & Hatton, 2013; vonKonsky, Oliver, & Ramdin, 2009). However, another rapidly growing area of research is the investigation of ways in which to utilize the capabilities of the platforms for learning (Barrett, 2005; Strampel & Oliver, 2010).

The electronic portfolio has increased in use throughout the developed world, and although much of the early research focused on assessment, more recent work has demonstrated potential to be used as a complete learning environment that contains several layers for different purposes (Housego & Parker, 2009; Stefani, Mason, & Pegler, 2007). The personal layers of the eportfolio, and the ability of these platforms to collect and collate evidence of practice, have demonstrated a capacity to use the platforms to enhance reflection in a more authentic way (Parkes et al., 2013; Raison & Pelliccione,
There does remain, however, the need to focus on “the pedagogy within which the ePortfolio is embedded” (Parkes et al., 2013, p. 99).

Environments such as PebblePad offer the opportunity to facilitate learning environments to students by allowing the provision of scaffolded tasks within the platform. These tasks can be developed and disseminated within the platform for the students to complete. In doing so, the students build upon their individual asset stores and develop artefacts that can be used for additional purposes into the future. Reflection is a central component of the PebblePad platform, and many of the templates are designed as a means of enhancing the reflective process for those who are engaged with it (Pebble Learning Ltd, n.d.). The difficulty remains, however, of how to further scaffold this process and engage learners with the platform.

Method

The methodology employed in this research study involved the implementation of the eLearning Lifecycle (Phillips et al., 2011). This framework was developed for utilization in the design and evaluation of electronic learning environments and was structured based on the ideals of both action and design-based research models (Phillips et al., 2011). The designers of the lifecycle describe it as being developed from a “pragmatic paradigm” which was “the most appropriate approach for evaluation research of the effectiveness of e-learning” because it used “the best features of each paradigm and applied them to the research problem being studied” (Phillips et al., 2011, p. 79). Figure 1 provides a visual representation of the stages of this model.

Figure 1: The stages of the eLearning Lifecycle (Phillips et al., 2011)
Although the model is shown here as a full cycle to be implemented in stages from Cycle 0 to Cycle 6, the framework was designed to be flexible. This was to allow the process to begin and end at any point within the pictured stages, depending on the requirements of the research being undertaken. For the research study discussed in this paper for example, Cycles 1 and 2 were expedited by the use of the existing PebblePad platform including the templates and Gateway provided, and adapting a pre-existing 4th year action research project unit to the eLearning environment. Cycle 3 was implemented with one cohort of students as the pilot study with changes made to the environment for a new student group the following year for Cycles 4, 5, and 6.

The pre-service teachers involved in the research were 4th year Bachelor of Education students completing either an early childhood or special needs minor as part of their final year of study. The cohort comprised of 80 students across two campuses of the university. There was a mix of mature age and younger students in the group with a predominantly female population.

The students were completing a compulsory unit of study for their degree that comprised of an action research project. This teaching unit was offered only in the external teaching mode with optional on-campus meetings held throughout the study period. In studying this unit, the students were required to select an area of their teaching practice they were concerned with, then complete an action research project towards improving this area. A requirement of the project was to visit a school setting for a minimum of 30 hours to implement the research project and reflect on the experience.

The students were required to complete the process and assessment pieces for their action research projects within the PebblePad platform. This was the first time the students had used the platform and for many, it was the first time they had completed an external unit within their Bachelor of Education degrees.

To provide the scaffolding to the students for both the use of the PebblePad platform and the newly introduced process of action research, a Gateway Blog was developed in the Resources section of the PebblePad environment. The version used in this research was PebblePad 2.0/Classic, which meant that there was limited flexibility with the formats available. Within this Gateway Blog, prompts were placed for the students to access as a scaffold for both their action research projects and the enhancement of reflection. The prompts were designed as either exemplar or activity in nature.

The exemplar prompts provided guidelines and step-by-step instructions for the completion of the required submissions within the PebblePad platform. In contrast, the activity prompts were not assessed as part of the action research project unit but were provided as stimulus for the enhancement of reflection. The activity prompts were designed after a review of literature into the development of reflection, and facilitated the areas identified by Colton and Sparks-Langer (1993) in their Framework for Teacher Reflection as being important to reflective practice. Table 1 provides the list of prompts provided to the students within the Gateway Blog with the source and purpose for each prompt included. The shaded rows of the table indicate those prompts that were provided to the students as exemplars to assist with assignment submission.
<table>
<thead>
<tr>
<th>Activity Prompt</th>
<th>Source</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflection on teachers</td>
<td>Phillips &amp; Carr, (2006)</td>
<td>The students are asked to describe and share what they think are the attributes of a good teacher.</td>
</tr>
<tr>
<td>Something to talk about</td>
<td>Previous experience</td>
<td>This prompt was designed to encourage the students to use the blog for discussion. It gave options to set up small discussion groups within the platform.</td>
</tr>
<tr>
<td>Reflective Journal as a Blog</td>
<td>Spalding &amp; Wilson (2002)</td>
<td>Reflective writing can promote reflective thinking because it is a permanent record of thinking, is an outlet for feelings, and can open up dialogue.</td>
</tr>
<tr>
<td>Plan/Rationale Outline</td>
<td>Previous experience</td>
<td>This was an outline for the assignment submission. It provided step-by-step instructions for the students to complete their assignments. It was designed to provide the format of the submission so the students could then focus on the content.</td>
</tr>
<tr>
<td>Time to refine</td>
<td></td>
<td>This activity was incorporated when there was a delay in placements to complete their projects. It was designed to provide them with guidance to continue to interact with the platform while they were waiting.</td>
</tr>
<tr>
<td>Adding ethics checklist</td>
<td>Student questions</td>
<td>The students were concerned with how to attach documentation to their submissions. This prompt gave the instructions of how to complete this action within the platform.</td>
</tr>
<tr>
<td>Progress report</td>
<td>Previous experience</td>
<td>This was the outline for the second assignment submission and was included for the same reasons as the Plan/Rationale prompt.</td>
</tr>
<tr>
<td>Uploading evidence</td>
<td>Student questions</td>
<td>This prompt was again added due to questions from students regarding how to utilize the uploading options of the platform.</td>
</tr>
<tr>
<td>Reflective writing review</td>
<td>QUT DRAW Project (2011)</td>
<td>This activity is a link to a platform for evaluating the level of reflection in student writing. Students completed these entries, and reflected on their writing against the determined criteria can make improvements to the writing.</td>
</tr>
<tr>
<td>Outline of 4R Framework</td>
<td>Ryan (2011)</td>
<td>This provided the graphic of the 4R framework mentioned in Prompt 9 for the students to use.</td>
</tr>
<tr>
<td>Prompt</td>
<td>Source</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Video Review</td>
<td>Jensen, Shepston, Connor, &amp; Killmer (1994)</td>
<td>The students will be asked to video or audio record a teaching experience and review their practice with the review statements. Permission must be gained before recording and only the students will view these recordings.</td>
</tr>
<tr>
<td>Verbal 3 step framework</td>
<td>Donaghy &amp; Morss (2007)</td>
<td>The students complete a mini action research cycle on one event in their experience. The process will be completed in the form of a verbal report to a peer for immediate feedback.</td>
</tr>
<tr>
<td>Reflective journal review</td>
<td>O’Connor &amp; Diggins (2002)</td>
<td>As the students begin to put their projects together, this prompt aims to get them to go back over their entries to add further detail or extra links to theory.</td>
</tr>
<tr>
<td>Conclusion questions</td>
<td>Phillips &amp; Carr (2006)</td>
<td>This will assist the students to bring their projects together and provide an overall review towards their concluding chapter. It is aimed at getting them to think about the bigger picture and to take the project beyond the focus of assessment.</td>
</tr>
<tr>
<td>Final report</td>
<td>Previous experience</td>
<td>As with the Plan/Rationale and Progress Report, this prompt gave the guidelines for the assignment submission.</td>
</tr>
<tr>
<td>Attachments</td>
<td>Student request</td>
<td>This provided students with instructions to upload evidence and forms required with their submissions.</td>
</tr>
</tbody>
</table>

Once all of the prompts had been provided and the students had completed their action research projects, a range of data collection methods were implemented. The data was collected to review the students’ perspectives on the effectiveness of the eportfolio-based learning environment and the impact this may have had on their levels of reflection. The data collection included an online survey, focus group and individual interviews, examination of usage log data from within the PebblePad platform, and the review of student work samples.

The data was reviewed using a constant comparative approach, firstly in terms of the a priori codes of exemplars, interactions, and activities, and then from the categories identified from further examination the student responses. Of the categories that were identified through this coding process, two key categories were selected as the focus of this paper. These were (1) the reported level of student engagement with the prompts in the environment and (2) the barriers to this engagement that the students identified. These categories provided insight into what worked within the ePortfolio learning environment, what did not work, and why.
Results

A number of results were determined from the data analysis in terms of the effectiveness of the eportfolio-based learning environment. The key data sources for the two focus areas of (1) engagement and (2) barriers were the usage statistics from within the PebblePad platform and the results of the online survey, as well as the feedback gained through the focus group and individual interviews.

Firstly, in terms of engagement with the prompts, the online survey results highlighted the level of utilisation the students reported with each of the provided prompts in the completion of their action research projects. These percentages were considered a determinant of the level of student engagement with the eportfolio-based learning environment. Table 2 provides the percentages of reported use of the prompts by the students who ranked their use on a provided Likert scale. These results were based on 25 student responses from the total student cohort that equated to a return rate of 32%.

Table 2: Reported percentage of use of prompts

<table>
<thead>
<tr>
<th>Prompt</th>
<th>Didn't Look</th>
<th>Read only</th>
<th>Read and Used in project</th>
<th>Read and completed</th>
<th>Shared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflection on teachers</td>
<td>46.7</td>
<td>46.7</td>
<td>6.7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Something to talk about</td>
<td>33.3</td>
<td>60</td>
<td>6.7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reflective Journal as a Blog</td>
<td>26.7</td>
<td>53.3</td>
<td>6.7</td>
<td>13.3</td>
<td>0</td>
</tr>
<tr>
<td>Plan/Rationale Outline</td>
<td>6.7</td>
<td>13.3</td>
<td>66.7</td>
<td>13.3</td>
<td>0</td>
</tr>
<tr>
<td>Time to refine</td>
<td>40</td>
<td>40</td>
<td>13.3</td>
<td>6.7</td>
<td>0</td>
</tr>
<tr>
<td>Adding ethics checklist</td>
<td>6.7</td>
<td>6.7</td>
<td>60</td>
<td>26.7</td>
<td>0</td>
</tr>
<tr>
<td>Progress report</td>
<td>0</td>
<td>6.7</td>
<td>66.7</td>
<td>26.7</td>
<td>0</td>
</tr>
<tr>
<td>Uploading evidence</td>
<td>0</td>
<td>7.1</td>
<td>57.1</td>
<td>35.7</td>
<td>0</td>
</tr>
<tr>
<td>Reflective writing review</td>
<td>0</td>
<td>42.9</td>
<td>42.9</td>
<td>14.3</td>
<td>0</td>
</tr>
<tr>
<td>Outline of 4R Framework</td>
<td>6.7</td>
<td>33.3</td>
<td>60</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Video Review</td>
<td>46.7</td>
<td>53.3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Verbal 3 step framework</td>
<td>42.9</td>
<td>57.1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reflective journal review</td>
<td>20</td>
<td>60</td>
<td>13.3</td>
<td>6.7</td>
<td>0</td>
</tr>
<tr>
<td>Conclusion questions</td>
<td>26.7</td>
<td>26.7</td>
<td>40</td>
<td>6.7</td>
<td>0</td>
</tr>
<tr>
<td>Final report</td>
<td>0</td>
<td>0</td>
<td>73.3</td>
<td>26.7</td>
<td>0</td>
</tr>
<tr>
<td>Attachments</td>
<td>0</td>
<td>21.4</td>
<td>42.9</td>
<td>35.7</td>
<td>0</td>
</tr>
</tbody>
</table>

This table shows that the students reported much higher levels of usage of the exemplar prompts (the shaded sections) as opposed to the activity prompts. By combining the reported use of the prompts for the scale items ‘read and used in project’ and ‘read and
completed activity’ the exemplar prompts had an average reported usage rate of 82.6%, while only an average of 21.2% of usage was reported for the activity prompts. These figures were supported by the data collected from the usage statistics generated within the PebblePad platform.

The graph of the assets created by the student cohort (Figure 2) indicated the full student cohort created 250 *Webfolios*. This was the asset type students were directed to use for the three assignment submissions. This was within expectation for 80 students (80 x 3 = 240).

Further support for the use of the exemplar prompts came from the focus group and individual interviews in which many students commented on the value of these prompts for the completion of their assignments.

“If that (the exemplar prompts) didn’t happen [they] would have been lost and…would have been panicking.”

(Focus Group Interview 2)

“[The prompts stopped me] getting really stuck on the layout of the assignment[s].”

(R- LMS Post)

Further examination of the data concerning the activity prompts revealed that the students reported being more engaged with those relating specifically to reflective writing. The higher percentages of reported use of the exemplar prompts were:
Reflective writing review – 57.2%
Outline of 4R framework – 60%
Reflective journal review – 20%

These three prompts provided the students with a model for the hierarchical levels of reflective writing developed as part of the Developing Reflective Approaches to Writing project (DRAW) completed by Queensland University of Technology (QUT). Students highlighted these prompts as being beneficial to the completion of their projects. Many students who responded to the online survey, or were interviewed, specifically mentioned the 4R framework as being the most useful of the prompts that were provided, and indicated it would have been valuable to have from the beginning of their studies.

“It gave precise details of how to reflect.”

(H24 - Online Survey)

“I think that (the 4R model) had a big impact in making it (reflection) improve because throughout the past, like, in all the different units, they told us how to reflect and gave us little things that we are supposed to do but they didn’t actually explain like how to properly do it.”

(Ta – Individual Interview)

The use of these prompts by the students demonstrates that the prompts placed in the Gateway Blog were an effective format for the dissemination of the examples and activities. There was, however, feedback on why the usage of these prompts was not as high as hoped. These aspects also needed to be examined.

Despite the reported use of the prompts placed within the environment, there were a number of barriers to engagement identified by the student group. These barriers prevented the students from becoming fully engaged with the eportfolio-based learning environment and the PebblePad platform. The main barriers were identified as the difference of the PebblePad platform to others the students were more familiar with, and the timing of the implementation in their final year of study.

The Webfolio template was chosen for the assignment submissions within the PebblePad platform as it offered formatting options that were very similar to those found in Microsoft Word. Despite this, the students did not use the platform for the drafting of their reflective journals and assignment submissions. This was evidenced by the usage statistics (Figure 2) and the responses given in the interviews.

Figure 2 detailed the assets created by the student group and showed that 104 Blogs were created by the student cohort. This figure was encouraging until further examination of the graph showed that only 282 Thoughts were created by this same group. As each item that is added to a student blog is also recorded as a Thought, this number (282) indicated a limited use of the Blogs once they had been created. In the interviews the students reported that they had set up the blogs within PebblePad as directed in the Reflective Journal as a Blog prompt, but then completed their journals either as handwritten notes or as typed documents in other platforms.
The use of other platforms was also evidenced by the number of File uploads attributed to the student cohort. The 80 students in the group uploaded 849 files during the study period, with the most prevalent format being Word documents (453 .doc or .docx). During interviews, students reported that they used Word to draft their work and then would either upload the file directly to PebblePad or use a ‘copy and paste’ action to transfer the text into their Webfolio asset template.

“I did it all in a Word document and then just copied and pasted it.”

(Focus Group Interview 2)

The use of other platforms in this way reduced the amount of time the students spent within the PebblePad platform thus further reducing their engagement with the options and affordances the environment provided. It also reinforced the difficulty in requiring students to learn a new platform in the last year of their degree.

A major barrier that the students identified to their level of engagement within the PebblePad platform, and the structure of the eportfolio itself, was that it was introduced at such a late stage in their degrees. Many students commented that if they had of used the platform from first year they would have been more comfortable in using it and therefore engaged with it more fully.

“I found the use of PebblePad quite frustrating. I would have preferred to use PebblePad prior to my last year of uni rather than have another hurdle to try and overcome.”

(M- email feedback)

“Take on such a program as PebblePad university wide…This would allow more time for students to actually practice refining their reflective thought and practicing this before entering the “real world”. “

(A14- Online Survey)

The use of the eportfolio at this point in the students’ degrees had an impact on the results of the research study. It did, however, provide some encouraging findings on the effectiveness of the eportfolio-based learning environment.

The data collected showed that the provision of the prompts was effective in that the students were able to access the tasks and complete the activities as defined in the prompt. The focus on the prompts for the assessment tasks, followed by those related to reflective writing, reinforce the need for a scaffolded approach to these practices. The barriers identified, however, need to be addressed for the future success of this type of eportfolio-based learning environment.
Discussion

The results examined in this research showed positive trends for the use of a prompt-based approach to scaffolding learning in an eportfolio environment. The usage of the prompts within the platform by the students demonstrated that the medium for sharing these prompts was effective. The students were able to access the prompts within the Gateway Blog and the exemplar prompts, in particular, provided clear examples to the students and assisted them in the completion of assignments within the PebblePad platform.

Although the students reported higher levels of engagement with the exemplar prompts, those classified as ‘activity’ were read by a percentage of the cohort. The tendency of students to focus primarily on the assessment tasks within the environment is a common problem in online learning and requires further examination of how to motivate students to complete tasks they view as extra. Particularly with online learning tasks, students need to identify the value of the task to their learning to begin to engage with that task (Chmielewski, 2010). A more structured approach that embeds the eportfolio within more of the students’ practice may assist with this.

The current version of the PebblePad platform can continue to facilitate this structured approach through a scaffolded environment utilising Workbooks. These multi-layered resource templates allow tutors to provide ongoing support and learning tasks to students on a weekly or fortnightly basis. The students could work through the tasks as part of action learning projects similar to the one implemented in this project, or a range of other process and content areas. The ongoing use of the platform in this way would increase the time spent within the eportfolio. This, in turn, may provide the students’ with more confidence in using the platform. For the continued success of these environments, however, some adjustments need to be made to address the barriers identified from the data analysis.

The barriers the students reported in this research study could perhaps be overcome through a more integrated implementation of the platform from earlier in the students’ degrees. If the students used the PebblePad platform from their first unit of study when entering university, and developed their study habits within this learning space, they may be more comfortable and confident using the platform and would develop a much more comprehensive asset store throughout their studies.

Research has shown that students are reluctant to use platforms that differ even slightly from the Word formats they are most used to (Janosik & Frank, 2013). Even though the Webfolio template was used (as it was the closest to Word) the students showed a preference for drafting in Microsoft Word and then uploading or completing a ‘cut and paste’ action with their text. If the students used the platform in an integrated way as they were developing their tertiary study habits, they may begin to view the processes within PebblePad as ‘normal’ and internalize the formats and structures more easily.

An integrated holistic approach would also alleviate the concerns over the timing of the introduction of the platform. If students began using PebblePad from the first semester of their degrees, by the time they completed their final year, they would have a whole
repository of documentation of their learning and development. This large resource store could then provide the evidence that may be required for employment or further study. This collection would also remain as a reference library for the students as they continue to develop as teaching professionals, and possibly be used for promotion in the future.

This integrated approach is recommended by much of the research in this area (Beishuizen et al., 2006; Hallam et al., 2010; Hiller et al., 2007). To be successful, however, such an implementation requires support from all levels of the university (Hallam et al., 2010; Lorenzo & Ittelson, 2005; Plaza, Draugalis, Slack, Skrepnek, & Sauer, 2007).

Based on the results of this research study, the key recommendations for future implementation of eportfolio-based learning environments using the PebblePad platform in higher education settings include:

1. Implementation of the eportfolio in as many units as possible throughout the degree starting from the first year the students begin their studies;
2. The embedding of as many tasks as possible within the eportfolio platform.

To specifically enhance reflection in pre-service teachers, the results support:

1. The utilization of the enculturation teaching approach incorporating exemplars, interaction, and activities with the Workbook offered to encourage students to gain not only the skills of reflection but also dispositions of reflective practitioners;
2. Structured scaffolding of the processes of reflective writing.

Through the implementation of the PebblePad platform, in the way outlined above, it is believed student engagement would increase and with it the success of any scaffolding processes implemented. This scaffolding could continue to be applied to enhance not only reflection, but other process or content areas within a range of degree programs.
References


To view this research paper in an electronic format please visit this link: www.pebblebash.co.uk/2014/resources/pdf/pb2014rp02.pdf
Engineering
Talk the talk: Finding the language of the eportfolio

Heather Pate
Centre for Learning and Development, Edith Cowan University, AUS

Abstract

The design of eportfolios in Australian universities has traditionally been focussed in the social sciences and liberal arts, leading to a use of language within eportfolio systems that is specific to these fields. This enforced language can act to discourage students, and as a result staff, from alternative fields taking an eportfolio platform on board. This paper analyses what reflective language items are used in the field of engineering and how this differs from the language of other fields. We discuss how the issue of differing expectations may be resolved to effectively support student learning outcomes in an engineering course allowing eportfolios to be more readily introduced into a new program. It is concluded that the language of eportfolios must be adapted to suit the needs of the discipline.

Introduction

Reflection is understood to be central to the use of eportfolios (Riedinger, 2006). By providing a scaffolded opportunity for students to achieve higher order thinking skills, eportfolios can empower students to take responsibility for their own learning (Stefani, Mason & Pegler, 2007). PebblePad is no exception to this. Sutherland, Brotchie and Chesney (2011) state that PebblePad's "inbuilt reflective structure is what transforms PebblePad into a space where learning is generated rather than simply collected and evidenced" (p.24).

Specific reflective techniques are built directly into a number of the templates in PebblePad. These include a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis in the Action Plan and a reflection template that is What? So what? Now what? These reflections, however, are not generic. Rather, they come from particular fields: The SWOT analysis from the field of business and the So what? reflection from the field of education.

The ability to reflect has long been understood to be an important area of learning in professional fields (Schön, 1987). However, in engineering there tends to be a negative attitude towards writing in general and ‘reflection’ specifically (Faulkner & Azin, 2011). Engineering is frequently seen by students as a practical or real world skill. Writing, meanwhile, is seen as a school skill that does not have a practical application for the profession of engineering (Beer, 2002). Reflection is frequently seen as a pointless exercise. This can be seen in the feedback Faulkner and Azin (2011) received following the introduction of a reflective task, “I really don’t see how writing a blog will make me an engineer” (p.13) and is telling of the problems many face in asking engineering students to reflect on their work.
Despite this opposition to reflection, within Engineering Australia (EA) Competencies (2011) graduating students must demonstrate that they are able to evaluate their own engineering and professional skills. In fact, reflection is addressed specifically as a skill that must be demonstrated in items 3.5a and 3.5e (Engineers Australia, 2011):

3.5a. Demonstrates commitment to critical self-review and performance evaluation against appropriate criteria

3.5e. Thinks critically and applies an appropriate balance of logic and intellectual criteria to analysis, judgment and decision making

The need to develop reflective skills and to record the progression of an engineering student’s professional competencies make an eportfolio system an extremely useful tool to provide engineering students a way to gain an independent understanding of their skills and professional development. However, the success of introducing an eportfolio system for this use hinges on student acceptance of it. To implement an eportfolio system in an engineering department, it is important to understand why so many engineering students dismiss the idea of reflection and look for a solution to this dilemma.

**Method**

ePortfolios were introduced to 177 first year engineering students at an Australian university as a way for students to improve their writing, presentation, and employability skills. Students were asked to use PebblePad to create a three-page webfolio. The first page was to be used for students to introduce themselves and the webfolio. The second page asked the students to present evidence of completion of their Practical Project, which was a group work task completed during the semester. The final page required students to demonstrate Evidence of Skills Developed. To complete this final page, students were asked to provide evidence of team work, and consideration of safety, ethics, and sustainability throughout the semester. Being able to demonstrate each of these skills is a requirement for the Professional Competencies for Australian Engineers (EA, 2011).

The students’ webfolios were assessed using a feedback template (Appendix 1), marked on the following criteria: Practical Project documentation; Evidence of skills developed - sustainability, safety, ethics, teamwork; Writing and proofreading; and Presentation. Each criterion was given a mark out of five, with marks being combined to give a final mark out of twenty. There was space for a comment for each criterion and an additional space was provided for general feedback. The assessment was marked by communication laboratory tutors using the feedback template within ATLAS.

