

PebblePad: Enhancing learning delivery by extending the capability of existing educational technologies.

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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.

