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) halfway 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

Professional and Clinical Portfolio Template (test)
This is a portfolio of evidence for student nurse (REPLACE WITH YOUR NAME)

Portfolio Introduction
Customise this page as an Introduction to your portfolio

Appendix 2: Public health custom reflective template

Practicum Reflections

Save record as ...
Please save your reflection as 'Reflection_Surname_Week#'

These form the basis of your reflections in your Learning ePortfolio and/or Report. Students should post a reflection on their experiences at Practicum each week for weeks one to three; and thereafter three weekly. To pass the unit you must post reflections as per the Unit Schedule. You will receive feedback on at least three postings from your Academic Supervisor, including one in the first three weeks. We are ensuring you do your reflections on an ongoing basis so you can use these as the basis for your reflections in the Learning ePortfolio. In addition, you will be able to observe improvement in your confidence, skills and knowledge over time.

Your reflections do not need to be long and rambling. Rather we prefer very specific reflections on, for example, something that you observed and that influenced you; something that you felt you did well and why; your response to constructive feedback; how something relates to what you have learnt in Health Science; such as specific scientific knowledge, public health principles, project management etc.

Description
What happened?
What is being examined?

Interpretation
What is most important/ interesting/ useful/ relevant about the object/ event/ idea.
How can it be explained?
How is it similar to adj different from others?
### Appendix 3: Public Health Assignment Listing

assignments are used to manage deadlines for submitted work. Assignments also allow multiple items of submitted work to be organised. Assignments are not required if work is not formally assessed.

<table>
<thead>
<tr>
<th>Title</th>
<th>Submission Deadline</th>
<th>Last Submission</th>
<th>Last Assessment Due</th>
<th>Last Feedback Due</th>
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<tr>
<td>Contact Information Form (due end of Week 1)</td>
<td>8th Jul 2013 00:00</td>
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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)