After ensuring the anonymity of the students and tutors, a text analysis was run on the language provided by the tutors on the completed feedback sheets to determine to what extent reflection was expected to have been produced by the students. Using a list of action verbs devised from Bloom’s Taxonomy of Learning (Clemson University, 2013), reflective language items were identified within each of Bloom’s progressively complex cognitive domains: knowledge, comprehension, application, analysis, synthesis and evaluation. To ensure that all formations of the word were included in the analysis, the
reflective language items were searched according to their word stems (see Appendix 2). The word ‘reflect’ was not listed in the Clemson University list of verbs. For the purpose of this study, reflection is assumed to sit at the highest of Bloom’s thinking skill level of ‘evaluation’. The word stem ‘assess’ was removed to avoid possible confusion with the idea of ‘assessment task’. When ‘critical’ appeared alongside the word ‘reflection’ it was removed, to prevent doubling up of results. (Appendix 2).

To compare the reflective language used by the university tutors with that of Engineers Australia, the text of EA Professional Competencies (2011) was analysed for the same language items. In order to examine what differences there might be between the expectations of graduating engineers and a different profession, the language of the Western Australian Department of Education and Training (WA DET) (2004) Competency Framework for Teachers was also analysed.

Results

In the webfolio feedback provided by the tutors, reflective language items accounted for 1.464% of words used. The largest number of reflective language words that were used were found in the lowest of the thinking order skills from Bloom’s Taxonomy of Learning: Knowledge. Words requiring reflective processes that were most frequently used from this list were ‘describe’ (0.368%), ‘discuss’ (0.654%) and, from the comprehension skill, ‘explain’ (0.193%). Words from the knowledge skill accounted for 1.0588% of the words used in the feedback (see Graph 1).

The tutor feedback for the first year ePortfolios used fewer reflective language items than both of the two professional competency documents: the Engineering Professional Competencies (Engineers Australia, 2011) and the Western Australian Competency framework for teachers (WA DET, 2004). These two competency documents used a very similar percentage of reflective language items, with reflective terms accounting for 2.852% of the EA Competencies vocabulary items and 2.784% of the Teaching Competency Framework vocabulary items. In both competency documents, the greatest number of reflective terms was found to be in the highest thinking skill of evaluation (see Figure 1).
Individual language items that were frequently used by Engineers Australia (2011) are analyse (0.428%), plan (0.321%) and evaluate (0.214%). The words that were most frequently used by the WA Department of Education (2004) were relate (0.225%) critical (when used independently from the item ‘reflect’) (0.538%), plan (0.361%) and reflect (0.281%). Two language items appear in only one of the competency documents: ‘Justify’, which accounts for 0.178% of the words in the EA competency and ‘reflect’, which accounts for 0.281% of the words in the WA DET competency (see Table 1). In Figure 2, the term ‘reflect’ is excluded from Bloom’s taxonomy and treated as an independent item.
Table 1: Most commonly used reflective words in the eportfolio feedback, EA (2011) competencies, WA DET (2004) competencies. Items appearing over 0.20% of the time appear in bold.

<table>
<thead>
<tr>
<th>Term</th>
<th>Bloom</th>
<th>ePort Feedback %</th>
<th>EA Comp %</th>
<th>Teacher Comp %</th>
</tr>
</thead>
<tbody>
<tr>
<td>descr*</td>
<td>K</td>
<td>0.368</td>
<td>0.107</td>
<td>0.265</td>
</tr>
<tr>
<td>discus*</td>
<td>K</td>
<td>0.654</td>
<td>0.036</td>
<td>0.040</td>
</tr>
<tr>
<td>identi*</td>
<td>K</td>
<td>0.009</td>
<td>0.428</td>
<td>0.233</td>
</tr>
<tr>
<td>expla*</td>
<td>C</td>
<td>0.193</td>
<td>0</td>
<td>0.040</td>
</tr>
<tr>
<td>analy*</td>
<td>A</td>
<td>0.009</td>
<td>0.428</td>
<td>0.128</td>
</tr>
<tr>
<td>critical*</td>
<td>A</td>
<td>0</td>
<td>0.214</td>
<td>0.538</td>
</tr>
<tr>
<td>plan*</td>
<td>S</td>
<td>0.073</td>
<td>0.321</td>
<td>0.361</td>
</tr>
<tr>
<td>Assess</td>
<td>E</td>
<td>0.147</td>
<td>0.214</td>
<td>0.682</td>
</tr>
<tr>
<td>evaluat*</td>
<td>E</td>
<td>0</td>
<td>0.214</td>
<td>0.096</td>
</tr>
<tr>
<td>interpret*</td>
<td>E</td>
<td>0</td>
<td>0.178</td>
<td>0.048</td>
</tr>
<tr>
<td>justif*</td>
<td>E</td>
<td>0</td>
<td>0.178</td>
<td>0</td>
</tr>
<tr>
<td>relat*</td>
<td>E</td>
<td>0.037</td>
<td>0.143</td>
<td>0.225</td>
</tr>
<tr>
<td>reflect*</td>
<td>N/A</td>
<td>0</td>
<td>0</td>
<td>0.281</td>
</tr>
<tr>
<td>Conclusion questions</td>
<td>26.7</td>
<td>26.7</td>
<td>40</td>
<td>6.7</td>
</tr>
<tr>
<td>Final report</td>
<td>0</td>
<td>0</td>
<td>73.3</td>
<td>26.7</td>
</tr>
<tr>
<td>Attachments</td>
<td>0</td>
<td>21.4</td>
<td>42.9</td>
<td>35.7</td>
</tr>
</tbody>
</table>

Figure 2: Per cent of reflective words used 'reflect' as single item
Discussion

The analysis of the EA Competency document and the WA DET Competency Framework reveals that at the graduate level, the reflective skills required of engineering and education students are comparable. However, many of the language items that are used to express this skill differ. It is interesting that two of these words are not represented at all in the alternate competency: justify and reflect. Given the importance of the word ‘reflect’ in the use of eportfolios, its absence in both the EA competency and the ePortfolio Feedback is particularly noteworthy. This is demonstrated in Figure 2, where the single item ‘reflect’ is treated separately.

The reflective language used by the tutors is interesting in that it is provided at a much lower level than the two competency documents. To some extent, this is to be expected for feedback that is provided to first year students’ work, as students are still learning engineering principles. However, it also reveals a need for staff to be aware of what the reflective requirements are for students to achieve professional engineering competencies. Students should be explicitly taught how to reflect appropriately in the field of engineering with increasing complexity throughout an engineering course. Specifically, students should be taught how to identify, analyse, plan, assess and evaluate in the context of engineering. By using these terms explicitly in the phrasing of the assessment task and on the feedback template, students can be guided through this process. Making these reflective expectations clear would further support communication tutors in marking student work.

Conclusion

An eportfolio is undoubtedly a useful tool to assist engineering students throughout their studies as they aim to meet the competency requirements of their field. However, it is important that the language of the profession is used. By replacing language from alternate fields that may lead to resistance from students, such as reflect, with language that is required within their field, students can take ownership of their learning and achievements. It is only once students recognise that the eportfolio system links directly to their future profession that it will be accepted as a valuable part of their studies.
References


Appendix 1: Sample of feedback sheet provided to students.

ePortfolio Feedback

The main aim of this ePortfolio is to show that you have reflected on your learning over the semester in the context of your future career.

ePortfolio objectives:
- List objectives here

ePortfolio components
- Portfolio introduction
- Practical project documentation with evidence
- Evidence of skills developed with evidence

Practical Project documentation
How clearly did you communicate the project task and your design solution—both your description of how it works and how well it performed during the competition? How well did you link the unit concepts to the project process?

Elements:
1. Solution description
2. Plan/photograph/slide
3. Link between project and unit topics

Insufficient: 0 1 2 3 4 5 excellent

Comments
A photo of your vehicle would have been good here. You need to openly show the links between the project and unit topics.

Evidence of skills developed
How well did you explain the evidence of skills you developed for each project? How clearly did you link these skills to the learning outcomes specified? How well did you explain these ideas in terms of your professional growth?

Elements:
1. Evidence of sustainable design
2. Evidence of safety and/or ethics in design
3. Evidence of teamwork

Insufficient: 0 1 2 3 4 5 excellent

Comments
This is not detailed enough to adequately cover the requirements of the rubric.

Writing and proofreading
How well did you express your ideas? Is the style of your writing appropriate to the task? Did you use specific enough vocabulary and clear sentence structure? Is your writing free from grammatical errors, and is spelling and punctuation correct?

Insufficient: 0 1 2 3 4 5 excellent

Comments
Well done.

Presentation
How thoughtfully did you structure your e-portfolio? Is it easy to read and navigate? Did you use graphics, multimedia wisely? How well did you organise your descriptions? Does each one have a topic sentence, and is it easy to follow? Have you communicated the ideas to the audience clearly and made it interesting? Is it appropriate for a professional audience?

Insufficient: 0 1 2 3 4 5 excellent
## Appendix 2: Blooms Taxonomy assessment

<table>
<thead>
<tr>
<th>Language item</th>
<th>ENG Feedback</th>
<th>EA Comp</th>
<th>Teacher Comp</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Times used</td>
<td>%</td>
<td>Times used</td>
<td>%</td>
</tr>
<tr>
<td>Blooms Taxonomy: Level 1 - Knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>descr*</td>
<td>40</td>
<td>0.3682902</td>
<td>3</td>
<td>0.106951872</td>
</tr>
<tr>
<td>discus*</td>
<td>71</td>
<td>0.6537151</td>
<td>1</td>
<td>0.035650624</td>
</tr>
<tr>
<td>identi*</td>
<td>1</td>
<td>0.0092073</td>
<td>12</td>
<td>0.427807487</td>
</tr>
<tr>
<td>outlin*</td>
<td>3</td>
<td>0.0276218</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>recogni*</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.035650624</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>115</strong></td>
<td><strong>1.0588344</strong></td>
<td><strong>17</strong></td>
<td><strong>0.606060606</strong></td>
</tr>
<tr>
<td>Blooms Taxonomy: Level 2 - Comprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>demonstr*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>disting*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>expla*</td>
<td>21</td>
<td>0.1933524</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Express</td>
<td>5</td>
<td>0.0460363</td>
<td>2</td>
<td>0.071301248</td>
</tr>
<tr>
<td>Extend</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>review*</td>
<td>4</td>
<td>0.0368290</td>
<td>1</td>
<td>0.035650624</td>
</tr>
<tr>
<td>summar*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>0.2762177</strong></td>
<td><strong>3</strong></td>
<td><strong>0.106951872</strong></td>
</tr>
<tr>
<td>Blooms Taxonomy: Level 3 - Application</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>apply*</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.035650624</td>
</tr>
<tr>
<td>predict*</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0.071301248</td>
</tr>
<tr>
<td>solv*</td>
<td>1</td>
<td>0.0092073</td>
<td>4</td>
<td>0.142602496</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1</strong></td>
<td><strong>0.0092073</strong></td>
<td><strong>7</strong></td>
<td><strong>0.249554367</strong></td>
</tr>
<tr>
<td>Blooms Taxonomy: Level 4 - Analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>analy*</td>
<td>1</td>
<td>0.0092073</td>
<td>12</td>
<td>0.427807487</td>
</tr>
<tr>
<td>critical*</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0.213903743</td>
</tr>
<tr>
<td>differenti*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>illust*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>infer*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>question*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1</strong></td>
<td><strong>0.0092073</strong></td>
<td><strong>18</strong></td>
<td><strong>0.64171123</strong></td>
</tr>
</tbody>
</table>
To view this research paper in an electronic format please visit this link:
www.pebblebash.co.uk/2014/resources/pdf/pb2014rp03.pdf
Part Two

∞

Case studies
Computing
Moving from paper to PebblePad: Connecting students, practicum supervisors, and instructors

Yusuke Ishimura
School of Computer and Security Science, Edith Cowan University, AUS

Chosen theme(s)

Programme curriculum
Professional learning and accreditation

The context

This case study is based on my experience in teaching graduate diploma students in Information Science. The aim of the diploma programme is to educate future information professionals who work in, for example, academic, public, and school libraries, archives, government organisations, and corporate information centres. The programme is accredited by the Australian Library and Information Association (ALIA) and is offered fully online. Information professionals must have theoretical knowledge of information organisation and retrieval for providing information services and instruction to users. In addition, applied practice is an important component for students to develop professional skills.

As a part of the degree requirement, all students must complete 2 practica during their study, which are allocated as assessments in 2 core units. They complete 60 hours in a work placement in different types of information organisations under the supervision of qualified professionals. During the practicum, students are required to keep practicum diaries, obtain evaluations from the supervisors, and produce practicum reports.

Traditionally, the information profession attracts many female students. ECU’s programme enrolls roughly 85% female and 15% male students. Some of them have been working in industry for a certain amount of time and are seeking opportunities to advance their careers as information professionals. In addition, some students apply for the programme to build a career. Thus, it is not common for students to enrol in our programme immediately after completing an undergraduate degree. Many are mature-aged students with some type of work experience.

How it was …

The basic structure of the practicum component in the curriculum has not changed. However, in the past, all of the relevant documentation, specifically the practicum handbook, practicum diary, and supervisors’ assessment, were paper-based. However, this approach has several limitations.
One key disadvantage of the paper-based approach is that instructors were not able to monitor the practicum experience; they only got information about it at the end of the practicum. It was challenging in that situation to be aware of the nature and progress of work students were engaging in and what kind of knowledge and experience they obtained. In addition, a paper-based practicum diary is a very static medium that simply contains a text listing of what students have done. It does not reflect the more dynamic and interesting experiences that students have.

It is important for students to share their ongoing pre-professional experience as a part of their professional development. This also provides a great opportunity for practitioners to develop supervision skills and learn new skills. That is why I decided to implement a new way to capture students’ experience and to allow for more effective monitoring and sharing.

The approach

My first implementation of PebblePad was in a final year unit offered in July 2013 in which one of the mandatory practica was scheduled. The first step was to shift all documentation from paper to the electronic environment. The practicum handbook, diary, and appraisal forms were created as pages in PebblePad. The practicum handbook was created using a Workbook template. The handbook is a gateway to all necessary information for the practicum such as basic information about the structure, workload, and workplace safety issues (Appendix 1). In addition to this information, forms and assignment guidelines were included as PDF documents for students to download if they wished. The handbook was to be shared with students’ supervisors by using PebblePad’s sharing function so that the supervisors could see the content.

During the practicum, students recorded their daily activities using the daily duty sheet, which used the Activity log tool (Appendix 2). Students logged the hours they engaged in their work. Students were encouraged to add images to the entries to give a richer documentation of the experience. These entries were a good foundation for the final practicum report, and each entry was monitored and approved by the practicum supervisor. The unit instructor also regularly checked students’ performance to ensure that all was going well. In order for supervisors (not affiliated with ECU) to evaluate students’ diary entries, they were given access to ATLAS, added as external members. Then, students and their supervisors are paired using the Sets functionality. This process also enabled the supervisors to evaluate students’ practicum performance, as described below.

After the practicum period had finished, supervisors evaluated students’ performance using an assessment form (Appendix 3). The form was created using PebblePad’s template builder. Students’ performance in areas such as communication skills and professionalism were assessed, and supervisors provided an overall evaluation with comments. As unit instructor, I checked the assessments first and returned them to students via PebblePad by releasing feedback.
How it is now ....

Although the curriculum is essentially unchanged, PebblePad has facilitated engagement among students, practicum supervisors, and the instructor, making the practicum experience more dynamic and efficient. It allows students to make a portfolio out of the practicum experience that is more appropriate for the programme’s professional development goals. This is consistent with ALIA's recommendations.

The Benefits

One of the main benefits of using PebblePad is that it has enabled a streamlined process for practicum students and supervisors. All content is digitally managed and any changes were immediately reflected without any difficulties. Keeping up-to-date information is very important. All documentation is in one place alongside the actual diaries and evaluation forms.

I believe that implementing PebblePad has helped students to realise more self-directed and independent learning for the profession. The capability of adding multimedia also helped them to express their experience beyond textual forms. Students actively engaged in the process of documenting and assessing their own performance, accompanied by continuous monitoring by the instructor and practicum supervisor. From the perspectives of supervisors and instructors, it is beneficial to be a part of students’ learning and assessment process throughout the experience, rather than just at the end. In this virtual space, students, the instructor, and supervisors share in the experience and contribute to students’ learning. This will be a good foundation for continuous professional development efforts for the profession.

Lessons learnt

A key to get students engaged with PebblePad is to convey the message that the system is relevant for their professional careers. When I first implemented PebblePad in 2013, the relevance of the system was not always explicit, which seems to have led to complaints that the system was overly complicated. There was confusion over procedures for creating diary entries and reports, particularly in the difference between Pebble+ and ATLAS. In addition, the terminology (e.g., “assets”) and the flash-based interface (as opposed to Windows programmes) meant that it took some effort to get used to the system. Going forward, I now explain that an eportfolio system is recommended by the relevant professional association (ALIA) for ongoing professional development. I anticipate that giving a clear message to students about why this tool is important for their profession will help with motivation in taking the time needed to get used to the tool. I will monitor whether this explicit connection with professional practice changes students’ perception during the current semester in 2014.

Active involvement of supervisors in PebblePad is an important part of students’ practicum assessment. Approximately 60% of supervisors completed their assessment with no difficulties last semester. However, the remainder of the supervisors had problems or did not participate in using PebblePad, as they did not seem to have followed the instructions provided. Interestingly, when I provided guidance via phone, some of these
supervisors quickly learned how to use the system. For example, some did not realise that they needed to use the “save” button after entering their assessment or didn’t understand that the assessment needed to be “attached” to the diary as a whole rather than each entry. These steps were mentioned in the instructions provided, although I have now updated the layout to make the procedure clearer.

Although these steps are a very small thing from my perspective, some supervisors expressed that there was a significant technological barrier to using PebblePad. Even though video tutorials and PDF guides were distributed, they really had trouble understanding how to find materials and add content in the system. It seemed that in some cases, the notion of using a “new” system itself was a barrier more than the actual programme. Since active participation from supervisors is an essential aspect of using the tool for practicum placements, I expect that more frequent communication between instructors and supervisors will resolve this issue in the future.

**In brief**

- streamlined practicum monitoring, documentation, and assessment for the practicum
- facilitated self-directed learning
- involved students, supervisors, and the instructor in the learning process, especially for the purpose of students’ professional development
Appendix 1: Practicum handbook

The purpose of this handbook is to provide: 1) basic details on the nature of the Edith Cowan University (ECU) School of Computer and Security Science (SCSS) practicum experience, 2) general expectations of the host information service and professional supervisor; and 3) general responsibilities of the University and practicum students.

Note to Students:
- carefully read all sections of the handbook before meeting your professional supervisor;
- examine all accompanying related forms available in Blackboard for the unit;
- raise any questions you have with the unit coordinator or lecturer/tutor prior to meeting your professional supervisor;
- be prepared to provide answers to questions the host supervisor may have at the initial practicum interview; and
- provide the professional supervisor with electronic copies of all relevant forms (or paper copies if necessary).

Note to Supervisors:
Please read this handbook prior to or soon after the initial meeting with the student, before finalising the practicum arrangements.

Appendix 2: Sample daily duty sheet entry

Practicum Daily Duty Sheet

Complete one sheet for each day of your practicum. While you will need to take brief and accurate notes on the job, the detailed information in this Daily Diary should be recorded outside normal working hours. Do NOT exceed the limit of one page (250 words) for each day of the practicum. When necessary, attach supportive item (e.g., pictures). Share the completed sheets with your professional supervisor at the end of practicum.

Logging period starts: 25 July 2013, Logging period ends: ongoing

This activity log target is 62 hours and 0 points
The activities recorded on this activity log currently amount to 62 hours 0 minutes
The activities recorded on this activity log currently amount to 0 points
10 assets have been added to this log

Day 10

Posted by [Name] at 20:59 on 13 September 2013 6:00 hrs | 1 comment
Appendix 3: Supervisor evaluation form

<table>
<thead>
<tr>
<th>Communication Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Uses language appropriate to clients</td>
</tr>
<tr>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>2. Demonstrates clear, expressive verbal communication.</td>
</tr>
<tr>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>3. Demonstrates clear, expressive written communication.</td>
</tr>
<tr>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>4. Approaches clients in an appropriate manner.</td>
</tr>
<tr>
<td>Unsatisfactory</td>
</tr>
</tbody>
</table>

To view this case study in an electronic format please visit this link:
www.pebblebash.co.uk/2014/resources/pdf/pb2014cs01.pdf
Education
Practicums, philosophies and learning design

Lilian Austin
Faculty of Education, La Trobe University, AUS

Chosen theme(s)

Unit level implementation

The context

This is a core second year subject in the Bachelor of Teaching. The subject is called Elements of Education. The main aim of the subject is to begin to develop students’ understanding of their own philosophical and pedagogical position. As part of this subject students undertake practical placement for three weeks in a school.

There are approximately 300 students in this subject, most of whom are in the age bracket (20 – 24). The students are training to be teachers but in many ways they still behave as adolescent students. Our plan in the curriculum redesign was to try to give them the necessary scaffolding so that they could make sense of their practical placement and also their pre-existing notions of education. We also wanted to create a number of assets which could be reused again later in their course as they come closer to graduation and step out into the world as teachers.

How it was ...

This subject had only been delivered once before. One of the key problems that was identified was that the experiences students had in their practical placement were often considered to be separate and unconnected from their learning back at university. This subject has a heavy theoretical basis and students struggle to see connections between this theory and practical experience.

Another issue was the timing of the practical placement, which was at the beginning of the subject, and as a result the learning students later undertook in the subject could not be focused on the placement. This issue of placement timing was set to become even more critical as it emerged that significant numbers of students did not have placements within a block at the beginning of the subject after all, and in fact would be taking their placements at various times in the semester.

The academic team and the Faculty educational designer decided to re-structure the learning and the assessment tasks to integrate the learning the students gained from their practical placements with that of workshops and lectures throughout the semester. PebblePad was a critical tool in doing this.
The approach

The plan was to use PebblePad throughout all the assessment tasks and also to revisit various activities in an iterative way throughout this semester so that students would reflect on the growth throughout the subject. There were a number of components to the design:

- **Task one** – at the beginning of the subject the students went on a 3 week practical placement. They were required to complete a blog posting at the end of each week based on teacher questioning strategies, classroom dynamics, and the sociocultural context. Each posting used *4Rs reflective process* which scaffolded and guided the reflections.

- **Week one of the teaching semester** – students were asked to print out their reflections from the PebblePad blog and bring these into the face-to-face interactive workshops. A number of activities were held in which students shared their insights and learning from the blog.

- **Survey** - After the workshops and lectures in week one, which highlighted the need for teachers to develop a personal pedagogy and philosophy of education, the students were asked to access a survey. The link was provided in the LMS. This survey was created in a template in PebblePad and published to the web. The students were asked to respond to a variety of statements about their current views on pedagogy and philosophy of education. The idea was to get them to interrogate their existing beliefs even if they didn’t realise that they already had an unspoken philosophy. When the students saved this survey it went into the asset store in PebblePad to be used later in another assessment task.

- **Task two** – students copied a PebblePad webfolio template from the ATLAS resource area. They used this to develop their own educational philosophy statement. They were asked to provide a link to the survey which they had completed at the beginning of semester. They were also asked to reflect on this survey and how their stance had either been changed or validated. Also included in the webfolio were two journal reviews based on activities undertaken during the workshops. Again we were trying to link and scaffold the task with the activities carried out in the workshops. Both responses to the journal articles followed the 4Rs process with specific scaffolds and prompts related to the readings.

How it is now ....

Overwhelmingly the students were able to be guided through a fairly difficult theoretical subject by the activities and assessment tasks which were supported and scaffolded both in the templates provided in PebblePad and also the workshop activities. At the time of writing the teaching team is in the process of marking all the work, so final analysis and evaluation is yet to come. Certainly some of the problems we had with the disjunction between practical placement and theoretical knowledge have been addressed and there is a greater awareness from students about this theory informing practice.
The benefits

This subject needed curriculum design change as the practical placement had been completely separated from the formal learning. As a result of the changes we were able to bring into the formal learning situation the lessons learnt in the practicum. In addition the students captured their current understanding at the beginning of the semester and were able to review this again as they compiled the final webfolio. From this perspective, the curriculum change which integrated PebblePad was instrumental in more effective student learning.

Unexpectedly our choices around the use of PebblePad were fortuitous, as the practical placement arrangements we had expected (i.e. all students to complete the practical placement before the commencement of formal classes), did not eventuate. Instead, due to the difficulty of placing 300 students, a significant number needed to take the practical placement at alternative times. What this meant for the teaching team was that deadlines for the submission of Task 1 – The blog, had to be adjusted for many students. Fortunately the ability to give extensions on a case-by-case basis in ATLAS meant that we were able to keep track of those students who had not yet created their blogs.

Lessons learnt

The placement of the practicum at the beginning of the subject was always seen as undesirable but in 2013 we were unable to change it for a variety of reasons. The redesign of the curriculum and the assessment tasks allowed us to still maintain integrity in curriculum design and to increase student learning. However we have now negotiated for this subject to change its placement within the degree and to also include a practicum towards the end of the semester. This will require another curriculum redesign, particularly in relation to the reflective blog, as students will not be able to use this at the beginning of semester like they did this year.

One of the ongoing issues we experienced with PebblePad is the misunderstanding students often have about submitted assets in ATLAS. Although we encourage them to submit their webfolios early in the semester so that there is no panic on the final due date, many do not follow this advice. Despite reiterating this to them on many occasions, many students do not understand this and blame PebblePad when they seem to be unable to submit on the due date. Much debate has taken place in our faculty about how to train students to understand the submission process in PebblePad and to know how to check for themselves that their asset in fact in the ATLAS workspace. We are planning for mandatory self paced modules and quizzes early in the academic year to ensure that students become more adept at using the tools.
In brief – personalising the curriculum

- Drawing on students’ personal experiences whilst on placement through a scaffolded reflective blog
- Ability to reuse assets on a number of occasions to allow students to reflect on their learning over time
- Students were able to create a webfolio outlining their own personal educational philosophy. The webfolio tool allowed them to do this in a creative and multimodal way.

To view this case study in an electronic format please visit this link: www.pebblebash.co.uk/2014/resources/pdf/pb2014cs02.pdf
Moving paper based reflective practice to a sustainable future

Kymberley Barbary
School of Education, La Trobe University, AUS

Chosen theme(s)

Unit level implementation

The context

La Trobe University’s five year ‘Future Ready’ strategic plan has ‘bold ambitions’ for the university to be ‘known for its excellence and innovation in relation to the big issues of our time’ (La Trobe University, 2013). Graduates will be ‘work ready’, ‘world ready’ and ‘future ready’. A core ingredient of the La Trobe Framework is the Radical Learning Project which reimagines teaching and learning ‘by drawing on rich educational technologies [with an] increased use of technology-enabled online learning, drawing on the rich resource of online educational resources relevant to student learning’ (La Trobe University, 2013). As part of the Future Ready strategic plan, La Trobe has identified three vital areas of learning known as ‘Essentials’. Global Citizenship, Innovation and Entrepreneurship, and Sustainable Thinking essentials will foster the skills and knowledge of all undergraduate students to become future ready (La Trobe University, 2013).

The four year Bachelor of Education is delivered at two regional campuses in Victoria. The Mildura instance of the degree is delivered to approximately 125 preservice teachers across the four years who are from regional and rural locations. Each year preservice teachers are required to participate in practicum experience in local and regional schools. Practicum is an assessable component of the course and is attached to a single subject each semester; in the first instance, the Introduction to Teaching Practice (EDU1ITP) subject supports the practicum. These placements may occur across three states and involve vast distances, due to our unique location. Preservice teachers are required to become reflective practitioners with the practicum being a large aspect of this reflective process. Preservice teachers need to demonstrate their knowledge and understanding via practicum documentation.

More than half of our current student cohort may be considered digital natives. Technology is an integral part of their lives as well as a fundamental component of their degree. All preservice teachers are expected to become competent users of a range of technological tools that will enable them to become skilled educators of 21st Century learners.

The Victorian Institute of Teaching’s Professional Standards for Teachers state what constitutes teacher quality. The Standards ‘define the work of teachers and make explicit the elements of high-quality, effective teaching in 21st-century schools, which result in improved educational outcomes for students’ (Australian Institute for Teaching and School
Leadership, 2012). For Graduate Teachers, the skills in Information Communication Technologies (ICT) are essential to quality teaching and learning experiences, and graduating teachers must be able to demonstrate their knowledge and understanding of ICT to meet these standards.

Not only does LaTrobe’s Future Ready strategic plan push us to move to a more sustainable approach to teaching, learning and assessment, the environmental impact of continued paper based approaches challenges one’s conscience.

How it was ...

Preservice teachers within the Bachelor of Education are required to demonstrate reflective practice throughout their degree. This is especially evident during their practicum when they are required to connect theory and practice. Until the beginning of 2013 all students were required to complete their practicum reflections via a paper based folder which was to be submitted and assessed typically twice a year.

Students were required to purchase the practicum folder when commencing their degree. Each year new documents were added relevant to the corresponding year in the degree resulting in a substantial amount of photocopying. Often, students chose to word process their reflective responses and include these within the folders, replacing the papers provided by the relevant academic staff. Often this folder became cumbersome with students soon housing their reflections, resources and planning in multiple folders.

Whilst the folder was considered a professional document, not all students cared for their documentation in this way. Organisation of the documentation and care for the presentation of the folder was inconsistent. Students taking pride in the presentation of their documentation may have lost sight of the importance of quality reflections on their learning experiences.

The paper based documentation required feedback and assessment. Feedback could only be provided to students when the documentation was physically sighted by supervising lecturers, typically after the practicum had been completed for final assessment and occasionally during the practicum. Feedback could not be considered timely and intervention to support struggling students was difficult. The monitoring of students’ responses was also difficult. Students on distant placements may have had little opportunity to receive formative feedback. Assessment for the smaller cohort in Mildura seemed to be a realistic task until the practicum folders were presented for assessment. The large submission may have resulted in a small avalanche!

The approach

PebblePad has been integrated into teaching and learning experiences across the Bachelor of Education at the Mildura campus since 2008. Students have been introduced to the program within the first semester of their first year and have continued to use the program until the completion of their degree. In 2012 the Mildura first year cohort piloted the Beta version of PebblePad. In 2013 all preservice teachers across the four years were required to use and submit assessment tasks via the new version of PebblePad.
The first year Bachelor of Education preservice teachers are placed on a paired practicum very early in their course (week 3) and are expected to reflect on their teaching and learning experiences as part of this placement. During 2012 the Faculty of Education staff on the Mildura campus recognised the cost, both financial and environmental, of the paper based practicum journal and moved to replace it with a digital version.

PebblePad\(^3\) provides users with the new tool of workbooks. This resource allows the owner (the lecturer) to construct a template which users can access and own. The unique opportunity for the creator to be able to continually add to this template made it an appropriate selection for the purpose of replacing the paper based version of practicum journal. The new workbook practicum journal allowed students to focus on the content of their reflection, rather than the construction and presentation of the document. Weekly requirements could be added during the semester, resulting in a refined document that responded to the needs of the cohort.

The ICT for Education (EDU1ICT) subject introduces first year preservice teachers to the technology requirements of their degree. An aspect of this up skilling of students is to introduce, familiarise and develop approaches in utilising PebblePad. Students have tasks throughout the majority of their course that require them to build, collaborate and submit via PebblePad.

As stated previously, practicum is attached to a single subject that supports the preservice teachers in all aspects of the placement including the reflective component of the documentation. To support the technology requirements of this task, a clear understanding of PebblePad needed to occur in parallel to learning about the practicum. To achieve this, collaboration between the two lecturers involved (EDU1ITP & EDU1ICT) needed to occur and a clear understanding of the requirements of the practicum journal was needed. As a result of this discussion, I (lecturer in EDU1ICT) was able to create a digital version of the practicum journal that mirrored the paper based version whilst meeting the assessment requirements of EDU1ITP.

In addition to providing the skills to navigate PebblePad we felt it was necessary to further support students by allocating in class time to provide technical support to students when they were completing their practicum reflections.

**How it is now ….**

The workbook version of the practicum journal allows academic staff to easily monitor student reflections. Formative feedback has become an ingrained process that continually supports students to improve their reflections. Various staff may contribute to student feedback (this may occur on different aspects of the workbook eg. Goal setting) rather than one person being the only one able to view the folder. As a result, assessment may now be considered more consistent, with all relevant academic staff able to view and moderate student submissions. Being able to review work and monitor student contributions allows teaching staff to better support students with their developing knowledge and skills.
The workbook template has allowed teaching staff to clearly demonstrate the requirements of the task, with supporting documents and videos linked directly from related pages. The template has students focussing on the quality of their content rather than the ‘prettiness’ of their folder; in turn, the documentation is professionally presented to all audiences. Evidence fields are also utilised to allow for the upload of evidence. If the cohort or staff indicate that further examples are needed or the structure of a page needs modifying, additions are easily included.

The opportunity for in class technical support also provided students with further scaffolding of their reflections. Facilitated discussions between practicum partners, school groups and the class were enabled, resulting in rich reflections that were able to be entered directly into the workbook, with formative feedback able to follow soon after each contribution.

As PebblePad\(^3\) was early in its development there were some minor issues with saving and formatting within the workbook. However, due to the close support of teaching staff, these issues were minimal and students were easily assisted.

The practicum journal is one component of the documentation requirements for preservice teachers. Preservice teachers are also required to collate appropriate resources in addition to their lesson planning. Whilst some of these documents will at this time remain paper based, there is great opportunity to explore the capabilities of PebblePad for compiling some of this documentation to again reduce the cumbersome folders used at present. This may include adding evidence fields to the forms within the template. There is also the unexplored possibility of providing supervising mentors with feedback templates to keep all records centralised.

**The benefits**

One of the greatest benefits of using workbooks to replace the paper based practicum journal is that students are no longer concerned about the construction of their professional documentation but now spend their energy on quality reflections. The opportunity for quick feedback from university mentors and peer collaboration are additional advantages that will continue to be explored with this more user friendly digital version of the practicum journal.

As PebblePad is a new program for the entire first year cohort an even playing field has been created with all students learning about the software together. The practicum pairs allow for peer collaboration and problem solving of the program.

La Trobe’s Future Ready strategic plan identified three essentials; our students are actively working toward achieving these via their practicum journal. Reflective practices begin to address Global Citizenship whilst developing personal and technical skills; Innovation and Entrepreneurship ideas include the ability to collaborate and effectively communicate in addition to being taught how to thrive in a fast-changing world; and going digital clearly addresses the future impact of documentation as part of Sustainable Thinking, without environmentally compromising our future.
During 2013, Professor Brian Caldwell was commissioned to conduct a review of teacher education in the Faculty of Education at La Trobe University. When discussing the contributions of the Mildura iteration, Professor Caldwell stated that he had not seen any other university that was able to tap into student feedback like that of the practicum journals on PebblePad. He commented that the immediate retrieval of responses was invaluable. This feedback received from external personnel reiterated the value of the move from paper to digital documentation.

The ability to view student responses during their practicum also addresses the need to provide preservice teachers on distant placements with on-going formative feedback.

Lessons learnt

In the first instance, keeping the workbook structure simple and allowing the students to take ownership over their contributions is important. It is necessary to problem solve issues early so that students do not get caught up concerning themselves with issues that may be easily solved by academic or technical staff, allowing them the opportunity to focus on their contributions.

The first year cohort received carefully structured in-class scaffolding for both their reflections and technical concerns. Having this support in place assisted in establishing competent and confident users of PebblePad. Some students in other cohorts did find the move to a digital practicum journal a little challenging, quite possibly because they required further technical support due to the move to a new version of PebblePad. Throughout 2013 reactive measures were implemented to ensure these preservice teachers had the technical support to be able to successfully complete their requirements. This issue may have been unique to 2013 as students familiarised themselves with the new look PebblePad and may not be an issue in the future.

It is essential that the owner of a workbook clearly understands the intricacies of editing the workbook once it has been shared with their student cohort. It is also imperative that clear processes for managing new cohorts and copying workbooks are adhered to so as not to compromise the ‘live nature’ of the existing workbooks. Knowing the structure of the task will aid in the construction of a suitable PebblePad asset; familiarising oneself with the tools of PebblePad, specifically those within a workbook will greatly aid the construction of a user friendly asset.

In brief – personalising the curriculum

- We are able to construct suitable assets for our local cohort under the guidance of relevant academic staff
- We have moved some of our cumbersome paper based documentation to more sustainable approaches; this will increase in the near future
- Teachers that are required to be 21st Century educators, including the ability to demonstrate knowledge and skills with ICT, are being up skilled in a structured, supported environment
References


To view this case study in an electronic format please visit this link: [www.pebblebash.co.uk/2014/resources/pdf/pb2014cs03.pdf](http://www.pebblebash.co.uk/2014/resources/pdf/pb2014cs03.pdf)
Educators at the core of lifelong learning

Lucy Stone
E-Learning and Resource Development, the Amateur Swimming Association, UK

Chosen theme(s)

Institution agendas

The context

The Amateur Swimming Association (ASA) develop qualifications that cross the aquatics industry including teaching and coaching in swimming, diving, synchronised swimming, water polo and open water. Courses cross different levels from entry through to higher education. As well as certificates, awards and diploma qualifications there is also a suite of some 50 continuous professional development courses that the aquatic workforce can engage in.

The core of the delivery of all the training is the licensed tutor workforce. The organisation have approximately 160 licensed tutors, 40 trainee tutors and a further 60 potential tutors waiting for the next opportunity to train themselves in becoming an ASA licensed tutor. The tutor workforce work across the UK and deliver in some of the ASA approved centres abroad.

Over the last few years, the focus has been on developing the tutor workforce to ensure that they reached a minimum requirement in teaching qualifications, for example the “Preparing to Teach in the Lifelong Learning Sector” (PTLLS) (now the Level Three Education and Training) and the Certificate in Assessing Vocational Achievement (CAVA).

The Educator Lifelong Learning Plan project was developed to tackle three issues:

1. Tutors currently feel isolated. There are few opportunities to discuss work. They work alone with no access to current good practice resources created and shared by their peers
2. There is no framework documenting the skills and experience development pathway for a tutor. How does a tutor identify their training needs?
3. Introducing a further level of pre-requisite teacher training will be unpopular with existing tutors.

How it was …

To qualify to become an ASA licensed tutor it is a pre-requisite that the tutor holds the PTLLS and CAVA, or equivalent qualifications. It is the responsibility of the individual to gain these qualifications either through a training provider of their choice or by attending the training course through the Institute of Swimming, the largest provider of aquatic training in the country.
Traditionally, once accepted on the programme, the tutors were responsible for pursuing their own ongoing personal development either through attending courses delivered through the Institute of Swimming, the ASA, or a combination of ASA with studies from another training provider. The ASA training offered is both face to face and over WebX.

Data shows that tutors do not engage in face to face training during winter. The busiest time for training uptake is spring and prior to licensing renewal in the spring period.

It was felt there was a need to identify “gaps” in tutors own knowledge, establish a training programme as a result of the identified gaps, provide new training opportunities associated with professional development, support the development of the “gaps” through supportive learning observations and start the tutors themselves on their own, lifelong journey.

The approach

A number of methods were used to engage educators in the use of PebblePad.

The first development was an Educator Community Site in ATLAS. This environment was created to encourage sharing of resources, enable safe discussion and debate over the discussion forums, provide the educators with regular news and updates through a blog on the About page, and provide access to a workbook called the Educator Lifelong Learning Plan. In reality, with a workforce that is geographically dispersed who only meet once or twice a year, the online community gave them an additional opportunity to “meet” people and engage in conversations.

The second development was the Educator Lifelong Learning Plan. The plan was created in a workbook using capabilities. The Educator can work through the plan and self-assess their teaching skills from planning a session through to their understanding of how to reflect. The workbook also enables the users to upload evidence, reflect on their own practice, develop an action plan, and share their thoughts and findings with anyone inside and outside the system or simply to keep the plan as part of their own individual development.

To support the educators with their recognised areas for development on the Lifelong Learning Plan a number of learning modules (i-Learns) are being created. The Educators will be able to review and revise their knowledge and revisit learning theory by working through these i-Learns. These interactive i-Learns, created in Articulate Storyline, will be made available in Workbooks so that the Educators can always access the materials from their personal learning space. They will be able to attach the associate workbooks to their Lifelong Learning Plan to make it a multi-dimensional record of their development over a lifetime of teaching delivery.
How it is now ....

In October 2012 the use of PebblePad was announced at the Tutor Conference. A specific group of tutors were trained in preparation for the delivery of blended learning courses. This is now ongoing training and with a new cohort of tutors going through the ASA Tutor Training Programme, the use of PebblePad and being a blended learning tutor is an integral part of that development programme.

The Educator Lifelong Learning Plan was launched at the annual Educator Conference in October 2013. As the plan only requires an individual to submit it to the Community Site should they wish to have feedback, it is difficult to know the current uptake of this. We are hoping with the new cohort of 45 potential new tutors starting in June 2014 that the plan will become embedded and integral to the individual recognising areas for development and reflecting on their teaching practice.

Every ASA tutor has to apply for an annual licence. This is a quality kitemark to ensure they meet the National Governing Body’s requirements of: being qualified at an appropriate level; ensuring they have a DBS and have attended Safeguarding training; and have participated in professional development during that annual period. The licensing scheme has been reviewed and updated after many years and all ASA tutors will have to apply for a new licence from 1st April 2014. This process is being done through a PebblePad workbook to enable the licensed tutors to have one central area to keep all their records and update them easily on an annual or ongoing basis.

In the beginning of 2014 a new Head of Workforce Development was appointed. A change in management has also seen a change in attitude towards how PebblePad can be adopted and used by the wider workforce, not just the learners and educators. There is a particular focus on developing the workforce in their knowledge and using PebblePad to ensure that the administration and assessment of apprenticeship programmes is more efficient and cost effective.

As a result three key projects have been escalated as priorities. The first is the development of online CPDs, hosted within PebblePad, for all staff in Health and Safety, Equality and Diversity and Safeguarding. The second is to create a “PebblePad Champion” scheme throughout the organisation with representatives in each area to support the 350 or so internal staff across the ASA, The IoS and British Swimming. The third is to ensure that the Advanced Apprenticeship in Sporting Excellence (AASE) use PebblePad as a means of gathering evidence for the tutors to provide feedback on over the system. It has been suggested that to do this effectively the learners use published collections of their work.

The benefits

The largest benefit to date is the recognition by the new Head of Department of all the opportunities PebblePad could potentially provide in terms of meeting our learners’ needs and engaging a wider audience of staff in the organisation.
Other anticipated benefits include:

- The sense of belonging to a community and an increase in an identity as an ASA Educator through discussion forums and participation on the community site
- Sharing of own developed resources to include narratives and reflections on how to use the resources
- Able to identify own areas of development and access appropriate training and resources to support own development
- Sharing of lifelong learning plan with key people for ongoing support and feedback

Lessons learnt

- Our experience indicates that the system is not particularly intuitive and therefore people do not just go off and use it independently without the addition of face to face or Web-X training, supporting materials and guidance.
- We tried to train people with too many things in one session, for example creating a blog then sharing it with individuals, collaborating and publishing. We have now developed a more progressive programme of training or targeted, small activities that are relevant and fit for purpose with the audience.
- Users of the system find the language of PebblePad difficult to understand. People find it difficult to understanding the differences between Pebble being their personal learning space and ATLAS being the formal learning space. The use of webfolios on the About page have been crucial to clarifying the terminology and to support the users with the navigation between the two areas.

In brief – personalising the curriculum

- Self assessment
- Community of practice
- Sharing best practice
- Identity
- Ongoing review and feedback
- Access to relevant learning

To view this case study in an electronic format please visit this link:
www.pebblebash.co.uk/2014/resources/pdf/pb2014cs04.pdf
Health
Using PebblePad in Health Sciences units: A comparison of design and support approaches during a pilot phase.

Astrid Davine  
Centre for the Advancement of Teaching and Learning, University of Western Australia, AUS

Chosen theme(s)

Unit level implementation

The context

This case study involves a comparison of unit level implementation of PebblePad in two capstone health related units, one in Nursing and one in Public Health, both of which had approximately 30 students in 2013. It is hoped that the observations made in individual units during this pilot phase will help with curriculum design recommendations and support provision for the wider implementation of a Personal Learning Environment (PLE) at The University of Western Australia.

The Nursing unit is part of a Masters level course. During this unit, students are asked to participate in a group presentation assignment, as well as create a portfolio. During the second half of the semester, students are required to participate in a placement, which is commonly a rural placement.

The Public Health unit included both undergraduate students (majority) as well as some international post-graduate students. Although students do still attend tutorials on campus, this whole unit is conducted as work-integrated learning. Students are required to attend an industry placement in a health related agency for the whole semester. Students are asked to create a portfolio to document a personal learning plan and demonstrate the achievement of this plan during the placement. They are also required to submit reflections and timesheets, as well as produce and present a report to their industry supervisor.

How it was …

Prior to trialling the use of PebblePad, both units had clearly documented paper-based portfolio requirements. In both units, though, this was seen as less manageable, especially when reviewing students work and providing feedback. The Nursing Unit Coordinator in particular described the frustration of flicking back and forth between portfolio content and the evidence stored at the back of the large paper document. The Public Health Unit Coordinators also expressed dissatisfaction with students submitting a mix of electronic and hard copy documents that didn’t “adequately allow students to demonstrate the learning that has taken place”. A more modern, cohesive approach was required, especially for sharing work samples with potential employers. The PebblePad pilot at UWA was seen as an opportunity to trial this.
The main intention for both units was to provide students with a means of creating a professional document for showcasing evidence of their learning. The Nursing Unit Coordinator had trialled WordPress (an open online blogging tool) in the previous year, as he saw electronic portfolios as the way forward. The WordPress trial had gone well, but the prospect of an institution supported PLE, with student training provided by a central department was seen as attractive.

**The approach**

The two units had different approaches towards embedding PebblePad in the curriculum. Nursing students were required to complete a Professional and Clinical Portfolio that demonstrated the student’s learning over their whole course [sample in Appendix 4]. Students were asked to submit a comprehensive portfolio that collates reflections and feedback from previous clinical placements in order to provide potential employers and the national registration board with a clear indication of students’ professional competencies and clinical readiness. In order to achieve this, students were provided with a sample Webfolio [Appendix 1]. This sample was provided at the start of the unit via the Resources section of the ATLAS Workspace with copy permissions. The single Webfolio sample was provided in order to try and reduce the amount that students had to create from scratch, and students were not required to use any other templates. The Professional and Clinical Portfolio was required to be submitted to the unit’s ATLAS workspace at the end of semester. It was the only item to be created and submitted in PebblePad.

In comparison the Public Health unit required regular submissions in PebblePad from students [for a list of submission requirements see Appendix 3]. Early in the unit, students were required to complete weekly timesheets and other administrative documents. These were accessed from the Resources area of the unit’s ATLAS Workspace, completed in Word and submitted back to the Workspace. A custom weekly reflection template was created by the Unit Coordinator in Template Builder [Appendix 2]. This was also shared via ATLAS and required to be submitted back to the Workspace (weekly, then every 2-3 weeks).

The main focus of the Public Health unit was the creation of an eportfolio that documented students’ five personal learning outcomes that they wanted to achieve during their industry placement. Students were asked to submit a Webfolio that provided reflections and evidence of achievements for each outcome. In order to scaffold the learning and provide formative feedback, students were asked to submit the first personal learning outcome (a single Foliopage from their Webfolio) half way through the unit. The full Webfolio was then required to be submitted at the end of the semester [sample in Appendix 5].

The support provided for each of the units was similar. In both units, staff were provided with 3-4 individual learning design sessions (one hour each) where features of PebblePad were demonstrated and staff were then supported to use features suitable for their curriculum.
Students were provided with a half hour introductory training session at the start of the unit. This session was quite specific to the requirements of the unit, with all students being asked to practice the basic skills required, such as upload a new asset or submit to a workspace. Students were also provided with support materials (links, videos, PDFs) and a support session mid-way through the semester. The second support session provided students with an opportunity to ask questions about how to achieve a certain task, report on any issues that they were having and also view demonstrations that were relevant to the particular unit and assessment requirements.

How it is now ....

Overall the staff needs for using PebblePad instead of paper-based portfolios were met, with ATLAS providing a useful way to track and provide feedback for submissions. Public Health staff in particular found that marking and providing feedback was easy, and students appreciated the feedback they received.

The Nursing unit coordinator felt less comfortable with the system:

“Very little [worked well]. Setting it up was difficult. Help involved others taking over the process rather than teaching the process. Time issues made it very hard to get to learn new processes. The only reprieve was that clever students seemed to pick it up without my support or [sic] direction. I was very relieved about this as I would not have been able to help them and this would have (and did on occasions) leave me red faced.”

He acknowledged that he has limited exposure to Information and Communications Technologies (ICTs) in general and found it difficult to become familiar with PebblePad. This was accentuated by external pressures resulting in less time using the system.

All staff involved, though, reported that they were happy with the cohesive, professional looking portfolios that students were able to create, and they would like to continue using PebblePad with students in 2014.

Students did see the benefit of reflecting and documenting their learning in an electronic format, but with different perspectives.

Comment from Nursing student:

“I enjoyed using the PebblePad® format. Once I was able to understand the platform I found compiling the portfolio simple. Using an online portfolio as a student means that going into my nursing career my organisation of professional documents will already have begun and will be easy to continue. Putting all this information into one place has highlighted what I have achieved over the past two years.”
Comment from Public Health student:

“Something like this where we went on outside agencies and stuff, it was a good way to record and document things, but I don’t see how it would be much use for units which are based mainly at uni.”

The benefits

Students in the Public Health unit saw the benefit of using PebblePad, especially because they had control over their learning journey and the way it was presented.

“In terms of the portfolio, in our learning guide it told us what we needed to put in there anyway... because that wasn’t templated that was probably a good thing because it was our control of how we wanted to set it out so it was more, I suppose, personal or creative.”

“I think this is a really useful system cause, I don’t know, it just allows you to review everything and go back to it and add to it.” [even after submitting]

Students also felt that the more immediate feedback enhanced their learning.

“I think it’s really good cause with most of the things that I submitted and that were assessed, the feedback that I got was pretty quick.... it made me realise particular things that I could change or that I needed to change for the next one.”

This was a reflection of the positive reaction that Public Health staff had to the experience of using PebblePad in their teaching and for students’ learning.

“Having a system that allowed flexibility [sic] for students to present their portfolio in a manner that reflected their learning, their practicum experience and their personality [worked well]. Submission of assignments through PebblePad was efficient and marking and providing feedback easy to do.”

Lessons learnt

By comparing the approaches in the two separate units and two different student groups we get a clearer picture of which strategies may help for full implementation of a PLE such as PebblePad.
Table 1: Comparison of PebblePad use, benefits and challenges in two pilot Health Science units.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Use</th>
<th>Benefits</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing</td>
<td>• Sample Webfolio (professional ePortfolio) for students to edit</td>
<td>• Providing an editable sample supported students</td>
<td>• Effort required to document two years’+ worth of learning in final unit</td>
</tr>
<tr>
<td></td>
<td>• Students submit one item at end of unit</td>
<td>• Students found the process of reflecting on their accomplishments satisfying</td>
<td>• Less confident ICT users (incl. staff)</td>
</tr>
<tr>
<td>Public Health</td>
<td>• Custom template for reflections</td>
<td>• Regular use meant students (and staff) felt more comfortable with the system</td>
<td>• Students trying to add Word documents as Webfolio pages</td>
</tr>
<tr>
<td></td>
<td>• Student created Webfolio (project based)</td>
<td>• Staff found marking easy</td>
<td>• Technical issues, e.g. access at placement agency</td>
</tr>
<tr>
<td></td>
<td>• Students submit many reflections and formative assessments throughout unit</td>
<td>• Students found prompt feedback useful</td>
<td></td>
</tr>
</tbody>
</table>

Providing a sample webfolio that students can edit rather than starting from scratch helped students that were less confident educational technology users (in the case of some Nursing students). It also allowed more confident students some scope for using additional tools and skills, such as embedding images and video, using activity logs and creating custom banners. Providing an editable sample file allowed students to personalise the evidence of their learning.

In the Nursing unit, students found the challenge of collating the evidence from their whole course satisfying and valuable, but extremely time-consuming. This indicated to the PLE team at UWA that where a graduate or employability type eportfolio is required, that a course-wide or progressive implementation, where students are asked to collect evidence from the start of their course and build their presentation eportfolio progressively, would be more manageable for students. In comparison, creating a presentation eportfolio based on the experiences during an industry placement in a single unit seemed a manageable workload for students.

Requiring the submission of formative assessments helped to distribute the workload for students and support staff in the Public Health unit. Quite a few students needed basic support right at the end of the Nursing unit when the submission was due. In comparison, the Public Health students required more assistance mid-way through the unit when the first personal learning outcome was due. This was more manageable timing for eLearning support staff and seemed to increase students’ confidence in both using the system and completing the task.
The most difficult part for students was around the changing of common practices. At first, some Public Health students were creating their personal learning outcomes as Word documents and wanting to add these as menu-listed pages in the Webfolio. Some students were not thinking about the affordances of an online PLE, particularly in the linking and embedding of assets.

Students also encountered some technical issues and confusion.

“I found it was quite slow…. It was lagging, it was quite frustrating.”

“That was kind of a big thing, trying to remember ‘What buttons do I press? ‘What is the difference between the ATLAS and the plus?’”

Some Public Health students had trouble accessing PebblePad from health-related agencies. We suspect that firewalls had been part of this issue.

Requiring students to use PebblePad regularly and submit multiple assets (from simple to complex) during a unit was a successful approach. Students in the Public Health unit were more likely to agree that PebblePad was easy to use (71% compared to 43% of Nursing students) and should be acquired by our institution for teaching and learning purposes (88% compare to 43% of Nursing students) [preliminary results only].

Using a PLE such as PebblePad seems a particularly suitable way for students to demonstrate the evidence and achievements relating to a personal learning plan. This curriculum design and the features of the PebblePad system worked together to allow students to personalise their authentic and valuable learning experiences. During this pilot phase, combining a more student driven learning approach together with early and regular use of the PLE system seemed to be a successful implementation.

Despite the individual perceptions and experiences with using the system, all staff involved in these pilot units agreed that PebblePad was able to meet the teaching purpose for which they used the system. In particular, the administration and ability to review and provide feedback for submissions was more manageable and will continue to improve once staff are more comfortable with using PebblePad (especially feedback templates). All staff also agreed that PebblePad is easy for students to learn to use and provided a way for students to clearly demonstrate their learning and experiences.

In brief – personalising the curriculum

- The ability to create custom templates and sample files have allowed unit coordinators to create unique resources for students.
- By choosing the most effective means of scaffolding students, unit coordinators were able to provide opportunities for students to personalise the learning experience.
- PebblePad supports custom designs that work well to document personalised learning journeys.
- Personalised training and support works well, but will need to be balanced with the limited number of educational developers available for a wider implementation.
Appendix 1: Nursing sample Webfolio

Appendix 2: Public health custom reflective template
## Appendix 3: Public health assignment listing

<table>
<thead>
<tr>
<th>Title</th>
<th>Final Deadline</th>
<th>Late Assignment Due</th>
<th>Late Assignment Late</th>
<th>Late Assignment Penalty Due</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contest Information Form (due end of Day 1)</td>
<td>8th Jul 2013</td>
<td>8th Aug 2013</td>
<td>16th Aug 2013</td>
<td>16th Aug 2013</td>
<td></td>
</tr>
<tr>
<td>Orientation to Agency (due end of Week 1)</td>
<td>8th Jul 2013</td>
<td>8th Aug 2013</td>
<td>16th Aug 2013</td>
<td>16th Aug 2013</td>
<td></td>
</tr>
<tr>
<td>Learning Plan (due end of Week 2)</td>
<td>14th Jul 2013</td>
<td>16th Aug 2013</td>
<td>22nd Aug 2013</td>
<td>22nd Aug 2013</td>
<td></td>
</tr>
<tr>
<td>Practicum Reflection Week 3</td>
<td>26th Jul 2013</td>
<td>28th Aug 2013</td>
<td>3rd Sep 2013</td>
<td>3rd Sep 2013</td>
<td></td>
</tr>
<tr>
<td>Timesheet Week 3</td>
<td>26th Jul 2013</td>
<td>28th Aug 2013</td>
<td>3rd Sep 2013</td>
<td>3rd Sep 2013</td>
<td></td>
</tr>
<tr>
<td>Practicum Reflection Week 4-6</td>
<td>14th Aug 2013</td>
<td>16th Sep 2013</td>
<td>22nd Sep 2013</td>
<td>22nd Sep 2013</td>
<td></td>
</tr>
<tr>
<td>Timesheet Weeks 4-6</td>
<td>14th Aug 2013</td>
<td>16th Sep 2013</td>
<td>22nd Sep 2013</td>
<td>22nd Sep 2013</td>
<td></td>
</tr>
<tr>
<td>Mid-year Assessment of Learning Outcomes (due end of Week 7)</td>
<td>19th Aug 2013</td>
<td>21st Sep 2013</td>
<td>27th Sep 2013</td>
<td>27th Sep 2013</td>
<td></td>
</tr>
<tr>
<td>Practicum Reflection Week 7-9</td>
<td>6th Sep 2013</td>
<td>8th Sep 2013</td>
<td>14th Oct 2013</td>
<td>14th Oct 2013</td>
<td></td>
</tr>
<tr>
<td>Timesheet Weeks 7-9</td>
<td>6th Sep 2013</td>
<td>8th Sep 2013</td>
<td>14th Oct 2013</td>
<td>14th Oct 2013</td>
<td></td>
</tr>
<tr>
<td>Oral Presentation Marking Sheet</td>
<td>18th Sep 2013</td>
<td>20th Sep 2013</td>
<td>26th Nov 2013</td>
<td>26th Nov 2013</td>
<td></td>
</tr>
<tr>
<td>Practicum Reflection Week 10-12</td>
<td>27th Sep 2013</td>
<td>29th Sep 2013</td>
<td>5th Nov 2013</td>
<td>5th Nov 2013</td>
<td></td>
</tr>
<tr>
<td>Timesheet Weeks 10-12</td>
<td>27th Sep 2013</td>
<td>29th Sep 2013</td>
<td>5th Nov 2013</td>
<td>5th Nov 2013</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>18th Oct 2013</td>
<td>20th Nov 2013</td>
<td>6th Dec 2013</td>
<td>Not set</td>
<td></td>
</tr>
<tr>
<td>Practicum Reflection Week 18</td>
<td>8th Nov 2013</td>
<td>10th Dec 2013</td>
<td>17th Dec 2013</td>
<td>17th Dec 2013</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4: Nursing student’s submitted Webfolio (with embedded video and use of an activity log)
Appendix 5: Public Health student’s submitted Webfolio (with use of images that are clickable and link to assets)

To view this case study in an electronic format please visit this link:
www.pebblebash.co.uk/2014/resources/pdf/pb2014cs05.pdf
Midwifery students’ experiences: Real time, real benefit, real deal

Helen Godwin & Jacqui Patten
School of Nursing and Midwifery, Edith Cowan University, AUS

Chosen theme(s)

Program curriculum
Institution agendas
Professional learning and accreditation

The context

Midwifery students are required to provide evidence of clinical experiences to be able to register as a health professional with the Australian Health Regulation Authority. The evidence is collected in the form of a paper based portfolio. The accreditation standards as set by the Australian Nursing and Midwifery Board include 100 antenatal visits, 100 postnatal visits, 40 births, 40 complex cares, and 20 continuity of care experiences. The continuity of care experience involves following a pregnant woman through her child birth period for approximately 20 hours. The standards are currently under review.

ECU provides two entries into midwifery; a post graduate Masters degree and the four year dual nursing and midwifery degree. Students commence collecting evidence from the first semester through to the last year of their course. During the course students are expected to demonstrate learning and application of knowledge to clinical situations through reflections.

The documentation of clinical experiences is a condition of the registration authority who may request the evidence for an audit. It was recognised that PebblePad could fulfil the recording requirements and in addition provide a platform for supervision and assessment of experience and reflection. However, we are finding other more tangible benefits can be realised with the software which will give our students much more than a digital portfolio.

How it was ...

Currently the midwifery students record their clinical experiences in a paper format. Two lever arch folders are supplied to the students; one for continuity of care experiences, and the other for all other experiences. The experiences obtained during continuity of care visits may also be counted towards the number required for antenatal, postnatal, births and complex care. Filing of records becomes confusing for students as visits with one woman involve a variety of experiences.
Safety is a concern when using a paper based system. Students are required to carry their portfolio in order to complete relevant paperwork. These folders become very heavy to transport. Confidential and sensitive information is recorded in the portfolios therefore students must ensure they are only seen by authorised people. Paper based portfolios are irretrievable when lost or damaged. With PebblePad the information can be entered into the student’s Pebble account during clinical placement using an iPad or other mobile device.

The approach

At first the requirements seemed quite simple, the migration of a paper based system into an electronic portfolio. However the more we learned about what the software could do, the more we wanted to do. The approach we have built combines almost all of the main features of PebblePad and ATLAS and has produced a model that is integrated throughout the whole course and starts on day one of the students’ studies.

The first area to be developed was the forms that the students are required to fill in whilst out on practicum. They were created with the template builder and great care was taken with the design so as not to mimic the existing paper forms but improve them utilising the rich tool set provided in PebblePad. Standards were defined so that they all followed a uniform approach in terms of heading sizes and formatting and coloured fonts were used to reflect the same colour as with the paper based system. This was to make students who had used both systems feel immediately familiar with the forms. Automatic tagging was set up on the forms so that every time a student filled one of the many different antenatal forms it was automatically tagged with ‘antenatal’ irrespective of the name of the form. Every time a new born form was completed, it was tagged with the words ‘new born’ and ‘birth’, making it easier to find and group for the accreditation standards as set by the Australian Nursing and Midwifery Board. The students are also prompted to tag the forms manually with the woman ID. If the woman happens to also be a part of the continuity of care experience the student will identify them with a ‘CCE’ tag.

The next part of the model was to create a PebblePad Collection to track the forms related to each continuity of care experience. A collection was set up for each woman and using the ‘Set Criteria’ option we were able to have any forms tagged with the woman ID automatically added into the collection. This means that when a student is filling in the forms on their mobile device the forms related to that woman are being digitally filed and stored without them having to do anything.

Once a collection for a woman is set up it will be added to a PebblePad Activity Log. The Activity log will stipulate that the students needs to have completed 400 hours continuity of care as part of their registration process and as hours are added to each woman’s collection (20 hours for 20 woman) they will see their target hours reducing.

It is important to also point out that every form that is completed by the student also has the facility for an electronic signature to be signed by the supervising midwife directly onto the mobile device. This means that the form has been verified by a clinical preceptor in real time.
The workbook we have created allows all of this information to be collated together. The evidence provided by the student can be monitored but more importantly verified by a lecturer or external clinical supervisor via the ATLAS workspaces. This evidence can be viewed in workspace reports in the format of a pie chart. The completed workbook can be sent as a published link to the Australian Nursing and Midwifery Board and could also be used as sample work towards course accreditation.

The reflection component of PebblePad has been proven in other disciplines but to be able to link forms created to a specific reflection for an assessment was the final piece of the puzzle.

**How it is now ....**

Although we are very excited, the new PebblePad portfolio is still in the development stage. A panel of midwifery students tested the on-line portfolio at the university. Students were unanimous in that it would be a great improvement compared with the current paper based system. Suggestions were made on how to improve the presentation. Student's voiced that they particularly valued the “hints” that could be provided within the PebblePad templates to help with learning.

The on-line portfolio will be trialled in the first semester in 2014 during clinical practicum. On site Clinical facilitators will receive training prior to the trial. The intention is to evaluate the current paper based system against the PebblePad portfolio. Feedback will be obtained from clinical facilitators and students.

**The benefits**

From the students’ perspective expected benefits include time saving, formative and early direct feedback from lecturers, a less confusing filing system, ability to use the same piece of evidence for multiple purposes, in built structured reflection templates, and they will leave with a tangible asset that they can use for future opportunities and employment. Also they do not have to worry about the inherent problems of a paper portfolio – carrying around huge files and the risk of loss.

Learning could be enhanced with the use of confidence scales within the templates. For example, the accuracy of a student's assessment of a woman during the antenatal period can be confirmed during an assessment performed later in the child bearing period.

The templates are able to include definitions of terms within the hints area. This is difficult to replicate in paper based formats. Terminology is difficult for students to grasp in their earlier years, and this process will reinforce their learning and familiarity with midwifery jargon.

Lecturers are able to provide timely feedback to a student who requires guidance early in, and throughout, the semester to ensure they understand and stay on task. Reflections will be a major component of the portfolio which will require critical thinking by the student and guidance from the lecturer or clinical facilitator. PebblePad allows quick access to modification of already distributed learning materials. This is particularly useful when the registration authority enforces the new standards.
Benefits to lecturers include monitoring student performance for a particular cohort or the whole course with the use of powerful reporting in ATLAS. Also within ATLAS the power to verify at 3 levels that the evidence provided meets a certain standard means that we can start to prove that authentic learning has taken place. The recently developed PebblePad digital signature feature ensures that clinicians and lecturers will be able to be confident that the experience has been validated.

Benefits to the institution include cost saving as paper and coloured ink are no longer required. The students will also save money on these consumable items. There are benefits to the environment due to reduced paper use.

**Lessons learnt**

In December 2013 students were invited to view the PebblePad Midwifery Student Portfolio and give comments. Some of the very junior students had a limited knowledge base and required more detailed definitions. For this reason the junior students (first year) will not be part of the trial in May. The final year students wished the portfolio had been available for them in the previous years but felt they would be too busy in their final year to be involved in the pilot. As a result of the feedback from students it has been decided that only the second and third year students from the four year Dual Nursing and Midwifery Course will be invited to participate in the Pilot in May 2014.

One of the anticipated challenges is the availability of iPads. Many students have them and for those that do not the School of Nursing and Midwifery will have a small number available. These iPads will be distributed to the clinical facilitators and the students will use them under their supervision. A problem may be encountered during clinical experience when a student may be prevented from accessing PebblePad due to the health care facility firewall restrictions or on rural placement with poor WiFi signal.

A further area we may want to venture into is the ability to ‘lock down’ changes to a form once a digital signature has been applied. Although cases of fraud are very rare this would effectively eliminate it. However we understand the issues in trying to stop changes to what are effectively the students own assets.

**In brief – personalising the curriculum**

- The evidence that theory is transferring into practice for students is more evident
- Students can own their experience instead of just collecting evidence on a form
- It will encourage lifelong learning through reflection and interaction with lecturers with prompt responses to situations.
- It will give students real benefit, in real time … we think it’s the real deal!

To view this case study in an electronic format please visit this link:
www.pebblebash.co.uk/2014/resources/pdf/pb2014cs06.pdf
The use of eportfolio in pre-registration clinical practicum, professional development and recertification processes in the New Zealand Osteopathic Profession - beyond curriculum to capability

Stiofan MacSuibhne
Co-Chair of the Osteopathic Council of New Zealand (OCNZ), NZ

Chosen theme(s)

Professional learning and accreditation

The context

The OCNZ is the statutory regulatory authority for the NZ osteopathic profession, established as per the Health Practitioner Competence Assurance Act (2003). The primary purpose of the Act is the protection of the health and safety of the public.

The Act requires that regulatory authorities determine a scope/scopes of practice for each registrant, accredit qualifications leading to registration, and develop competency frameworks and processes to ensure the maintenance of competence and assessment of competence in a range of disciplinary, recency of practice and assessment processes of international osteopathic graduates.

How it was ...

Historically the pre-registration/accreditation processes, assessment of international osteopathic graduates for registration, the assessment of competency in disciplinary processes, and the processes for return to practice have been conceptually and methodologically inconsistent. There has been little if any consistency in the approaches used in assessment, or even a shared understanding of what constitutes ‘scope of practice’ and contingent on that an ill-defined and highly contestable set of knowledge, skills and attitudes that support or are characteristic of ‘competent practice’.

Essentially the various forms of assessment were predicated on the existence of a somewhat mythical, historical curriculum and view of practice as being one of rehearsal of the skills acquired in pre-registration training. However, over time and between institutions there is little evidence to support the existence of a stable osteopathic curriculum. Further, understanding of health and disease evolves over time, knowledge of individual osteopaths both decays and develops over the career-span in particular ways, and there is specialisation and diversification within the profession. There is also recognition that there is a range of acceptable levels of competence in any given set of capabilities as there is a continuum between novice and advanced practitioners. The range of assessments in place failed to adequately deal with these realities.
The approach

The decision by OCNZ to adopt PebblePad needs to be situated in a broader and complex understanding of discourse on scope of practice and an acceptance of the reality that the nature of what constitutes competence in osteopathic practice is both indeterminate and emergent.

Key aspects to OCNZ’s process:

1. A form of assessment that aligns learning and assessment was required that allows the practitioner to identify and develop a reflective approach. At the same time from a regulatory perspective a defensible mechanism was required that allows evidence to be assembled and, notwithstanding the diversity of approaches to practice, allows competencies to be identified within a flexible capabilities framework.

2. Creating an understanding of reflective practice and a commitment to lifelong/lifewide learning - training and dialogue with the profession. Over three years a cycle of regional conferences has been used to raise awareness amongst the profession of issues, problematising current approaches and sharing an understanding of the theoretical framework supporting the use of PebblePad.

3. Migrating from a p-portfolio to an e-portfolio: trialling PebblePad with international osteopathic graduates and the 4th year undergraduate student practitioners at Unitec, Auckland; converting the paper assessment tools to PebblePad resources; developing expertise and supporting users.

4. Encouraging practitioners to creatively develop and use PebblePad as a personal learning space.

5. Creating allies and project champions - the coalition of the willing. Identifying potential pilot sites for trialling professional development/recertification processes.

How it is now ….

Progress is slow but progress nevertheless:

1. Second cohort of 4th year students using PebblePad for the assessment of their clinical practicum.

2. Two peer groups of osteopaths identified as pilot sites and further training scheduled.

3. OCNZ preceptors trained in PebblePad

The benefits

The approach to the adoption and implementation of PebblePad has been deliberately gradual and with no general compulsion to date. Over a period of three years a series of regional conferences have been used as a vehicle by the OCNZ to generate discussion within the profession on issues around professional development.

We have sought to problematise the existing approach of setting a tariff of hours each year for registrants attending approved courses by looking at the evidence base supporting
such forms of professional development (which is almost entirely lacking) and to draw out the some key themes relating to learning and assessment in professional practice and epistemological issues relating to osteopathic practice.

We are in the midst of a paradigm shift:

- The underlying knowledge base that supports competence in practice is no longer viewed as being static. It is no longer defensible to view professional development or competence merely as an exercise in recapitulating a pre-registration curriculum.
- The NZ osteopathic profession has a number of scopes of practice: a general scope; vocational; and extended. We need to acknowledge a diversity of practice styles and interests.
- The acknowledgement that whilst regulators ultimately rely on professionals to self-regulate, self-declaration of competence in the absence of evidence is no longer acceptable to the public.

PebblePad provides both a means of moving the focus from the proto-professionalism inherent in the underlying knowledge base to practice itself, allowing the fine grain of what constitutes competent practice to be captured. This allows the regulator to inform its policy development and accreditation processes with authentic representations of practice reality.

This empowers the osteopath in a number of ways. In an overload of evidence it is all too easy to be disheartened by the array of conflicting evidence that the literature presents. What constitutes best practice is seldom clear-cut. Without encouraging reflection it is hard to see how evidence can inform practice. The scaffolding within PebblePad allows learning to be embedded in practice rather than practice somehow to emerge from learning. This gives a real possibility of bespoke and therefore meaningful professional development.

Over time new graduates/overseas trained osteopaths will form a network of PebblePad savvy practitioners and hopefully help ease PebblePad’s wider adoption in professional development processes. This has reduced the ‘fear factor’ with respect to change and created curiosity and a pool of volunteers to trial PebblePad.

**Lessons learnt**

Overcoming barriers – whilst resource constraints have been, and continue to be, an issue perhaps the major hurdle has been overcoming conventional thinking amongst administrative staff. Poorly articulated fears over loss of control of process, substituting more complex/amorphous ‘reflexion’ for the simple/concrete hourly tariffs of attending courses or substituting the ‘sage on stage’ view of learning with self-reflection. It is important to focus on the added value of reflection on practice over the growing pains of different working practices. But enthusiasm and determination carries the day!
An advantage of the slow burn approach with the profession has been time for the conceptual framework to be understood and producing practitioners that are keen to push forward with innovation.

In brief

From the ivory towers to the swampy lowlands of practice!

- PebblePad has helped move the focus of what the profession understands constitutes competence beyond the boundaries and artificial subject areas of traditional pre-registration training courses to professional practice.

To view this case study in an electronic format please visit this link:
www.pebblebash.co.uk/2014/resources/pdf/pb2014cs07.pdf
Introducing eportfolios into the Bachelor of Occupational Therapy (OT) program

Christine Slade¹, Keith Murfin¹, & Anita Hamilton²
¹Centre for the Support and Advancement of Learning and Teaching & ²School of Health and Sport Sciences, University of the Sunshine Coast, AUS

Chosen theme(s)

Unit level implementation
Program curriculum
Professional learning and accreditation

The context

In 2013 the University of the Sunshine Coast undertook an ePortfolio Early Adopter Phase using the PebblePad platform. As part of this phase the Bachelor of Occupational Therapy (OT), a four year degree, was the first undergraduate program to use eportfolios at the University. In this program eportfolios play an important role in providing students with a Personal Learning Space (PLS) to develop reflective practice and store evidence for meeting external graduate standards, practitioner registration and career opportunities. The implementation of eportfolios began with the first year cohort of 140 students with the intention of an incremental introduction of further eportfolio features over the whole program as outlined in Table 1.

Table 1: Anticipated OT Program Level ePortfolio Implementation for Students

<table>
<thead>
<tr>
<th>Year</th>
<th>Personal Statement</th>
<th>Ongoing Reflection</th>
<th>Evidence of Learning</th>
<th>Graduate Attributes</th>
<th>Aust Min Standards</th>
<th>CV</th>
<th>CPD Plan</th>
<th>CPD Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
How it was …

The first year introduction to eportfolios occurred in two courses/units i.e. Semester 1: Concepts in Human Occupation and Semester 2: Participation in Occupation. No portfolio activities existed in these courses prior to 2013 which meant that students previously saw their reflections as merely ‘an assignment’ and would not keep them for review later in their degree. Many students potentially lost their work over time which meant that they were unable to look back on their growth and development over the time of their degree. Consequently, even though a paper-based portfolio already existed in fourth year, students often complained they did not have enough evidence of their progress towards becoming a competent occupational therapy graduate and expressed regret at not keeping a portfolio across their degree. Including the eportfolio in first year creates a means by which students will not only start to save their work and review their progress, but they will store these assets in one place and will be able to retrieve them in fourth year to demonstrate their competency in the final assignment and be confident in using an eportfolio when applying for jobs after graduation.

The approach

A collaborative approach was taken to facilitate the embedding of ePortfolios into the course curriculum as explained in Table 2.

Table 2: Details of Major OT ePortfolio Implementation: Groups, Timeframes and Activities

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Timeframe</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>C−SALT Staff</td>
<td>Semester 1</td>
<td>Planning session (building eportfolios into the course)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introduction to eportfolios and PebblePad for academic teaching staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of research partnership between C−SALT and course coordinator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training session with academic teaching staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>One-to-one support creation of templates with course coordinators</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre-usage surveys facilitated by C−SALT staff with students</td>
</tr>
<tr>
<td></td>
<td>Semester 2</td>
<td>Training session with academic teaching staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>One-to-one support creation of templates and making videos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Online post-usage surveys facilitated by C−SALT staff with students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Debrief session with OT eportfolio/course coordinator at end of 2013</td>
</tr>
</tbody>
</table>
### OT Portfolio/course coordinator

<table>
<thead>
<tr>
<th>Semester 1</th>
<th></th>
<th>Semester 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attend first year class to present to students what eportfolios are and why we are introducing them at USC.</strong></td>
<td></td>
<td><strong>In consultation with course coordinator select activities that will be included in eportfolio.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>In consultation with course coordinator select activities that will be included in eportfolio.</strong></td>
<td></td>
<td><strong>Arrange training for academic staff on scope of eportfolio tool (PebblePad)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Create templates for students to use to upload work to eportfolio</strong></td>
<td></td>
<td><strong>Arrange training for students on how to use eportfolio tool</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Arrange training for academic staff on scope of eportfolio tool</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Check templates and create additional ones for semester 2 eportfolio tasks</strong></td>
<td></td>
<td><strong>Make instructional videos with C–SALT team members about eportfolio tool so students can upload information for assessment task.</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester 1</strong></td>
<td><strong>Semester 2</strong></td>
<td><strong>Students</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Hear about eportfolios generally in class</strong></td>
<td><strong>In consultation with course coordinator select activities that will be included in eportfolio</strong></td>
<td><strong>Choose to attend optional face-to-face training sessions to learn how to use the eportfolio</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Choose to attend optional face-to-face training sessions to learn how to use the eportfolio</strong></td>
<td></td>
<td><strong>Some students ‘played’ with the PebblePad software to explore how it worked.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Watch videos about how to upload work to the eportfolio</strong></td>
<td></td>
<td><strong>Upload a selection of work to the eportfolio</strong></td>
<td></td>
</tr>
</tbody>
</table>

Centre for the Support and Advancement of Learning and Teaching (C–SALT) support staff worked with the OT eportfolio/course coordinators to design the eportfolio implementation and to build teaching staff skill levels with the view that these educators would then work to up skill students in their eportfolio use.

**ePortfolio tasks for students**

Two existing tasks i.e. ‘The Desk’ and the Fieldwork journal, plus one optional task, ‘Why I chose occupational therapy’ formed the foundation of the eportfolio. Templates were developed for students to use to complete these tasks as illustrated in Figures 2, 3 and 4.
Figure 1: ‘The Desk’ Template

Figure 2: Sample student response (used with permission)
By the end of 2013 students were introduced to the main features of PebblePad and required to submit a reflective task into ATLAS using the custom designed templates. Reflecting on the Early Adopter Phase the OT eportfolio coordinator commented:

*At this point I don’t feel that I have many ideas about where to improve what we have done in our first year. I feel that by only taking on a small challenge we were successful. If we had tried to achieve anything more I doubt that it would have gone as smoothly as I think it did.*

In 2014 the new cohort of first year students will follow a similar effective ‘gentle’ approach although an assessment task using eportfolios will be added to the semester one curriculum which was not possible for the Early Adopter Phase in 2013. The curriculum for the second year students (the 2013 first year cohort) requires them to regularly add further evidence of learning and graduate attribute attainment and the development of competency in using other aspects of their PebblePad eportfolios.
The benefits

Emerging benefits from this short *Early Adopter Phase* include:

1. The importance of developing a critical reflective practice as students was reinforced through the eportfolio assessment task.

   *It forces students to put reflection on their progress on their “must do” list and will help them build habits that will be very important in professional life. Being able to reflect on one’s achievements, struggles, learning and growth is important in the cycle of any professional’s annual review and planning process. Students will be able to use the ePortfolio to prepare for workplace activities such as PPR and for annual registration through AHPRA.*

   [Course coordinator]

   *Will be able to reflect on what I learnt in previous years of my course.*

   [Student]

2. Students can be engaged through pedagogical tools that encourage self-learning. Students shared in the Post-Usage Survey that instructions from the lecturer, training received on campus, the ‘how to’ videos the course coordinator posted online, and taking time to play with the software program made learning how to use an ePortfolio easier. Students developed self-confidence with using PebblePad through these methods as described below:

   *Designing a template for placement was challenging. I don’t think I did it right, but I can go back and change it as I learn how to use it.*

   [Student]

3. C–SALT staff and academic teaching staff found the slow start approach effective in an undergraduate degree program.

   *I think this experience reinforced my “take it slowly” approach, and that is a very good thing. I think that rolling the eportfolio out slowly is critical to its success.*

   [OT ePortfolio coordinator]
Lessons learnt

- It is vital to plan early the embedding of eportfolios into the course curriculum, particularly assessment tasks.
- Be mindful that staff and students may struggle initially with learning the software within a context of multiple demands on time, energy and resources.
- Having training workshops engaged some students early. Others relied on later help, such as the ‘how to’ videos.
- The importance of all members of the eportfolio implementation ‘team’ communicating and planning together regularly so support will be available when needed.

In summary:

*It is difficult to “retrofit” a course with an eportfolio, it needs to be slowly integrated into the course, the training needs to be part of the learning activities in the course and the students need to be continually reminded why it is being done*

[OT ePortfolio coordinator]

In brief – personalising the curriculum

- PebblePad not only allows storage of assets in one place but these assets can be used for multiple purposes and audiences.
- The ATLAS interface between student and academic teaching staff allows students to be comfortable putting assets in PebblePad as their own private Personal Learning Space.
- PebblePad is a versatile tool enabling many pedagogical objectives.

To view this case study in an electronic format please visit this link:
www.pebblebash.co.uk/2014/resources/pdf/pb2014cs08.pdf
Master of Midwifery: A postgraduate program’s first use of eportfolios

Christine Slade¹, Keith Murfin¹, Michelle Gray², & Kendall George²
¹Centre for the Support and Advancement of Learning and Teaching & ²School of Nursing and Midwifery, University of the Sunshine Coast, AUS

Chosen theme(s)

Unit level implementation
Program curriculum
Professional learning and accreditation

The context

In 2013 the University of the Sunshine Coast undertook an ePortfolio Early Adopter Phase using PebblePad. As part of this phase the Master of Midwifery, offered both full time and part time, was the first postgraduate program to use ePortfolios at the University. ePortfolios were introduced to the same cohort of students across two semesters; Semester 1 NUR700 Theory for Midwifery Practice (14 students) and in Semester 2 NUR729 Midwifery Practicum (11 students). Implementation support was provided by the Centre for the Support and Advancement of Learning and Teaching (C–SALT). However, the implementation phase was short meaning that teaching staff and students learnt to use this new technology simultaneously.

The Approach: How was the curriculum delivered previously and why was it changed?

The Masters of Midwifery program was reaccredited in 2013 which meant that for the first time student midwives were required to follow 20 women through their childbearing experience in order to meet registration requirements at the end of their program. In addition students also had to complete other statutory requirements such as 100 antenatal and postnatal examinations. Documentation of these experiences was anticipated to be cumbersome as previously student midwives were only required to record follow through experiences with five women and present this in hard copy in a paper folder. PebblePad was seen to offer an opportune electronic storage system where students could collate evidence for registration purposes.

In Semester 1 students were introduced to pre-made asset templates which they completed after each individual learning experience with women. Students then shared their completed templates with their lecturer in a formative manner via ATLAS and students received written feedback. Discussion and ongoing support about the completion of templates was provided in class but increasing use of the ATLAS feedback resource by students became time consuming for the lecturer as students became more proficient. Therefore students were instructed how to amalgamate assets into
webfolios. This scaffolding of learning introduced students to elements of PebblePad in a sequenced approach rather than bombarding students with less IT skills with ambitious expectations.

For students unenthusiastic about their eportfolio, attempts to increase the tool appeal involved efforts to personalise the tool with photographs and their professional CV, and highlight the convenience and flexibility of completing records on the go via mobile phone or tablet. Nevertheless, some students identified that unless the eportfolio served as an assessment piece they would resist the online version, preferring to submit hard copy evidence. This option involves repetition of evidence across the professional standards. For example each antenatal examination would need to be written as one of the 100 antenatal checks and again as an antenatal experience with a continuity of care experience.

In Semester 2, 4 out of the 11 students chose to continue to use PebblePad as their data storage for clinical requirements and continuity of care experiences. The remainder of the students chose to record and submit data using the hardcopy evidence provided. Feedback from the students highlighted the reluctance to undertake the extra hours of interactive support during the course and felt overwhelmed with the prospect of additional learning. Those who continued to utilise PebblePad emphasised the engaging ways in which they had learnt to be creative with their eportfolios and were able to identify the benefits for their future professional interactions with prospective employers.

Lecturers saw PebblePad as a useful tool to refine the documentation process of all clinical interactions and expected clinical experiences required by students to successfully obtain registration as a midwife. The lecturers also wanted students to develop their CV and store evidence for continuing professional development (CPD). Once students graduate and become registered midwives it is a requirement for them to maintain their CPD. This online eportfolio repository provides an efficient way in which to store this evidence and display achievement of this to future or current employers.

Collaboration and support

C--SALT staff and the midwifery lecturers worked together to design the eportfolio implementation and to build their skill levels with the view that the lecturers would then work to enable the students’ eportfolio use. Activities undertaken between C--SALT staff and lecturers included an introduction to eportfolios and PebblePad and later training sessions, planning meetings on how to build eportfolios into the courses, one-to-one support in creating customised templates (see Appendix 1), and finally a debriefing meeting at the end of the year.

Evaluation

Another collaborative aspect of this eportfolio implementation was the development of a research partnership between C--SALT and the Master of Midwifery lecturers. The eportfolio project manager designed the research project and gained human ethics permission for data collection. C--SALT staff administered pre and post-usage surveys with the students at the beginning and end of the year as well as leading a focus group
in Semester 2, 2013. Furthermore, C–SALT staff collected post-usage surveys from the academic teaching staff about their experience in using ePortfolios.

Participants from the three groups involved in this implementation process shared their thoughts about the value of ePortfolios in meeting the students’ learning needs.

I see ePortfolios as valuable as the creation of evidence once can be linked to other areas, saving time for the student.

[Teaching Staff Member 1]

I think the program has value, [there is a] need to consider timeframe of implementation and value to students.

[Teaching Staff Member 2]

Good for reflective practice: learning and also appointment record.

[Student 1]

[I was]…able to keep track of things to meet requirements for follow-throughs.

[Student 2]

There is so much benefit in having everything collated into one place.

[Student 3]

When I look at eportfolios I see the possibilities of what can be done there is a lot of value…in five years’ time when you look back… you have something that’s accessible, it is still there, you reflected on it when it happened and five years on you benefit from it.

[C–SALT Staff Member 1]

It’s very much about how you integrated it into the course.

[C–SALT Staff Member 2]

I want to see people using it successfully.

[C–SALT Staff Member 3]
How it is now ....

This Early Adopter Phase with this first cohort of Master of Midwifery students showed that there is a wide range of digital literacy skills evident amongst the cohort with some students finding it relatively easy to use PebblePad while others found it a struggle, particularly within the context of high workload demands. However, all students had the opportunity to improve their current digital literacy by using the eportfolio software whether on a regular or infrequent basis. Identified issues with duplication of practicum documentation in order to submit it as artifacts into PebblePad was addressed through adjustments to the volume of work required of the students for the ‘follow through’ cases assessment task.

In 2014 the eportfolio will be embedded into course assessments and the curriculum. In light of the short timeframe of 18 months, courses within this Masters of Midwifery program have been adjusted to accommodate further workshop opportunities for future students in order to increase students’ confidence in their competence to create eportfolios for storing evidence ready for registration. Weekly support and regular workshops will be conducted throughout the semester to engage students and increase their confidence and self-sufficiency in preparation for Semester 2.

Assessment for the clinical portfolio and recording of all clinical experiences have been streamlined by the use of webfolios and are now more efficient for both students and lecturers as PebblePad is easy to access and view work, allowing the giving of timely feedback whilst still monitoring progress.

What have we learnt through this experience?

Students learnt how to use an eportfolio to record their follow through experiences and store documentation and evidence of clinical activities. They learnt a new way of managing data, and how to showcase experiences and enhance their CVs. Students and lecturers had opportunity to improve their current level of digital literacy and be exposed to future technological advances in storing and showcasing evidence for multiple purposes and audiences.

This experience reinforced that any anticipated eportfolio use for students needs to be embedded into the course curriculum and assessment regime early, and learning activities need to be staggered to support the different IT abilities. In order to engage students and encourage them to invest their time and interest the eportfolio has been made a critical part of the assessment process. The completion of the eportfolio assessment will be supported through additional workshops created through an adjustment to the curriculum. The assessment has been staged to provide formative and summative incremental submission.

The length of the course and the workloads of staff and students need to be considered in the expectations of what students are required to complete using eportfolios. The experience also highlighted the importance of supporting both lecturers and students in their eportfolio learning process.
How has PebblePad helped to ‘personalise the curriculum’?

There are a number of ways in which PebblePad provided opportunities to shape the Masters of Midwifery curriculum.

- In the first year of this program the use of PebblePad has concentrated on using the tool as a learning strategy, particularly to guide new student midwives in professional documentation processes and reflective practice entries in line with the Nursing and Midwifery Board of Australia’s (NMBA) standards.
- The use of PebblePad enabled lecturers to produce specialised templates that allowed students to directly link their learning to registration requirements.
- Similarly, eportfolios could be customised by the individual student for personal use to record their interactions with women and the requirements to meet the national standards for registration as a midwife that dictate the program curricula.
- Provided ‘a one stop’ location for the storage of evidence particularly for accreditation purposes.
- PebblePad enables the contemporaneous addition of information to accumulate evidence of the statutory number of care interactions dictated by the Australian Nursing and Midwifery Accreditation Council (ANMAC). Previously students were required to accumulate documentary evidence as a folder which required duplication of recurrent entries.
- ATLAS provides lecturer-student connection so that feedback can be given to support development of reflective tangents or correct any inaccuracies.
Appendix - Customised Templates Developed for Student Use

The following templates were designed for students to use as part of their ‘follow through’ cases.

Clinical Experience Record

Individual Follow Through

Appraisal and Feedback
Clinical Competency Assessment

Course
Which course is this assessment being submitted for?
- Midwifery Practicum 1
- Midwifery Practicum 2

Formative / Summative
- Formative
- Summative

CCA
Please scan and upload your completed CCA

Comments
Please comment on your progress

Episodes of Care

Episode of Care
Please enter a title for this record

Course
Which course was this episode assessed in?
- Midwifery Practicum 1
- Midwifery Practicum 2

Assessment
What grade did you achieve for this episode?
- Satisfactory
- Unsatisfactory

Area of practice
- Antenatal
- Intrapartum
- Postnatal
- Infant requiring special care
- Holistic / continuity

Episode of Care
Please upload your a complete and assessed version of the episode of care
Personal Activities

To view this case study in an electronic format please visit this link:
www.pebblebash.co.uk/2014/resources/pdf/pb2014cs09.pdf

Antenatal Experiences

To view this case study in an electronic format please visit this link:
www.pebblebash.co.uk/2014/resources/pdf/pb2014cs09.pdf
Utilising the workbook to scaffold reflective practice skills and add professional meaning for Diploma of Nursing students

Bec Watt
RDNS Training (SA) and Silver Chain Training (WA), AUS

Chosen theme(s)

Program curriculum
Professional learning and accreditation

The context

This project is located at RDNS Training and Silver Chain Training, a Registered Training Organisation providing the Diploma of Nursing in both South Australia (SA) and Western Australia (WA). The majority of students and staff are located in SA and 2013 saw the commencement of delivery in WA to a small group of students.

The Diploma of Nursing is the minimum qualification for admission to the professional nursing register in Australia, and comprises 26 units taught over an 18 month period, delivered over 3 semesters. We offer rolling intakes of 4 or 5 groups each year, with up to 350 Diploma of Nursing students at different stages of the course at any one time. Only domestic students can apply and entry requirements are either completion of Year 12, Certificate III or mature age entry. The students, who are overwhelmingly female and at an average age in the early to mid 30s, present with highly varied levels of computer confidence and ability, predominantly on the lower end of the spectrum.

Study modes include classroom, online and simulated practical, plus facilitated work placements across Aged Care, Community and Acute nursing environments. The course is a generalist nursing qualification covering topics including palliative care, anatomy and physiology, chronic and acute nursing, cultural diversity, law and ethics, aged care, research and reflective practice.

This Case Study primarily deals with supporting student reflective practice during placements.

External curriculum drivers

As a nationally licensed qualification the curriculum is accredited by both the Vocational Education and Training (VET) regulator and the licensing authority for nursing and midwifery in Australia (the Australian Nursing and Midwifery Accreditation Council, or ANMAC). This dual regulation framework compels the curriculum to address Employability Skills, a nationally endorsed set of capabilities that all nationally recognised training providers must endeavour to develop and assess in their students and graduates. In addition, the
professional standards for nurses contain explicit requirements in relation to continuing professional development, and these commence from the moment of registration as a nurse. This ‘moment of registration’ is typically immediately on completion of the pre-registration course, in this instance the Diploma of Nursing, hence training providers delivering this qualification need to build the capability for their students to satisfy these requirements very early in, and continuously throughout the curriculum.

Non-regulatory external drivers include the expectation of industry and employers that nursing graduates, and increasingly student nurses on placement, can demonstrate application of reflective practice and continuing personal and professional development in a planned and systematic fashion.

Internal curriculum drivers

We undertook a review and upgrade of the curriculum in line with changes in the regulatory environment, which highlighted the need for increased rigour in the collection of evidence related to the non-technical elements of the course, such as reflective practice. The turnover of some teaching staff also introduced a change to the skill mix of the faculty, again presenting an opportunity to make changes to the curriculum.

How it was ...

In the previous HLT51607 Diploma of Nursing the students were required to produce a one page handwritten reflection in their clinical logbook for each placement. The reflection page in the clinical log book did not provide any framework to guide the student in how to write a well-constructed reflection. This approach to reflection in the Diploma did not prepare the students for a professional nursing career which embraces on-going learning based on a cycle of analysis and reflection.

In 2010, RDNS (SA) delivered an ePortfolio Implementation Trial funded by the Australian Flexible Learning Framework to investigate and identify the factors that contribute to the successful implementation of an eportfolio system which supports a learner’s ability to easily move between education sectors and between job roles/industry areas. One of the outcomes of this trial is that we recognised the potential for PebblePad to add professional meaning for nursing students through application in the reflective practice element of the curriculum.

The approach

RDNS (SA) incorporated PebblePad into the curriculum during the development of the curriculum submission for the current HLT51612 Diploma of Nursing, by requiring students to undertake reflection in PebblePad after lessons and after each placement activity.

Orienting students to PebblePad

New students are given several weeks to become familiar with Moodle before starting the PebblePad orientation. As Moodle is the primary contact point with students we
encourage students to log into their Moodle accounts to access our PebblePad Help Page where they can click on a hyperlink to the PebblePad installation URL and they can find all customised help guides.

In SA, the location of the majority of students, the PebblePad orientation is delivered to each group by the PebblePad Project Nurse in the Resource Centre, allowing the students to work through the customised help guides with the help of a facilitator. The commencement of the first cohort of WA students was a catalyst for the step-by-step guides to be fully developed so students could get started with only minimal support required from their educator.

The Help Guides

Some of the information in the help guides is generic but was included in the specific information for consistency. The following image is from the help guide that is specific to using the Reflective Practice Workbook.

Figure 1: Help Guide
The Reflective Practice Workbook

Delivery has centred on putting all course-based requirements in one Reflective Practice Workbook to better cater to the significant proportion of students who struggle with technology. We have taken advantage of new workbook features such as being able to change content, scaffolding the release of pages and using a collection page.

When the students encounter the workbook for the first time, it appears with only 3 pages which is a little less daunting. Before each placement only two pages are added to the workbook (e.g. Placement 1 Context and the Placement 1 Final Reflection). By the end of the 18 month course, there will be approximately 12 pages in the workbook. As each group starts at a different month of the year, the workbook is copied and renamed so that the pages are added at the right time for each group’s progress. What follows is a summary of the Reflective Practice workbook pages and their features.

Welcome page

This page clearly states the requirements of the course and has a link to the Reflection Template. Towards the end of the course the content will be changed to address preparation for professional life, such as information about the nursing CPD registration standard and how to build and share a CV which can incorporate content from the Reflective Practice Workbook.

Figure 2: Welcome page
Employability Skills page

At the beginning of the course each student self-rates against eight Employability Skills and then revisits their ratings after each placement. Each placement reflection prompts the student to identify which Employability Skills the reflection has related to and then revisit, update and justify their self-rating. The aim is for the students to complete their course with evidence-based high self-ratings that can be built into a CV or job application. Each of the Employability Skills is linked to the relevant professional competencies (ANMC Enrolled Nurse Competency Standards) and there is a link from each Employability Skill to a folio page which contains the ANMC Competencies.

Figure 3: Employability skills
**Placement Final Reflection pages for each placement**

The placement final reflection page requires a placement expectation box to be completed before the placement commences, which is useful for the student in terms of looking back at how far they have come, but it also means the student can touch base with PebblePad before leaving the safety and support of the training facility.

In early iterations of the workbook, we used the What? So What? Now What? Reflection format, but we found this was more suitable for specific incidents than for a whole-of-placement reflection. The following three images show a student placement reflection response using the current reflection structure.
Placement Context pages for each placement

It is a requirement of the CPD registration standard that all Australian nurses define their context of practice every year. The placement context page prompts the student to clearly describe the type of placement they were on using a format similar to the CPD registration standard context statements to help them become comfortable with one of the requirements of their future professional registration as Enrolled Nurses. It is also an effective way to describe to potential employees the type of experiences they have gained during their Diploma course placements.
My Reflections Page

The reflection template available from the Welcome Page is where the students are encouraged to reflect on any occurrence, either before, during or after placement. The My Reflections Collection page displays all assets tagged with ‘diploma reflection’ and the Reflection Template available from the Welcome Page is tagged with ‘diploma reflection’. The students are also reminded to relate their reflection to their employability skills.

Initially the students were encouraged to use the Community blog to begin reflecting and to keep in touch with each other during placement. The blog was used quite a lot for keeping in touch by one of the earlier groups however several students preferred to keep their reflections private. It was at this time that the collection page feature was added to the workbook which enabled us to add a tagged Reflection Template to the welcome page and set up the collection page to pick up the same tag. This has been utilised well by the students and we have received feedback that they prefer it to using the blog format.

How it is now ....

From the beginning of 2013, students were required to write their reflection for each placement in PebblePad. Non-compulsory components included employability skill self-ratings and using the conversations page to reflect and keep in touch with each other during placements.
As part of the Quality and Improvement process, in 2014 the PebblePad reflection is to be added as an assessable component to the unit HLTEN508B Apply reflective practice and critical thinking in nursing to address the following essential skills in the unit:

- critical thinking and analysis
- professional review and skills development
- self-reflection and evaluation

This unit is delivered in Semester 1 which means the compulsory component of the PebblePad reflection will be completed in that semester. In order to encourage use of PebblePad in semesters 2 and 3, PebblePad reflection will be added to the lesson plan for every placement debrief session and third semester students will be encouraged to prepare for professional life by building their CV and learning how to fulfil the requirements of the nursing CPD registration standard using PebblePad.

The benefits

- PebblePad has become another tool in building technology confidence and competence in our students. Students have experienced a more tangible treatment of a skill previously considered quite theoretical and therefore difficult to grasp. The integration with Employability Skills and the production of evidence to support claims in a student’s CV also makes the activity more relevant for students.
- PebblePad has been utilised to manage the reporting of staff CPD activities. The nurses on staff have been able to simultaneously meet the national CPD registration requirements using a specific workbook for that purpose.
- Language, Literacy and Numeracy (LLN) support can be enhanced by matching low self-rating students in PebblePad with other LLN and course performance indicators. Using the “Add a Plan” feature of PP has helped formalise and record this support.
- PebblePad’s reporting features assists educators to monitor student self-ratings over the course duration, enhancing the effectiveness of pastoral care and enabling more targeted support interventions.
- Students are better prepared to fulfil their obligations as professional nurses on graduation, particularly ongoing learning and the CPD standard.
- Overall, student learning has shown signs of improvement through better engagement with the reflective practice content, better performance in related assessments, and improved application of related skills during placements.

Lessons learnt

Due to rolling intakes it has been necessary to carefully manage the timing of all PebblePad related communication, teaching and changes to each group’s workbook. This has been done by using a freeware programme called Evernote.

The educators have not engaged with PP as much as initially expected due to their high work load and the fact that I have been managing the PP component of the course. I have begun to focus more on improving educator engagement with PP which has
involved development of tailored help guides and one on one training sessions with a view to educators being able to give the students feedback on their reflections whilst they are still on placement.

It became challenging to ensure all students had reflected as required. Initially we managed this by running the ‘Members that have not yet submitted’ report from the workspace management area, however many students had shared their workbooks and then not reflected. To ensure all requirements were being met, we then had the students come into the Resource Centre during the first lesson after each placement to finalise their reflection. This provided an opportunity for the educators to read the reflections for assessment purposes and also see the other components of the workbook, whilst providing real-time feedback to the students.

We ran into a challenge when we found the computers in WA did not have flash installed. This has now been addressed by installing Flash and also developing a simple HTML format guide. We have also purchased a simple video conferencing system which has successfully enabled me to guide the WA students through how to use PP and the Reflective Practice Workbook.

In brief – personalising the curriculum

- Provide students with a personal space to record their own experience with a challenging element of the curriculum (placements)
- Integrate this personal reflection into the assessment of the course
- Provide students with a tool to build evidence in support of their CV which has delivered them stronger employment outcomes
- Have direct and private conversations with educators and other students at times of their choosing using PP

To view this case study in an electronic format please visit this link:
Moving midwifery placements online

Terry Young¹, Michelle Newton², & Sarah Hay²
¹La Trobe Learning and Teaching & ²School of Nursing & Midwifery, La Trobe University, AUS

Chosen theme(s)

Professional learning and accreditation

The context

Midwifery students are required to meet the Australian Nursing and Midwifery Accreditation Council (ANMAC) National Competency Standards in Midwifery and midwifery and nursing programs have to demonstrate capacity for students to meet these standards through a process of course accreditation against the Education Standards for Courses Leading to Registration. Teaching institutions commonly use these education standards as frameworks for their clinical practice assessment and documentation tools for students, ensuring that each student meets the requirements of the program before entry into the profession. Therefore, documentation of placement hours, activities undertaken while on placement, and assessment of skills and competencies form an essential component of the clinical placement of midwifery education programs across the country.

How it was …

Previous processes involved the distribution, collection, filling in and validation of many paper-based forms and documentation of activities in a student-held bound workbook. Records of each placement were then transcribed into a paper-based form that was stored in the student file. Verification of the various assessments was undertaken at the time of completion of each placement and again prior to course completion in order to confirm that each student had met the education standards as outlined by the ANMAC accreditation process. Issues:

- physical handling of the large volume of forms was cumbersome
- paperwork could be lost or misplaced
- version control was difficult
- storage problems including retrieval
- confirmation of completion of placement was reliant on student submission of the placement form
- potential for falsification of records as students took possession of the form after the completion by the clinical educators
- academic administrators had challenges managing student records and monitoring clinical learning at external sites
- all participants acknowledged the current paper process was not ideal
The approach

We initially ran a pilot with first year students of the Bachelor of Nursing / Bachelor of Midwifery, La Trobe University using an on-line version of the existing reporting form. Participants included 70 students, 20 Clinical facilitators (from 5 different hospitals) and 5 La Trobe academic staff. The following outline the key steps undertaken:

1. Initial consultation with staff
2. Developed a project plan.
   Who, what, how, when and Why
3. Identified parameters/requirements for a pilot
4. The form was migrated to a PebblePad Workbook
5. Draft demonstrated for feedback
6. Workbook modified based on feedback
7. Testing as a student, clinical facilitator and LTU Staff
8. Training to Clinical facilitators, including demonstration video and documentation
9. Orientation to students, including demonstration video and documentation
10. Created a support forum within the LMS for discussion around issues
11. Review pilot
12. Modify processes based on review feedback for next iteration

Example Workbook

How it is now ....

Placements were conducted from November 2013 through to February 2014. Of the 70 students in the pilot, 67 used PebblePad for the completion of the placement workbook. Only three were unable to use the PebblePad at the time of completion of their placement and their issues related to access to the system (these were able to be resolved with simple IT assistance once the issue was raised with the appropriate support staff).

The benefits

Feedback from students, Clinical Facilitators and Midwifery Academics has been positive and the majority of participants have reported the format to be easy to use.

Using PebblePad has placed the onus of the clinical reporting process onto the student. The design of the workbook requires that students have completed their documentation prior to their assessment meeting with their clinical facilitator. This has ensured that facilitators have the information necessary to complete their workbook, and has reduced the number of incomplete workbooks coming to the University.

Given the widespread acceptance of the tool amongst clinical facilitators, it is planned to roll the tool out across the program in 2014. Minor modifications are being made based on facilitator and academic feedback.
The capacity of this format for clinical reporting has great potential for the recording and reporting on clinical placements within the program. Ideally, students could have one ‘master’ tool that is cumulative throughout their program, and each workbook could feed into this ‘master’. This allows a tracking or progression using a single workbook rather than using multiple workbooks. This would also provide access to comments from other facilitators when meeting with the student for the first time, which becomes invaluable when students are located in a different setting from their normal placement allocation.

Other perceived efficiencies include:

- Student access to records when required for application for employment (currently managed by requesting copies to be made of paper based reports)
- Monitoring of Clinical Facilitators and students by LTU Staff
- Data collection
- Ready access of progress reports required by the Australian Nursing and Midwifery Accreditation Council Accreditation
- Storage and retrieval of data/workbooks
- Opportunities to action identified skills gaps and record progress
- Opportunities to facilitate self-directed learning using evidence portfolio
- Opportunity to support personal learning

Lessons learnt

- The existing form was not difficult to convert to an online version
- Staff saw the value of an online version immediately
- Clinical sites were a potential problem for accessing PebblePad and needed checking. Equally, access to computers in the clinical environment can be problematic. Ideally, the completion of the workbook should accompany a dialogue between student and facilitator. Ensuring the workbook is compatible with mobile technology could improve access with minimal cost to organisations.
- Involve staff throughout the process
- Develop a prototype early and demonstrate for feedback
- Test early and test as much as possible
- Based on this case study, we have created a reusable development methodology for other Health Science PebblePad projects
- The experience of this pilot has identified a great potential for these workbooks using PebblePad. The capacity for linking of workbooks into a ‘master document’ would be advantageous in streamlining the ongoing data that is required throughout the students’ course of study. This could then be easily accessed for reporting.
In brief

- Students are encouraged to take responsibility for evidence gathering
- Staff are considering how they can take action for students who are not meeting the standards
- Students have an electronic record of their personal individual progress of their learning
- Students are encouraged to have a personal evidence portfolio based on learning activities

To view this case study in an electronic format please visit this link:
Institution-wide
The short and the long of it: Sustaining workbooks from three weeks to three years

Susan Atkinson, Mark Henderson, Jo Lockwood & Ruth Weeks
Sydney eLearning, University of Sydney, AUS

Chosen theme(s)

Unit level implementation
Program curriculum
Professional learning and accreditation

Overview

This report details case studies from four different faculties where we used the workbook tool in the enterprise-level eportfolio system (PebblePad) as the preferred design solution. The formal learning periods during which students engaged with the activities ranged from three weeks to three years.

The workbook feature allows multiple templates to be created and compiled for students. They were used in our designs to support a variety of learning outcomes; developing iterative writing skills, nurturing the application of theory to practice, facilitating reflection and personal goal-setting and collecting evidence of learning during placement for accreditation.

The anticipated benefits of using a structured collection of templates were to scaffold the development of the target learning skills and to provide more opportunities for formative feedback. Even where the formal class contact was short, the activities were designed to model a process that had relevance beyond the unit of study. We hoped that students could and would reuse and build upon their initial work.

Reflection on the outcomes and challenges of implementing the activities also led us to some general conclusions for maximising the success of eportfolios in the higher education context.
Case study 1: A Workbook for a three-week intensive unit of study

Improving Academic Writing, Faculty of Arts

The context

Many students have difficulty mastering the skills needed to write well in an academic context. The University of Sydney offers a range of credit-bearing courses to improve academic writing and these courses involve a range of reflective and journal-style writing exercises for both formative and summative assessment. A key part of the teaching curriculum is frequent, ongoing formative feedback for students as they create their writing.

How it was …

Previously, it was logistically complex for teachers to provide ongoing feedback to students across lecture and tutorial groups. Writing was stored in paper-based diaries and students were unable to keep working while they were waiting for teachers to provide feedback. Teachers also had to control large amounts of paper both in and out of tutorials.

The approach

The academic wanted to provide ongoing feedback to students without relying on paper. The existing assessment items were analysed and it was decided that a collection of templates would provide the basic structure for students to develop a virtual diary where both reflective and formative pages could be provided. The templates provided models for students to then create their own pages and develop their own rhetorical style.

The real-time feedback loop was also seen as a distinct advantage for the condensed Summer School timetable on which the activity was trialed. Students were encouraged to use their eportfolio to store other writing assets and also create a repository for the references they needed to support their arguments. The workbook activities were piloted with a small cohort of 32 students.

Figure 1: Research journal workbook
The outcomes

The students were positive about their eportfolio experience and the associated feedback process, with an evaluation questionnaire confirming this. They were in their second year and were already familiar with the University of Sydney’s Learning Management System (LMS) so they were confident to try a new student-centred system with perceived benefits. Also, the project allowed for in-class support from an educational designer in tutorial time. This meant students soon developed the skills needed to complete their assignment and many started to build content outside the set tasks. The academic perceived that being able to provide more formative feedback online enhanced the students’ learning outcomes. She was also able to mark at home and at work and generally manage marking more effectively. After this successful three week intensive course with a small cohort, the reflective activity is now being used with a larger cohort of 100 students over a full semester.

Case study 2: A Workbook for a three-month unit of study

Introducing Reflection to First Year Education Students, Faculty of Education and Social Work

The context

As part of a curriculum review for the Educational Theory program at the University of Sydney, it was considered important to help students reflect on their motivation for becoming a teacher. Students were also required to consider how their attitudes and previous experiences influenced their response to the pedagogical theories presented across the degree program and to reflect on changes in their attitudes as they progressed through their degree. This first year course has a cohort of over 500 students in their first semester at university.

How it was ...

Previously, the reflective process was introduced in tutorials. Students were asked to write informally about their reasons for becoming a teacher, but this was not part of the summative assessment process. Introduction to theoretical frameworks was part of the lecture process and the first summative assignment was an essay summarising the theoretical frameworks underpinning current teaching practice. This essay was not explicitly related to the reflective exercise undertaken in tutorials. The essay was submitted on paper in week seven and was often the first academic essay that students had written at university.

The approach

Using an eportfolio was seen as an opportunity to support the process of reflection for students and also to provide a method for maintaining this process across their whole degree. The reflective and essay tasks were combined into one submission. Students were first required to submit three experiences that had motivated them to become a teacher. They were encouraged to add images or multi-media material which
Encapsulated this motivation. Contextual examples were provided to show what was possible and encourage the collection of assets for use in later courses. Students then completed their own pages and these were submitted one month later for tutors to comment on.

In the second part of the activity, students were asked to write an essay which explained how each experience related to one of the theoretical frameworks outlined in lectures. An example of a correctly formatted reference list was also provided in the workbook for students to use as a model. Formative and summative feedback was to be given through their eportfolios.

**Issues and outcomes**

Overall, students responded very positively to providing images and reflection on why they wanted to be a teacher. However, approximately fifteen percent of students required one to one support to enable them to use the software. An introductory lecture on using the software and an on-line downloadable handout with step-by-step instructions and screen shots were provided but the cohort size prevented a thorough lab-based student introduction to the task. We now view this feature as vital to the success of implementing eportfolios. The eleven tutors were provided with two two-hour training sessions on how to complete a workbook and how to then provide the feedback but were often unable to provide students with help in tutorials.

Our end of semester evaluation showed that for first year students, learning the LMS and eportfolio software at the same time created a lot of anxiety. They often completed the reflective task successfully, but over thirty percent found the essay component frustrating, especially as they were expected to submit essays for other subjects to the LMS. As they did not receive formative feedback as was initially intended, the additional value of the eportfolio was diminished and because eportfolios were not used in any related subjects, over forty percent felt they would not continue to use it as a personal learning space. Approximately half the tutors also found using an eportfolio to be challenging and, despite receiving some excellent reflective journals, did not wish to continue using it.

Generally the level of support required was unexpectedly high with resulting resource implications for continuing to manage and train such a large cohort. As a result, it was decided that proceeding with the plan to embed eportfolio tasks in the remaining units of study was not viable. After the three-month trial, a decision was made not to introduce eportfolios across the curriculum at this time.
Case study 3: A Workbook for a three-year undergraduate program

VETS Extramural Placement portfolio, Faculty of Veterinary Science

The context

A mandatory component of the Bachelor of Veterinary Science is the VETS Preclinical Extramural Practical Work Placement program. Students are required to collect evidence of work experience while on six compulsory placements over their three-year degree program. For each compulsory placement students must complete:

- A property management report
- A reflective journal requiring daily contributions
- A basic skills declaration form

How it was …

Historically, students have collected this information using a range of documents, forms and hand-written notes placed in a folder and handed in after their last placement. The unwieldy nature of folder collection and the burden of marking all six placements at once prompted the Faculty to move to an online collection of documents where progressive marking and feedback could occur.

The approach

The resulting workbook provides an effective interface for the collection of a range of document types and the menu allows a clear and consistent layout for the six placements which occur over an entire degree program. The various tools employed are:

- a form for the property reports with in-field hints (Figure 3)
- a form for the skills declarations (with one field for a summary of each skill set with evidence attached)
- a Foliopage for the Daily Diary (as this encourages creativity with images, links etc.)

The student-centred nature of the eportfolio, which allows for iterative creation and progressive formative feedback, made it most suitable for this activity. However, building a workbook with no prior experience is not feasible for a time-poor academic and educational design support is essential in the design and development phase.

Benefits

Feedback

Students submit their workbook for feedback before their first placement. Lecturers can then check students’ progress after each placement period and provide feedback. A final grade is given at the end of the three-year period. Previously, academic staff had no means of monitoring students’ placement experiences. The workbook provides a way for
supervisory staff to check that students are acquiring the necessary skills and experience as the placements occur. It is expected that continuous feedback will raise students’ awareness much earlier in their degree of the role their extramural placements have in progress toward a professional qualification.

**Student engagement**

The ‘Daily diary’ has in the past been a simple record of activities undertaken on the property, without any reflective dimension to the task. The introduction of the workbook has provided an opportunity for a more scaffolded approach to the development of reflective skills. A Student Guide (provided as an extra resource) gives students a step-by-step guide to reflective writing. As this is a difficult skill to attain, it will be necessary for the markers to provide ongoing assistance and encouragement in this area.

A focus for future evaluation will be an assessment of whether the reflective skills developed in the daily diary carry into the classroom, with greater student recognition of the need to integrate practical experience with theory.

**Issues and outcomes**

The atypical nature of the assessment workflow for an eportfolio demands close attention to administration. Students who are used to submitting completed assignments to the LMS have difficulty with the early, pre-completion submission of their templates and the resulting real-time ‘window’ on their portfolio development. The concept of submission before work has been completed is entirely foreign to students and they are reluctant to allow supervisory staff to see unfinished work. Despite clear explanations of the workflow, several email reminders and resetting of submission deadlines, many students have yet to submit.

Student evaluations during the trial phase of the activity rollout showed that the learning curve with the eportfolio was much steeper than with the LMS. In response to this feedback, each of the current cohorts was given an introductory session, showing how to pick up, complete and submit complete the workbook. A detailed, customised Student Guide was also provided.

Student queries to the central eLearning Helpdesk to date have been on submission and on template customisation issues such as adding pages. This underscores the need for initial and ongoing student support.
Case study 4: A Workbook for a three-year postgraduate program

Map my PhD, Faculty of Health Sciences

The context

Many Higher Degree Research (HDR) students find their candidature a lonely, bewildering and intimidating experience. There is often little formal opportunity or space to plan their studies, to set realistic learning objectives and milestones, and to assess their progress in a community environment that shares ideas, resources, and experiences. This sense of isolation and bewilderment can be exacerbated by a perceived lack of support from academic supervisors.

One way to ameliorate these feelings of floundering in a liminal space is to take a holistic approach to PhD candidature: to provide a cohesive space for planning, feedback and conversation, so that both student and supervisor are communicating in a timely and effective manner. This project aimed to empower students to see their development and to realise that their learning goals were being achieved and, at the same time, encourage supervisors to take a more articulated approach to supporting their students. It was hoped that students would have an enhanced candidature experience by involvement in a continuous planning and monitoring process and engagement with a community of other HDR students.

How it was ...

Previously, there was a less structured approach to supervision and goal-setting for HDR students in the discipline of Radiation Science. The academics felt that there was no provision for tracking students’ progress and thus little ability for shared feedback and discussion. A lack of documentation and a non-standardised approach to goal-setting was causing added stress to students. In addition, there was no paper trail to keep track of the planning or supervision process, which made the management of progress, goal-setting and timelines difficult.

The approach

The academics provided some models of paper-based templates and types of files that were being used in the supervision process, specifically, a research plan template. Meetings were held to discuss the types of files required and means of providing templates.

It was decided that the best way to ensure a community developed would be to utilize the workspace functionality in the eportfolio software. A workspace was created with an area for conversation, resources and the community, while a workbook was created for the Research Plan template. This contained areas for dates of Annual Performance Review, expected completion of PhD and reminders to upload capability evidence, such as conference proceedings, journal papers published and other important documentation. Other pages included areas for individual objectives with estimated completion dates, and different phases of candidature, plus areas for reflection and additional capabilities and achievements.
Issues and outcomes

While the HDR students welcomed the concept of the space, after a period of trialing the template, they decided that they preferred to use email, with their own files and reports. It was therefore a great idea, but not easy enough to use for the students to invest the time and energy on it.

Lessons learnt are that it is very important to make sure that there is a real need to use eportfolios, otherwise students will not be willing to invest the time to learn the system. This is especially true of PhD students, who are perhaps less motivated to take on extra work.

Lesson learnt from the four case studies

Sustaining scaffolded activities in an eportfolio over three weeks with a modest student cohort is not difficult. We suspect however, that the students who took part in the intensive unit of study will not continue using their eportfolio in future subjects as there is no extrinsic motivation for them to continue using it in other units of study. It takes time for the habit to be embedded and the full value of the tool to become apparent. We conclude that using eportfolios for even a semester provides a poor return on time investment for academics, support staff and students. Due to the learning curve involved, use of the eportfolio should not be a “one-off” event but should be integrated into the curriculum. Related to this is the necessity of including continuous assessment and formative feedback processes to maximise value.

Our experiences with embedding eportfolios at the program level underscored the essential role of the academic sponsor. Without this leader and champion, successful implementation and sustained use is not feasible. At a unit of study level, we saw the importance of the introduction of the software to students. A ‘hands-on’ session
at the computer appears to be an essential part of the induction process but this can be operationally impossible where large cohorts are involved. We also observed that academics who brought enthusiasm, commitment and a “can-do” attitude were much more likely to have a successful experience.

It is vital that tutors as well as unit coordinators be given adequate induction, training and support to ensure the success of the eportfolio. Increased casualisation and high staff turnover in higher education makes this more challenging to achieve. It is also imperative that the unit coordinator takes a leadership role with the tutors, otherwise they may seek alternatives to using the eportfolio to save time.

Implementing eportfolios requires more resources for student and staff training and support than we had anticipated. Some users found the learning curve steeper than we expected and we wondered whether in some cases it might be more suitable to wait to introduce eportfolios until students are in their second year as they undergo so much learning and adjustment to change when commencing university. A number of academics and students coped poorly with using both the LMS and eportfolio technology and despite clear delineation of their function some students questioned the need for both.

**The benefits**

Despite the challenges, there were significant benefits to using the workbook features:

- Implementation of continuous assessment with more opportunities for formative feedback
- Ability for students to retain feedback and refer to it later in their degree program
- Structured approach to skill development
- Modelling of processes for students

An additional benefit that we had not foreseen was that the scaffolded approach somewhat mitigated the learning curve required to master software that ultimately requires a student-led approach for its benefits to be fully realised. The workbooks’ structure provided students with an entry point to the software as well as the skills development process.

**In brief – personalising the curriculum**

Overall, using eportfolios in the four case-studies described provided opportunities to personalise the various curricula by:

- giving students greater overview and control of their learning
- allowing students to add accounts of their own experiences in the form of narrative, images and multimedia
- allowing students to personalise the form of the product, choosing the mix of media, adding layout and design features in contrast to traditional assessment pieces e.g. academic essay
- providing academics with greater insight into the learning processes of their students and their individuality
• giving academics an insight into students at risk
• helping to mitigate against the isolation experienced by higher degree research students

Our experiences show that if the key challenges of providing holistic program implementation and training confident users can be met, there are significant benefits in using workbooks to induct students into the processes of academic skills development.

To view this case study in an electronic format please visit this link:
From training to learning: Using PebblePad to enhance professional development

Pamela Basden
Centre for Learning and Development, Edith Cowan University, AUS

Chosen theme(s)

Professional learning and accreditation

The context

In January 2013 the Centre for Learning and Development (CLD) was tasked with designing a program to increase the management and leadership capabilities of Edith Cowan University’s (ECU’s) current and aspiring supervisors. Although we delivered other management programs to our staff, we identified a gap in development for this section of our community. The program needed to be suitable for both academic and general staff focusing on the skills required to effectively supervise and develop teams, and manage systems and resources. The Program we developed follows a blended learning approach with 11 face-to-face workshops and accompanying post-workshop activities for participants to utilise within their workplace. The first four modules are foundational units which were specifically developed for this program. The other seven modules are chosen from existing professional development courses run within the University.

PebblePad was selected as the platform as it allowed participants the opportunity to not only reflect on the development sessions they attended, but also to build their own learning portfolio around the outcomes of the post-workshop activities. ATLAS provided the additional benefit of enabling participants to engage in discussions before and after the workshops as well as providing a repository for additional resources.

How it was ...

In other Management and Leadership training programs we have used ECU’s Learning Management System (LMS), Blackboard. As the content is controlled and maintained by the course coordinators, participants who store their learning reflections on the Blackboard site lose their content when the site is closed down at the end of the program. In designing the Supervisor Program we wanted a way for participants to revisit their reflections and PebblePad offers a way for them to retain control of their own content as well as submitting it to the course facilitators for assessment and recording.

The approach

After attending each module participants are given some post-workshop activities. One component is to complete a learning reflection about the session. Other activities include workplace learning or research. These are all recorded in Pebble+. Resources have been
developed for use, some of which have been set up to automatically submit to the course facilitators via ATLAS. Completion of activities is then recorded and feedback given.

The first resource is a workbook called Supervisor Post-Workshop Reflections Workbook and allows space to record reflections for each of the 11 modules participants need to complete. This was resource was created by compiling 11 templates into one workbook with different tabs titled with the module name. The advantage of this approach is that students can use the one asset and keep their reflections together. Questions they need to address include:

- What have I learned?
- How did I find the learning process?
- How did I feel about what I learned?
- What can I do with what I have learned?

We also developed two other templates for reflections:

- Workplace Implementation – this allows participants to record the outcomes of the activities we ask them to complete within the workplace. They need to describe the activity and reflect on:
  - What learning underpinned this activity?
  - What was the outcome of this activity?

- Taking action on incidents – this is to be used to record any incidents they need to act upon in their daily work, how they handle them and what they would do differently next time. They describe the incident and answer the questions:
  - How did you feel about this?
  - What action did you take?
  - What have you learned so far that was relevant to this situation?

We also use the Resources section in ATLAS to store all resources relating to the Program. There are general resources relating to the Supervisor Program as well as specific panels for each of the foundational modules. This is where we load participant workbooks and PowerPoint slides as well as articles and information referred to within the workshop.

The main mode of communication with participants is through the “Conversations” facility in ATLAS. One of the first activities participants are asked to undertake in Module 1 is to introduce themselves on the Conversations link. We have set up a conversation entitled “Welcome and Introductions”. They are asked to write about their role and to answer the question “To know me is to know that...”. This has been a great conversation as we have had the privilege of getting to know these people a little bit more. It is hoped that not only will participants build their network but as they do they will form valuable relationships.

“Conversations” has also been used to communicate some interesting articles relating to the management and leadership area.
Follow this link (https://v3.pebblepad.com.au/alt/ecu/Asset/View/34w9d78fkg8GpdhG93n39mRp9c) to a webfolio which showcases information about the Supervisor Program, the use of PebblePad and some of the templates we have created.

How it is now ....

The program has run for one year and participants have embraced the PebblePad learning portfolio. Initially there was some apprehension from participants however after initial training and some personal coaching participants now seem to be comfortable submitting required learning reflections for assessment and feedback. The Conversations space has been used for sharing of information and research regarding topics covered in the Program. Participants are building their Learning Portfolios and are beginning to make use of the other features in Pebble+ to store additional information relating to their career development.

The benefits

This has been a great way to encourage our staff to focus on their career development. PebblePad is available to all staff within the University; however most people are unaware of what it is. By promoting the use of PebblePad within the Supervisor Program, staff have had the opportunity to become familiar with it and can now see the value not only from developing a learning portfolio, but also as a way to collect all career related information in one place.

We received several testimonials from participants, some of which are included below:

“I find Pebblepad useful when working on my reflection journals because:

- It allows me to work at my own pace, providing me with the flexible editorial functions which make working on my journals really easy;
- I am assured that the materials I have on PebblePad are secured, well organised and easily retrievable on and off campus; and
- I also use PebblePad to organize my other CV assets so that I can find them all in one place.”

“Writing reflections using PebblePad is beneficial. Having a chance to sit back and reflect on what we had gone through during the sessions and documenting those reflections on PebblePad allowed me greater clarity and insight of not only what I had known before and what I had gained from the session, but also what areas I could improve on. My working life is so busy that it is easy to just keep going the same way as always, whereas this reflective process has highlighted the need to use reflection as a way to not only improve my working outcomes but also as validation when appropriate.”
“The Post-Workshop Reflections Workbook reflections provided on Pebblepad are completed fairly quickly with specific questions to answer. I find that having attended a workshop it is useful to reflect on why it was helpful and how the new knowledge I have gained will assist me with my work practice. I have found that by writing down my ideas I am better able to remember what I have actually learned; otherwise it is forgotten too quickly. I keep the reflections as a record of my learning experiences and find this a valuable follow up to a workshop.”

Lessons learnt

During the 2013 Supervisors Program we found that people embraced PebblePad at different rates. Some staff achieved proficiency quickly whereas others need individual help for quite a while. We found it necessary to provide “Drop-In” sessions after each of the face-to-face modules to allow people to get the help they needed. We also found it necessary to follow up with people to see why they had not submitted their reflections. This was often because they did not understand how to use PebblePad and were too embarrassed to admit it. After some coaching we were able to get them using it well.

In future we will be providing more guidance from the beginning of the Program and ensuring participants are aware of the help available both within the PebblePad site and the Centre for Learning and Development at ECU.

Another issue has been to train participants to check the Conversations page each week to see what new things have been added. We have begun giving them some post-workshop activities which require them to load information into this page which helps to develop a habit of checking it. This is an on-going challenge.

In brief

- Participants now have a platform to record their own reflections after a workshop which enhances the learning, whereas previously they would attend a workshop and if it wasn’t used immediately would gain little benefit. It encourages them to look at what they have learned and see how it relates to their individual situation.
- By asking them to submit a reflection on their Post-workshop activities we are providing an impetus for staff to apply what they have learned in the workplace and reflect on the outcomes of this.
- Staff are using PebblePad to gather a variety of information relevant to their career development including the documenting of new knowledge.
- The “Conversations” area has been a useful tool to help participants build networks with their peers.

To view this case study in an electronic format please visit this link:
The ‘Unfold’ project – enhancing the Personal Tutor System with the use of reflective templates

Robert Chmielewski1 & Prof. Ian Pirie2
1Information Services and Institute for Academic Development, and 2Assistant Principal Learning and Development, University of Edinburgh, UK

Chosen theme(s)

Institution agendas

The context

This paper focuses on the initial stages of the ‘Unfold’ project. The aim of the project is to explore ways of enhancing the University of Edinburgh’s institutional Personal Tutor System with a set of self-reflective templates – created, distributed and collected via PebblePad. The PebblePad-based developments (managed by Robert Chmielewski) are presented in the context of a much bigger institutional implementation of the Personal Tutor System (work led by Prof. Ian Pirie).

University of Edinburgh’s Personal Tutor System

At the beginning of the 2012/13 academic year, the University of Edinburgh introduced the Personal Tutor System for undergraduate students (extended to postgraduate students a year later). The personal tutor arrangements which were put in place are the frontline of academic guidance and support at the University. Currently, the system encompasses all undergraduate and postgraduate taught students and is underpinned by a schedule of individual and small-group meetings between Personal Tutors and their Tutees. The primary focus is on the provision of academic advice and support, facilitating self-critical reflection on progress and feedback, supporting the development of personal and professional attributes, and developing self-efficacy. The system is supported by a set of online tools developed in-house (PT IT Tools). The tools underpin the system by enabling the creation of personalised and dynamic supplements to the student record of each student. The software facilitates online interactions between Tutees, Personal Tutors and Student Support Teams. This set of online tools has been developed to support scheduled and ad-hoc meetings, to record notes/discussions regarding academic progress, and to enable the recording of any significant issues that may be affecting a student’s studies.
Use of PebblePad at the University of Edinburgh

Prior to the ‘Unfold’ project, PebblePad has been used in selected Schools across the University to support:

- online assessment (assignment collection and marking with ~1000 submissions in peak months)
- Edinburgh Award (a University-wide programme based on the Higher Education Achievement Report (HEAR))
- course-based reflective diaries (blogs)
- course-based presentations (webfolios)

How it was ...

Personal Tutor System – the big picture

The Personal Tutor System is one of the outcomes of the ongoing Enhancing Student Support (ESS) initiative. The ESS focuses on giving students a framework of guidance and support that builds on the best of current practices.

It was established to address the following issues:

- Levels of student satisfaction have not been where they should be across the University
- Student experience not as personalised as it might, could or should be
- Inconsistencies in academic guidance and oversight of whole programme experience
- Student support fragmented across Schools and Central Departments
- Student concerns in general around assessment and feedback

These issues were highlighted by student surveys such as the National Student Survey (NSS), and the University of Edinburgh’s own quality assurance processes, such as Teaching Programme Review and the QAA Enhancement-led Institutional Review.

The ESS is also designed to provide more consistent quality of provision, help students systematically monitor their progress and performance, and relate these to their long-term aspirations. It seeks to blend a clear set of University-wide requirements, well-understood by students and staff with scope for Colleges and Schools to tailor provision to programme structures, subject needs and professional accreditation requirements.

Combining PebblePad with the Personal Tutor System

Although the Personal Tutor System institutional roll-out has been generally viewed as successful, there are issues which have to be addressed. One of them is lack of students’ engagement with the process of meeting note keeping. Whilst personal tutors are being systematic at keeping notes/records of the meetings, the same cannot be said about a majority of their personal tutees.
The PT IT tools include functionalities designed to accommodate notes from the meetings. These are open-box spaces in which students can record their comments/notes after each meeting. As highlighted above, the mechanism is used mainly by the tutors, while the students’ perspective and experience of the meeting remains uncaptured. This alone can make any future students’ self-reflection very difficult. Moreover, other tutors who might need to look at a student’s meeting history (without being able to consult that student’s own notes) will find establishing the full picture of the PT-student interactions difficult.

Therefore, the main task of the ‘Unfold’ initiative was to find a way of enabling students to become more self-reflective, and to start collecting/recording their thoughts about PT meetings. With that in mind, the project is based on two hypotheses:

- students are more likely to record notes within personalised and structured environments (as opposed to open-box spaces),
- students should be expected to engage with recording/reflective note-taking before the meeting (as opposed to waiting till after the meeting).

Robert Chmeilewski about work which led to ‘Unfold’:

“Professionally, I have always been interested in the subject of reflective learning; especially in encouraging more mature and metacognitive analysis of students’ educational journey. For years, I have also been promoting PebblePad across the University to support all types of activities linked to students’ self-monitoring and recording. The arrival of the Personal Tutor system presented a chance of combining the two areas of my interest to produce something fresh and powerful.

I was invited by Prof. Ian Pirie to one of the meetings of the Senior Personal Tutors group, where I was presenting PebblePad as a tool which could be used by personal tutors and their tutees. During the meeting I realised that, despite the flexibility of PebblePad, more work would have to be done to customise its templates (before we were able to offer it to personal tutors). It seemed that a new, bespoke set of specific activities was required. Activities, which could contribute to the Personal Tutor System whilst at the same time would simplify the process of recording notes.

In order to investigate the new ways of combining PebblePad tools with the idea of reflective development for personal tutees, I was offered a secondment with the University’s Institute of Academic Development (from January 2013). After a few months of some preliminary research, I began to promote the idea of introducing online reflective templates for personal tutees under the name of ‘Unfold’.”

The approach

Building the workbooks

As part of the preparatory work, a dozen of the personal tutors from across the institution were interviewed to seek their views on the ‘Unfold’ approach. All of the tutors expressed their support of the idea of adding some structure to their meetings with their tutees. As
a final result of those consultations, a group of personal tutors from three Schools agreed to take part in a pilot run of ‘Unfold’:

- School of Biology (3 personal tutors - 14 students)
- School of Education (2 personal tutors - 30 students)
- School of Biomedical Sciences (6 personal tutors – 61 students)

Interestingly, one of the Schools (Biomedical Sciences) had already had experience of designing reflective templates (using a different set of online tools). Taking part in the ‘Unfold’ pilot was an opportunity for updating their templates and thus allowing a fresh start. That particular set of reflective templates has been named ‘Unfold+’.

A series of further meetings and consultations within the three Schools resulted in the creation of three custom PebblePad workbooks (one per School). Each workbook has been designed to suit the following prerequisites:

1. Students’ self-reflection is structured and directed using locally pre-prepared templates (relevant to subject areas).
2. Students are asked to complete relevant sections of the Unfold workbook ahead of the meeting.
3. The student’s input in ‘Unfold’ serves as the foundation for the face-to-face meeting’s conversation and insight.
4. After the meeting, the student is encouraged to return to the template to update it.
5. System permissions can be granted, so that the link to the Unfold workbook is posted in the ‘Notes’ section of the central Personal Tutor IT system. (In this context, PebblePad is used alongside (but not integrated with) the Personal Tutor IT Tools. It is worth adding that any wider roll-out of the Unfold templates beyond the pilot stage would most likely involve developing a mechanism of linking the ‘Notes’ section in PT IT tools with the Unfold templates in PebblePad/ATLAS).
6. Personal Tutor group meetings can be planned based upon issues and trends which are arising from structured preparation or reflective comments.

The launch of ‘Unfold’ (which took place in September 2013) was promoted through a poster at an internal teaching conference (www.tiny.cc/unfoldposter), and through an article on the IAD4LEARN blog: www.tiny.cc/unfoldblog.

Reflective questions

Since its introduction, the ‘Unfold’ workbooks have proved to be very flexible template containers. Students found them easy to access (with very few technical problems). One of the essential features was the ability to expand workbooks continually - new sections could be added to templates whilst students were using their copies of the workbook. The ‘Unfold’ workbooks were also customised visually using a custom banner and colour scheme – see example www.tiny.cc/unfoldbio3.

Currently, the workbooks are being updated with new sections to provide scaffolding for the 2nd semester Personal Tutor meeting reflections.
Although each of the three ‘Unfold’ workbooks features unique questions, their overall structure can be divided into the following themes:

a) Day-to-day issues/general reflection, for example:
   - How are you settling in so far?
   - In general, how are things going?
   - Currently, is your experience on the programme keeping with your expectations?
   - Are you clear on what you need to do in the next few days?
   - Reflecting on your goals for this year, do you feel you are progressing well?
   - How do you feel about the courses which you are taking this year?
   - Is there anything you wish to discuss face-to-face but do not want to put it in the workbook?

b) Self-assessment of assignments, engaging with feedback and post-feedback reflection, for example:
   - Feedback Points – what I’ve done well;
   - Feedback Points – what I need to improve;
   - How I will use the feedback to improve…;
   - Draw up a quick action plan based on the feedback you received;
   - Which three words would you use to summarise your experience of preparing for and writing the essay?

c) thinking about the future, including strong references to graduate attributes, for example:
   - Please select your two attributes which could particularly benefit from being strengthen;
   - What is your realistic plan for improving on those two attributes during the current semester?

Example of the ‘Unfold’ workbook: [www.tiny.cc/unfoldbio3](http://www.tiny.cc/unfoldbio3)

Communication to students

The students were introduced to the ‘Unfold’ idea by their personal tutors via email. The email included a link to the ‘Unfold’ instructions. The instructions themselves were published as an open PebblePad webfolio. When designing the instructions, it was important to ensure that students did not see taking part in ‘Unfold’ as too time-consuming and overwhelming. Here is a sample message which was sent to tutees:
“The UNFOLD workbook is designed to help you record your reflections around the meetings with your Personal Tutor.

YOU will be able to:

- learn more about yourself, who you are and where you are heading,
- identify gaps, make sense out of university reality and establish long term goals,
- revisit older sections of your workbook and learn from past experiences.
- YOUR PERSONAL TUTOR will be able to:
  - know you better and provide more adequate advice during your meetings,
  - provide you with more relevant references in the future,
  - help you with making the most of the feedback you are receiving from other tutors.”

Example of the ‘Unfold’ instructions: www.tiny.cc/unfoldeducation

Personal tutors and ‘Unfold’ workbooks

There are two ways in which a tutor can access their tutees workbooks. They can do it on an individual basis before the meeting by opening each of them in ATLAS. However, they can also run reports on students cohorts using the ATLAS reporting features. To illustrate this approach, below is a wordle created using the Biology students’ anonymised group responses to the following question: ‘Which three words would you use to summarise your experience of preparing for and writing the essay?’

Figure 1: Biology students’ wordle
Assuming that some scale-type questions are asked before all personal tutoring meetings, running group reports on such questions on a year-to-year basis might expose tutors to rich and interesting sets of data/graphs.

**The benefits**

Although the evaluation of the ‘Unfold’ pilot is scheduled for the UK summer of 2014 (surveys and focus groups are being planned for tutees and their tutors), the informal conversations with personal tutors who are taking part in the pilot have so far been encouraging. The Personal Tutor meetings are seen as better structured with the vast majority of tutees engaging with the workbooks provided. More measurable outcomes/views are not available at this stage of the project. Despite that, the process of consulting tutors on the structure and the questions for the ‘Unfold’ workbooks, presented a good opportunity to explore their approaches to personal tutoring tasks. In other words, it has been useful to encourage them to reflect on things on which they want their tutees to reflect!

As for the University-wide Personal Tutor System, a year after its introduction a survey was carried out to assess the experiences of the Personal Tutor System amongst students. The headline results show that 79% of students stated they had attended at least 2 meetings (with their personal tutor during the previous academic year), with 49% attending 2 meetings. Three quarters of students found the Personal Tutor meetings helpful, with 36% finding them very helpful.

As indicated earlier, the survey also highlighted the students’ reluctance to record their meeting notes – one of the issues for which we hope to have found a cure in ‘Unfold’.

**In brief – personalising the curriculum**

- extremely flexible reflection-recording tool allowing for seamless customisation of templates
- expandable workbooks which can be updated “in the background”
- potential to link individual workbooks or whole ATLAS sections with the University’s own Personal Tutor system
- interesting workbook reporting capabilities within ATLAS

To view this case study in an electronic format please visit this link:
Eportfolio competitions: Everyone’s a winner

Jacqueline Patten
Centre for Learning and Development, Edith Cowan University, AUS

Chosen theme(s)

Institution agendas
Program curriculum
Unit level implementation

The context

ECU began its PebblePad pilot in Semester 2 2012. The aim was to have it actively used for teaching and learning in each of the 4 faculties. First year and capstone units were targeted and staff were encouraged to use it for their own professional development. Sixteen units opted into the pilot and mid semester analysis indicated approximately 820 active accounts producing creative and diverse teaching materials and assets.

The inaugural ECU ePortfolio competition was held in November 2012, open to both staff and students. The drivers of the competition were to raise the profile of eportfolios designed to enhance students’ learning and increase their employability skills. Was it too soon? Will people enter? How will we judge the eportfolio entries?

Initial research found that implemented correctly, competitions of this kind had met with great success around the world. The City University of Hong Kong held a competition in 2009 with approximately 1000 as a “… celebration of the hard work that teachers and students have put into making eportfolios a success within City University”. They went on to say that “… the promotion of ePortfolios for learning is part of the University’s Strategic Plan 2010-2015” (City University of Hong Kong, 2010). This aligned with the strategic approach being taken at ECU. A further competition was held by Clemson University, South Carolina. ‘Clemson’s Best’ claimed that the winning entry was “… the eportfolio that brings together creativity, originality, reflection, as well as substantive evidence of learning” (Clemson University, 2013). This pedagogy was also high on the ECU agenda. The examples on the Clemson website led us to believe that competitions of this nature yielded high quality results that could be used to showcase what was being achieved.

Full of hope and spurred on by the success of other institutions (City University of Hong Kong, 2009; Clemson University, 2013) the preparations began with 3 categories:

- First Year Students
- Other Undergraduates
- Academic Staff
Surprisingly the entries were diverse and not always from the students who had scored the highest in their PebblePad assessments but from those who valued the personal growth it allowed them.

Another driver for the competition was to raise institutional awareness and use of PebblePad.

By the second year of the competition the categories had been expanded to include:

- Professional Staff
- Graduated Students

**How it was …**

The rationale for running the competition was primarily to raise awareness of the work being undertaken across the faculties in a public forum. Although part of the ECU strategic plan, PebblePad was still not on the immediate agenda for many academics and it was still felt by many that it could be a passing phase.

A further aim of the competition was to show how portfolio and reflective elements (which had been used as paper based assessment methods) could be incorporated into the curriculum in a new way of learning. PebblePad allows the user to draw upon experiences and assets from across a range of competencies within a course. It was felt that by staff and students actually standing up and showing people living examples of what had been achieved, this message would be cemented in a powerful way.

As part of the preparation for a wider University rollout in 2013, we were delighted to announce the competition open to all staff and students involved in the initial pilot.

**The approach**

The competition was promoted to staff and students. They were supported through emails and assistance during lectures and tutorials. Where this wasn’t possible they were provided with a slide they could show or send to out to external online students.

**Figure 1: Competition advertising**
Advertisements were also posted on video walls around the campus and information provided in the staff and student electronic newsletters.

‘Submissions must be ePortfolios or workbooks using the ECU Learning Portfolio platform known as “PebblePad”, and take the form of a single link submitted to the competition workspace. See also the How to enter document.’

Rules were devised to ensure the protection of both the entrant and the institution. This was an unforeseen lengthy part of the process as terms and conditions of this kind had to be processed and authorised by the legal department within the university.

The academic staff category of the competition called for webfolios or workbooks that presented how the curriculum had been delivered using PebblePad as the main tool e.g. modelling, demonstration, linking to assessment, formative feedback and technical support.

The student categories asked how the use of PebblePad had enabled them to make meaning of their learning and hence the curriculum across the course not just at an individual unit level.

A PebblePad template was created that acted as the competition entry and ‘How To Enter’ instructions.

![Figure 2: Competition entry](image-url)
How it is now ....

The outcome of PebblePad being incorporated into the curriculum meant that ECU had a pool of staff and students ready to engage in the competition. Not only did these people understand the benefits of gathering evidence and reflecting in this way, they were happy and excited to share what they had discovered with a wider audience and of course they had the chance to win one of a number of iPad and cash prizes.

The annual ECULTURE conference (ECU Learning, Teaching and Research Event) showcased the competition with selected finalists giving a five minute presentation of their eportfolio.

There seemed to be a real buzz and competitiveness about the event and the second year it ran it took centre stage at the conference. A selection panel of academic and industry judges scored the presentations with a rubric based upon the following criteria.

<table>
<thead>
<tr>
<th>Selection Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entries will be judged and shortlisted. All entries, including the final shortlisted entrants presentation will be judged on the basis of three equally weighted criteria:</td>
</tr>
<tr>
<td>1. <strong>Communication style:</strong> Was the presentation communicated well? For example, is the presentation concise and clear?</td>
</tr>
<tr>
<td>2. <strong>Support of learning:</strong> Did the presentation help the audience to understand the entrant’s approach to learning? Examples might include use of the ECU Graduate Attributes, and/or reflection on the unit or course that they are studying, and/or presentation of the entrant’s knowledge, skills, and abilities.</td>
</tr>
<tr>
<td>3. <strong>Engagement:</strong> Did the presentation promote ePortfolio to the audience? For example, did the presentation engage interest in doing an ePortfolio?</td>
</tr>
</tbody>
</table>

The outcomes of the competition were more users wanting to get on board and start using the software personally, within their teaching and most encouragingly across whole courses. It really was a turning point and the reasons for running it were more than realised.

The benefits

The benefits of the curriculum design could not have been better demonstrated than through the competition entries. As an institution ECU now seemed to understand the value of the software. At the last competition a comment was made by one of the judges that ‘this software really is much more than I thought’.

The first year the competition ran, entries were of a high quality. The second year saw increased categories, entries and sponsorship. The portfolios produced by staff and students were of excellent quality and diversity. This was partly due to increased awareness and confidence but also the increased functionality made available by PebblePad. The ePortfolio competition will continue to be held annually.
Anecdotal evidence provided by the students during their presentations on the value of creating an eportfolio, demonstrated that PebblePad helped them understand their learning, increased their employability skills and gave them confidence in their own abilities.

The second year the competition ran we found out that graduate students were actually using their eportfolio as part of the job application process and they were getting the jobs!

From the teaching aspect, PebblePad enabled lecturers to track students’ work, give formative feedback and ultimately gave them a clear view of what a student had achieved. This was useful for assessment purposes.

A serendipitous result of the competition was that ECU harnessed examples to demonstrate what could be achieved in PebblePad.

Lessons learnt

We learnt that in order to have a competition you need people using the software. However, it is not necessary to have whole course wide instantiations. Some of the most powerful presentations were given by first year students. For example, one first year created a collaborative engineering project portfolio and an education students’ portfolio was based around the Australian Institute for Teaching and School Leadership (AITSL) standards.

Initial barriers were funding for prizes and a lack of certainty that a sufficient number of staff and students would enter.

Next time we would consider somehow involving a more audience participative vote when judging the finalists rather than a selected judging panel. Also on a practical level the entries have so far asked for a published link to the piece of work. This has caused a few issues when the link has expired and we are no longer able to show it on our intranet. Instead we would ask the entrants to ‘share’ their work into a ‘competition’ user account and then we could be in control of creating non expiring published links for the purposes of show casing their work as examples.

In brief – personalising the curriculum

- The staff ePortfolios presented in the competition showed how, through the creation of teaching tools that included reflections, activity logs, blogs and webfolios, the resulting student work was a portrait of themselves in the context of the curriculum agenda.
- The student eportfolios presented in the competition showed how they had taken the key concepts of an assignment but incorporated a great deal of their own story and journey into it.
- The reflections shown in the presentations were often of an intensely personal nature and demonstrated true learning had taken place “we do not learn from experiences; we learn from reflecting on our experiences” (Dewey, 1938).
References

City University of Hong Kong (2010) *CityU ePortfolios Competition* from http://www.cityu.edu.hk/edge/eportfolio/competition/

Clemson University (2013) *ePortfolio Awards* from http://www.clemson.edu/academics/programs/eportfolio/awards.html


To view this case study in an electronic format please visit this link: www.pebblebash.co.uk/2014/resources/pdf/pb2014cs15.pdf
Implementation of an ePortfolio Early Adopter Phase: Processes and outcomes

Christine Slade & Keith Murfin
Centre for the Support and Advancement of Learning and Teaching, University of the Sunshine Coast, AUS

Chosen theme(s)

Program curriculum
Institution agendas
Professional learning and accreditation

The context

The ePortfolio Early Adopter Phase built on previous research from the ePortfolio Feasibility Study in late 2012. This earlier study found that professional degree program leaders, and teaching staff in particular, within the University of the Sunshine Coast value eportfolios for storing and using assets for career purposes, such as continuing professional development, accreditation and employment opportunities. Further, eportfolios were seen by teaching staff as useful in providing evidence of student competencies and graduate attributes. Based on these findings and other internal (and external) support for the value of eportfolios, the Centre for the Advancement and Support of Learning and Teaching (C-SALT) recommended the University adopt eportfolios for student learning purposes using the PebblePad software platform. This recommendation was accepted by the institutional decision-makers with the view to apply for funding to begin a staged implementation across the university in 2014. However, some professional degree programs were keen to start using eportfolios in 2013 as an outcome of this consultative process. This was a year earlier than anticipated. Therefore, the Bachelor of Occupational Therapy program was joined by the Master of Midwifery program as Early Adopters, including eportfolios in their curriculum for the first time.

How it was ...

The Bachelor of Occupational Therapy program leaders introduced eportfolios to the first year student cohort (140 students) with the view of progressively building up the students’ skills and knowledge throughout the four year degree. This allowed the program to take a ‘slow start’, gently introducing students to the concept of an eportfolio and basic functions and culminating at the end of the second semester with the submission of a reflective assessment task into the students’ PebblePad eportfolios.

The Master of Midwifery (15 students both full and part-time) took a more active implementation approach particularly due to the shorter timeframe of a postgraduate
program. The students’ extensive practicum was used as the basis for eportfolio use. Emphasis was placed on students’ philosophy and reflections of care, clinic experience records, and feedback from patients. Under new accreditation requirements, Master of Midwifery students need to complete 20 ‘follow through’ case studies during their degree.

The rapid introduction of the ePortfolio Early Adopter Phase did not align with the slower institutional curriculum revision and amendment processes. Therefore, embedding of changes to assessment tasks to include eportfolios into the course outlines for the two programs was not possible until the second semester of 2013. Consequently, the introduction of eportfolios and PebblePad in Semester One was not linked directly to immediate assessment tasks. Evidence from pre and post-usage student surveys and program analytics show that a majority of students were slow to engage with the eportfolio software until it was an integral part of an assessment task. Therefore, academic teaching staff needed flexible pedagogical approaches to address this challenge in terms of preparing students over both semesters to use eportfolios for later assessment tasks.

**The approach**

C–SALT staff facilitated the eportfolio implementation process with teaching staff and students. Oversight of the Early Adopter ePortfolio implementation was undertaken by the C–SALT eportfolio project manager. Activities involved liaison with the academic teaching staff to facilitate their understanding and curriculum planning for eportfolio use in their programs as well as initiate and lead a research partnership with them during the course of the implementation. The project manager developed the research design, gained human ethics permission, collected and analysed data collected on behalf of the programs, and at the end of the program shared this information with the teaching staff for their use in wider dissemination opportunities. The research also provided evaluation and reflective practice opportunities for all concerned.

The C–SALT IT Functional Analyst worked with academic teaching staff to build their eportfolio skills so in turn they could work with their own students in a similar digital literacy development role. Initial sessions included an introduction to eportfolios and PebblePad for academics; a planning session to develop understanding about building eportfolios into course curricula; a training session with academic staff; and one-to-one support to create templates for student use. Further, a couple of non-compulsory computer workshops for students were trialled but were not well attended.

In Semester 2, 2013 attention turned to developing six basic ‘how to videos’ in the Bachelor of Occupational Therapy program that guided students in how to complete their first assessment task to be submitted in PebblePad. This method was particularly successful in engaging students who did not respond to other methods. In the Masters of Midwifery program adjustments were made to the workload associated with the development of the case studies assessment task.
See links below for publications from this eportfolio work that further explain the processes and outcomes:


3. USC ePortfolio Journey: Past, Present and Future, Presentation at Learning & Teaching Week 26-30 August 2013, University of the Sunshine Coast. Link to Video: [https://mediasite.usc.edu.au/Mediasite/Play/f466250c4bac4c07add84db7391562b11d](https://mediasite.usc.edu.au/Mediasite/Play/f466250c4bac4c07add84db7391562b11d)

How it is now ....

The Early Adopter phase contributed valuable insights into the planning of a university-wide staged eportfolio implementation process funded for 2014-2015. The aim of this new process is to foster a culture of eportfolio use across the University that creates a positive outcome for all stakeholder groups involved. The first year Bachelor of Primary Education students are now joining the first and second year Bachelor of Occupational Therapy students and two cohorts of Master of Midwifery students in using eportfolios as an embedded part of their curriculum in 2014. It is anticipated that another one or two programs will start using PebblePad in semester 2, 2014 with further programs added in 2015. C–SALT staff are also currently trialling the use of PebblePad for their professional practice review (PPR) to explore the enablers and challenges involved in potentially wider use within the University.

The Benefits

Benefits of this Early Adopter Phase include:

- Opportunity to begin a staged eportfolio implementation process which, according to scholarly literature and current best practice, increases the likelihood of successful outcomes.
- Showcasing eportfolio use in the Early Adopter Phase has generated further interest and improved understanding of eportfolio value across other programs. Implementation at both an undergraduate and postgraduate level provides deeper understanding of potential enablers and barriers through highlighting the individual nature and needs of different programs.
- Collaboration between faculty and C–SALT provides pedagogical and curriculum support for staff.
- Development of a research project between C-SALT and the early adopter programs involved to produce scholarship of teaching and learning (SoTL) outcomes for academic and C-SALT staff involved.
Lessons learnt

Challenges of this Early Adopter Phase include:

- Taking a measured and timely approach to look past participant excitement with a new technology to bring about pedagogical adaption and digital literacy support.
- Ensuring adequate training for different groups involved e.g. management team, L&T staff and academics, including sessional staff, as well as meeting the needs of students.
- Finding the capacity to respond appropriately to the differing needs of both a long undergraduate program and a short postgraduate one.
- Managing a range of stakeholder expectations

Recommendations for future improvement include:

- Allow a longer preparation time so eportfolios are embedded into curriculum and particularly in assessment tasks.
- Take a ‘program level’ approach to eportfolio implementation
- Don’t assume that all younger age students have digital literacy
- Maintain a consistent relationship with teaching staff during the semester whilst they are in early stages of eportfolio implementation.
- Always be looking for ways to cross-link learnings and resources across programs.
- Develop a community of practice for peer support.

In brief – personalising the curriculum

- The PebblePad platform provides flexibility for use in different contexts and timeframes.
- Teaching staff can design their own templates to meet individual course needs.
- PebblePad allows students (and teachers) to have a Personal Learning Space (PLS) for the development of reflective practice as well as evidence collection for later use, which is vital to career and accreditation purposes.

To view this case study in an electronic format please visit this link:
PebblePad: Enhancing learning delivery by extending the capability of existing educational technologies.

Ross Yates
Centre for Learning and Development, Edith Cowan University, AUS

Chosen theme(s)

Institution agendas

Introduction

Edith Cowan University (ECU) deploys a number of synchronous and asynchronous educational technologies to support teaching practices. Some have been in use for several years and their evolution has not kept pace with contemporary trends and concomitant demands placed on them by students. This has been particularly evident in relation to evaluative elements such as assignments, as well as in providing meaningful and structured feedback, which can be used both during studies and also beyond when students enter the workplace. With ECU’s online evaluation systems offering similar services, staff using the systems must consider factors such as usability, the ability of students to master key features of the system with minimal support, and, most notably, the time investment required for staff to reach an acceptable level of proficiency to use the service in a meaningful and beneficial way. Against this backdrop, this case study investigates key system features of PebblePad and highlights evaluative elements that, if implemented following an active training and awareness campaign, would enrich the student experience and offer a time-efficient way to use, share and reuse learning material.

The context

PebblePad is one of a number of educational technologies that facilitate evaluative activities such as assignments and assessments as part of the curriculum at ECU. All of these technologies are available to staff at ECU, most offering basic training in their use. Staff using such systems would, in most instances, require additional practical experience before they would be deemed to be competent in the delivery of educational activities via the specific technology. As such, staff typically make a value judgement about the perceived benefit vis-à-vis the time and effort required to reach the appropriate level of efficiency. The relatively complex and steep learning curve associated with PebblePad has been a source of concern for staff. In many instances, and based on enrolments in courses, staff primarily focus on mastering the University’s corporate Learning Management System (LMS), Blackboard, to achieve their educational objectives.

The Blackboard LMS has been in use at ECU for several years, and as a result, has been widely accepted as the preferred corporate learning environment. On 6 January 2014 Blackboard underwent a significant upgrade which included additional functionality
such as “inline marking”, where student assignment documents could be edited within Blackboard. Formerly it had been necessary to download and mark the document offline, and then upload it again to allow students to view the comments and feedback. These additional steps were time consuming and prone to errors, and thus the improvements welcomed, resulting in greater acceptance of the Blackboard system.

Whilst technology advances such as this provided a more integrated and usable interface for staff, there were still limitations in this process that needed to be addressed in order to more closely align with student learning expectations such as receiving structured learning material and meaningful feedback. One of the more commonly used marking interfaces that integrates with Blackboard, Turnitin has also gained wide acceptance in recent times. However, once again, this does not offer an all-encompassing solution to providing targeted feedback to students. Turnitin has however been seen by some sectors of the university community as offering one of the most complete evaluative services, expanding on the initial core element of plagiarism detection to include inline making and rubrics, as well as offering integration with the Blackboard Grade Centre. Whilst these features are useful, they do not extend to include key student requirements such as receiving structured and meaningful feedback and the ability to enhance their employment prospects.

The introduction of PebblePad as a key learning platform for students has introduced several key advantage over existing educational technologies. These include the preparation and deployment of a web-based portfolio and the creation of structured, template-based artefacts that guide the student through the required stages of the assignment. More significantly, and aligned with student feedback indicators, is the ease with which evaluative feedback and commentary can be provided to students, further engaging them through ongoing dialogue within the system. Whilst not synchronous in nature, students nonetheless have an opportunity to clarify and identify areas that require improvement in their work. The in-built communications are held as a record with the student submission material and are useful for later reference for students as they progress through their learning career.

PebblePad's ability to rapidly deploy, reuse and share existing templates and other artefacts also offers a time saving advantage over existing software offerings, and as such is an attractive option for time-poor academic staff, particularly when they run a unit over several years. Given that these are largely long-term advantages, there is a need to highlight the benefit of PebblePad use during contact opportunities with staff, such as in training or information sessions, or through the use of “champions”, users with advanced skills in the software who can extol its benefits for educational staff. This strategy has been implemented and continues to encourage an increasing number of staff to use PebblePad.
How it was ...

Despite the ubiquitous availability of PebblePad to all students and staff at ECU through the student/staff portal, the take-up of the usage is currently at 20% of units offered. The initial uptake has been the result of a vigorous training and promotional campaign, targeting academics and users within the university. This process culminated in a display at ECUlture 2013 which focussed on showcasing talented staff and students who had successfully used PebblePad to further their careers or study activities. The resulting interest generated by ECUlture 2013 and the subsequent Teaching & Learning Forum at UWA in early 2014 resulted in further uptake of the PebblePad system.

Driven by the efforts of the PebblePad implementation team, the software has gained a foothold in key areas of the university such as the School of Nursing and Midwifery, Engineering, Speech Pathology, Museum Studies, Sports and Recreation Management, Psychology, and Computer Science. Staff in these areas have identified a particular need for the use of PebblePad in their discipline. Other faculties have, however, simply “dipped their toes in the water” by using small-scale elements such as templates and basic workbooks/webfolios as experimental exercises to test the effectiveness of the system.

The promotional focus at present is to alert other potential users within the university community of PebblePad’s capabilities and inherent value as a teaching tool. This has been achieved by highlighting deployment, collaborative and engagement capabilities of PebblePad over other learning tools such as Blackboard and Turnitin. Potential users of PebblePad have been alerted to the beneficial features of the system through a vigorous promotional campaign encompassing faculty information sessions, awareness flyers and by highlighting related training opportunities at the end of all scheduled training courses. This process is currently under way and is yielding promising results.

Direct evidence of user experiences has been largely anecdotal and acquired through discussion with staff and feedback received during training sessions. Whilst acknowledging the benefits associated with the use of PebblePad, staff resistance to its use has centred around the perceived complexity of the system and the steep learning curve necessary to understand and implement it within their teaching units. Whilst falling beyond the scope of this case study, this is a key area for future examination in order to understand usage patterns and to gain detailed data on user experiences, both from a staff and a student perspective. The findings of this exercise would serve as an important shaping tool for the future use of the system.
The approach

In seeking a shift in PebblePad acceptance and usage and making it more closely aligned to the needs and expectations of staff and students, the following approach was taken:

a) Additional training courses were run covering Pebble+ and ATLAS at all ECU campuses;
b) Pebble+ and ATLAS were incorporated in mainstream Blackboard training courses;
c) Information sessions were held with key staff and student representatives to promote the training offerings for all the educational technologies, including PebblePad;
d) Custom template development assistance was provided to staff to fast-track their implementation of learning elements;
e) Staff and students were provided with tip sheets and video clips as support for the software;
f) Student consultant scheme being scoped and implemented.

How it is now ....

Against the backdrop of existing, embedded software such as Blackboard and Turnitin, PebblePad has been somewhat slow in gaining mainstream acceptance. However, through a continued education campaign, direct training and hands-on consultation with academic staff, there has been a shift towards viewing PebblePad as having specific and clearly defined benefits that are not competitive but complementary to these existing systems. PebblePad is particularly effective for the provision of formative feedback, and practicum/WIL support and management. In order to promote PebblePad as an enhancement that extends the capability of Blackboard features, staff are educated on the integration options with Blackboard and to view PebblePad as an evaluative offering alongside quizzes, surveys, Blackboard assignments, and Turnitin assignments within the assessment space in Blackboard.

PebblePad’s positioning in the Blackboard evaluative space places it on an equal footing with other evaluative tools and thus requires additional incentives to encourage users to deploy its services, instead of the other options available. This occurs through an active education program which incorporates elements of PebblePad in the standard Blackboard training offerings. Key training offerings such as Blackboard Essentials provide an introductory overview of PebblePad, while courses such as “Getting Started with the Grade Centre” demonstrate the automatic creation of Grade Centre columns by PebblePad.

The heightened role of the Blackboard Grade Centre as the central assemblage of grades and other student evaluative work has been driven largely by the recent introduction of a new Marks Recording System (MRS) that sources official results from key columns in the Grade Centre – including those generated by PebblePad. This situation has generated a significant increase in use of Blackboard as the primary learning system, with additional training opportunities arising as a direct result. PebblePad thus enjoys additional exposure which has fuelled an increase in the use of this software.
Continued promotion of PebblePad as a complementary system to enhance Blackboard (which has evolved to become a portal), has seen an increase in interest in the possible benefits to both students and staff. Current increased take-up targets are to move from the current 20% of units offered using PebblePad to 40% by the end of 2014. This would effectively double the user base, and place further emphasis on the need to have strong user support mechanism in place to meet the increased demand.

Academic and professional staff are provided with training and a separate program is under way to train students to become “Student Consultants” to provide peer support to other students. Specialised course designers at the university are available to assist staff develop workbooks and other artefacts to get them started on the use of PebblePad. “Champions” in key academic areas in the university have also been instrumental in promoting the benefits of the software.

The benefits

The value of PebblePad as a learning tool also extends to areas such as the School of Business where academic staff have compiled a structured, interactive framework using Workbooks. This transposes the Unit Plan into a structured and logical resource with relevant scaffolding and signposts which step the student through the learning process, providing cues to submit evaluative material and reflections at predetermined points throughout the semester. This approach has since been followed by other areas of the university with workbooks and templates being shared among academic staff to facilitate creation of new, unit-specific learning material.

The use of PebblePad offers staff the ability to provide meaningful, targeted feedback to students and to more closely engage with the key learning activities of their units. The ability to link meaningful study experiences to an eportfolio provides an additional dimension to the purpose of the activity such as research (with reflections), with the inherent benefit that the material extends beyond its initial purpose and serves as part of the student’s resume. This has occurred most notably in areas of the university such as the School of Nursing where practical experience is a course requirement and PebblePad acts as an assemblage mechanism to store, collate and provide a reference point for student’s progress.

Whilst the most significant benefits associated with the use of PebblePad will likely be realised in the long-term once students complete their studies, during ECUlture 2013 several students identified a number of short-term benefits related to the ability to showcase and share research projects. Additionally, some staff highlighted their success in obtaining employment through shared eportfolios. In both instances, PebblePad was a useful system for the advancement of both student learning and career progression, making it a versatile tool in the higher education sector.
Lessons learnt

The following key lessons were identified as outcomes of this case study:

- Designing training courses to include complementary training systems and promoting their use through an active awareness campaign provides acceptance of, and a greater uptake of, PebblePad;
- Highlighting the benefits of PebblePad to academic staff and promoting the benefits jointly to students creates a sense of enduring value for PebblePad and serves to negate the perception that the system is difficult to use;
- Staff can use PebblePad to develop clear and structured learning pathways to guide and plan the student’s learning experience and to provide targeted feedback in line with student expectations.

In brief – personalising the curriculum

- The provision of a structured learning pathway closely aligned with the Unit Plan.
- Improved student experience through the provision of targeted assessment feedback
- Greater collaborative experience between students, and also with their lecturer/tutor.
- Student ability to develop and share an ePortfolio through the support and input offered by academic staff. This has been demonstrated through examples of job placements.

To view this case study in an electronic format please visit this link:
www.pebblebash.co.uk/2014/resources/pdf/pb2014cs17.pdf
Index
<table>
<thead>
<tr>
<th>A</th>
<th>134</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic skills</td>
<td></td>
</tr>
<tr>
<td>Accreditation</td>
<td>50, 85-87, 89, 91, 93, 100, 104, 109, 119, 121, 125, 135, 140, 152-153, 155</td>
</tr>
<tr>
<td>Amateur Swimming Association</td>
<td>69</td>
</tr>
<tr>
<td>Assessment</td>
<td>8, 15, 31, 64, 103, 106, IX</td>
</tr>
<tr>
<td>Assessment System</td>
<td>IX</td>
</tr>
<tr>
<td>Atkinson, Susan</td>
<td>125, VII</td>
</tr>
<tr>
<td>Austin, Lilian</td>
<td>59, VI</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor</td>
<td>6, 20, 59, 63-65, 93, 120, 129, 152-154, VII</td>
</tr>
<tr>
<td>Barbary, Kymberley</td>
<td>63, VI</td>
</tr>
<tr>
<td>Basden, Pamela</td>
<td>135, VII</td>
</tr>
<tr>
<td>Blackboard</td>
<td>135, 156-160</td>
</tr>
<tr>
<td>Blended learning</td>
<td>71, 135</td>
</tr>
<tr>
<td>Blog</td>
<td>17, 20-21, 23, 25, 27, 35, 60-62, 70, 72, 116, 142</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate in Assessing</td>
<td></td>
</tr>
<tr>
<td>Vocational Achievement (CAVA)</td>
<td>69</td>
</tr>
<tr>
<td>Charles Sturt University</td>
<td>5-7</td>
</tr>
<tr>
<td>Chmielewski, Robert</td>
<td>139, VII</td>
</tr>
<tr>
<td>Collaborative</td>
<td>94, 101, 150, 158, 161</td>
</tr>
<tr>
<td>Computing</td>
<td>VI, 15, 30, 49</td>
</tr>
<tr>
<td>CPD</td>
<td>93, 101, 112, 115, 117</td>
</tr>
<tr>
<td>Curriculum</td>
<td>III, VIII, 31, VI</td>
</tr>
<tr>
<td>CV</td>
<td>93, 101, 112-113, 117-118, 137</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dalziel, Colin</td>
<td>X, VI</td>
</tr>
<tr>
<td>Davine, Astrid</td>
<td>75, VI</td>
</tr>
<tr>
<td>Distance Learning</td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Edith Cowan University</td>
<td>35, 50, 85, 135, 146, 156</td>
</tr>
<tr>
<td>Employability</td>
<td>109, 113, 117</td>
</tr>
<tr>
<td>Engineering</td>
<td>33, 35-37, 41, 158, VI</td>
</tr>
<tr>
<td>Evaluation</td>
<td>101</td>
</tr>
<tr>
<td>Evidence</td>
<td>IX, 6-8, 10, 18, 21-23, 28, 36, 66, 70-71, 75-76, 79-80, 85, 87-91, 93-94, 97, 100-104, 110, 113, 117-118, 121-122, 125, 129, 131, 146, 149-150, 152-153, 155, 158, VIII</td>
</tr>
<tr>
<td>G</td>
<td>Gateway</td>
</tr>
<tr>
<td></td>
<td>George, Kendall</td>
</tr>
<tr>
<td></td>
<td>Godwin, Helen</td>
</tr>
<tr>
<td></td>
<td>Graduate Attributes</td>
</tr>
<tr>
<td></td>
<td>Gray, Michelle</td>
</tr>
<tr>
<td>H</td>
<td>Hamilton, Anita</td>
</tr>
<tr>
<td></td>
<td>Hay, Sarah</td>
</tr>
<tr>
<td></td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td>Health Care</td>
</tr>
<tr>
<td></td>
<td>Health Science</td>
</tr>
<tr>
<td></td>
<td>HEAR</td>
</tr>
<tr>
<td></td>
<td>Henderson, Mark</td>
</tr>
<tr>
<td></td>
<td>Higher Education</td>
</tr>
<tr>
<td></td>
<td>Higher Education Achievement Report</td>
</tr>
<tr>
<td>I</td>
<td>Institution-wide</td>
</tr>
<tr>
<td></td>
<td>Ishimura, Yusuke</td>
</tr>
<tr>
<td>L</td>
<td>La Trobe University</td>
</tr>
<tr>
<td></td>
<td>Lifelong Learning</td>
</tr>
<tr>
<td></td>
<td>Lockwood, Jo</td>
</tr>
<tr>
<td>M</td>
<td>MacSuibhne, Stiofan</td>
</tr>
<tr>
<td></td>
<td>Methodology</td>
</tr>
<tr>
<td></td>
<td>Microsoft</td>
</tr>
<tr>
<td></td>
<td>Midwifery</td>
</tr>
<tr>
<td></td>
<td>Mobile</td>
</tr>
<tr>
<td></td>
<td>Moodle</td>
</tr>
<tr>
<td></td>
<td>Munday, Jennifer</td>
</tr>
<tr>
<td></td>
<td>Murdoch University</td>
</tr>
<tr>
<td></td>
<td>Murfin, Keith</td>
</tr>
</tbody>
</table>
N
New Zealand 6, 89, 154, VII
Newton, Michelle VII

O
Occupational Therapy 93, 152-154, VII
Organisation 64, 109
Osteopathic Council 89
Outcome 12, 76, 79, 136, 149, 152, 154

P
Patten, Jacqueline 85, 146, VII
Pate, Heather 35, VI
Pedagogy 14, 19, 60, 146
Personal Learning Space IX, 93, 99, 155, VIII
Personal Tutor 139-142, 144-145, VII
Pirie, Prof. Ian 139, 141, VII
Placements 120
Planning 8, 11, 41, 61, 64, 66, 70, 94, 98-99, 101, 131, 153-154
Poot, Alison IV, III
Postgraduate Degree 6
Practicum 54, 63, 100

R
RDNS Training 109
Reflect(ion) 8, 10-12, 16-17, 20, 25, 29, 31, 35, 37-41, 44, 51, 60, 62, 65, 70, 86, 98, 116, 127, 135-138, 145, VIII
Reflective Practice 29, 111-112, 118
Roberts, Pauline 16, VI

S
Silver Chain Training 109
Slade, Christine 152, VII
Stone, Lucy VI, 69
Student Experience 140, 156, 161
Summative Assessment 126-127
Support VII, IX, 6, 8-10, 15, 17, 24, 27-28, 35, 40, 64-67, 70-72, 75-77, 79-80, 89, 93-95, 99-101, 103-104, 111, 114, 117-118, 120-121, 125-133, 139-141, 148, 152-156, 159-161, VI

Sutherland, Shane 9, 14, 35, 41

T
Template 76, 96-97, 112, 116
Training 30, 37, 41, 69, 71, 94, 109, 120

U
Undergraduate 6-8, 11, 13, 50, 63, 75, 90, 93, 98, 129, 139, 154-155
Undergraduate Degree 6-7, 13, 50, 98
University of Edinburgh 139-140
University of Sydney 125-127
University of the Sunshine Coast 93, 100, 152, 154
University of Western Australia 75

W
Watt, Bec 109, VII
Web 2.0 31
Webfolio 8, 10-11, 25-27, 36-37, 60-62, 76, 79-81, 83-84, 137, 143
Weeks, Ruth 125, VII
Workbooks 27, 70, 160
Workshop 60, 103, 135-136, 138

Y
Yates, Ross VII, 156
Young, Terry 168, VII