# Encouraging Reflective practice through the introduction of e-portfolios: a comparison of the postgraduate and undergraduate experience.

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# **Background and Rationale**

Encouraging students to reflect on their learning and life experiences and making sense of these reflections has been widely reported in the literature as problematic (Barclay 1997, Stalker et al 2001). Pedagogic responses aimed at deepening reflection have often encouraged the use of learning journals to make sense of theory in the light of students' practice. There is evidence that students find it difficult to engage in this process in anything but a superficial and cursory way (Betts 2004). This innovation project stemmed from a desire to utilise the newly developed electronic portfolio, Pebblepad, as a mechanism for encouraging a more systematic and structured approach to reflection thereby assisting in overcoming the barriers to engagement. The aim of this project was to introduce, trial and evaluate the tools offered by the e portfolio system to two cohorts of first year part-time postgraduate HR Diploma students in the encouragement of reflective practice. In reality this introduction proved to be problematic as described later in this report, hence the scope of the project was widened to include the experiences of first year cohorts of undergraduates studying for BA Honours in Human Resource Management and Business. This has provided the opportunity for valuable comparison of the experiences at post and undergraduate level.

Prior to this project students would submit a summative piece of work for assessment which was often constructed in retrospect rather than being indicative of continuous review and sense making of the learning experience. The possibilities for formative and timely feedback provided by Pebblepad appeared to yield a rich foundation for encouraging more critical reflection.

The introduction of the e portfolio for the postgraduate student cohorts was embedded within module HR 4059 Workbased Project and Personal Development. Students are required as part of their assessment on their individual project, to reflect and analyse their experiences of undertaking research, developing themselves and making sense of academic ideas over the course of the year. The undergraduate students studying HR 1007 Learning and Development are asked to reflect on their learning experiences during a Semester and comment on their progress as independent learners demonstrated through a piece of reflective writing. The two modules therefore have similarities in requiring sense to be made of a variety of experiences over time.

# The Innovation

There were some common features of the innovation which was introduced in September 2005 for both the postgraduate and undergraduate groups

• Pebblepad was introduced in week 1 and demonstrated by the tutor

- In week 2 a workshop was arranged where students were given the opportunity to try out the technology with facilitation by the tutor/developer.
- Brief guidance notes were given on how to use the Pebblepad applications
- A number of structured exercises were provided to help students in constructing their ideas.
- Students were encouraged to share their writing with the tutor and selected student colleagues.
- Students were asked to build their store of Pebblepad assets over the year/semester.
  They could then select the most personally significant items for inclusion in their
  journals for assessment which would demonstrate critical reflection and action from
  feedback
- Postgraduate students and Level 1 students in Semester 1 were encouraged to try out the technology but it was not a requirement. However in Semester 2, Level 1 students were asked to demonstrate some engagement with Pebblepad, submit their assignments to the Pebblepad gateway and to comment on its usefulness in deepening their learning.

## **Evaluation**

The views of the students using Pebblepad were sought through focus group discussion in class, entries in their weblogs, feedback through module evaluation forms and a small number of student interviews. The views of staff were also elicited through module team meetings. Because the numbers in the postgraduate group who participated over the duration of the year was so small, as was the take-up of undergraduates in Semester 1, there was insufficient data for quantitative comparison of results. However, the undergraduate group in Semester 2 provided a useful comparison with a similar group running concurrently who were not introduced to Pebblepad. The findings from this evaluation are presented below.

## **Results and Discussion**

The cohort groups were as follows. In HR 4059 there were 2 cohorts (n=56) who were introduced to Pebblepad as outlined above. At Level 1 in Semester 1 there were 5 cohorts (n=178) and in Semester 2 there was 1 cohort (n=38).

The outcomes of this intervention have been considered in terms of: the level of engagement and participation of students in using Pebblepad to assist reflection; the reported benefits and drawbacks to both staff and students in embracing technology supported learning; and the impact that using the e portfolio had on assessment results.

#### **Engagement and participation**

Engagement and participation from the Postgraduate group was problematic from the start. The module ran from 7:00-9:00pm and from the first week there was reluctance and hostility to trial the software. During the workshops in week 2, registers indicated that only 48% of the cohort groups actually attended the session. This had a knock on effect throughout the following weeks in that the basic skills of how to access Pebblepad were weak and consequently made students even less likely to participate. There were logistical problems to engagement in that computer suites at Compton Campus were inadequate to cope with the size of the cohorts. This meant that students either had to share PCs or had to work unsupervised in other areas of the site. There

were several instances where PCs did not support the application of Pebblepad thus reducing access to machines even further. Feedback to tutors from students was vociferous stating that they did not want to use technology, they found the various applications of WOLF, E vision and Pebblepad confusing. Participation in the first two weeks gauged through the sharing of assets with the tutors was no more than 20%. In the longer term over the year 8 students demonstrated regular use of Pebblepad using it for a variety of academic and work based reflections, gaining regular feedback and for submitting their final assignment.

Undergraduate engagement demonstrated much greater take-up despite similar issues with access to resources and the logistical problems of inducting five large cohorts in the use of the technology. In Semester 1, three of the five cohorts made regular entries to their portfolio assets and students were receptive to trying a variety of tools. Five students used Pebblepad to submit their assignments and commented favourably on its use. In Semester 2 the whole cohort used Pebblepad for submitting both of the assessments, writing and sharing on a regular basis their learning experiences.

The disparate reactions are of interest and surprising in that one might expect postgraduate learners to be more adventurous and flexible in their approach. The first explanation raised by both staff and students was the difficulty of PC access under supervision. Some of the student reluctance to engage in prolonged activity, staff attributed to their own lack of confidence with the new technology. This project was undertaken in the spirit of a joint learning adventure between staff and students. Surprisingly postgraduate students expressed a preference for learning with more traditional methods suggesting that their expectations of university study are heavily influenced by their prior expectations and experiences of learning. The undergraduate groups were much more receptive to 'having a go'

#### **Benefits and Drawbacks**

The benefits outlined by the postgraduate students who participated throughout the year centred around their improved confidence to undertake academic work through detailed and regular feedback from the tutors and colleagues. They reported that Pebblepad was an easy and speedy mechanism by which to engage in a community of practice with others thus helping to deepen their understanding of ideas.

"At first I was quite resistant to using Pebblepad and I struggled with the concept of using this to communicate. But once I began to converse with my group and the lecturer it opened up new ideas for my project .I am now a great fan and have persuaded my group to use it and they are finding the benefits of sharing new ideas"

Undergraduate students were excited by the use of the new technology and displayed some thoughtful reflections on the process in their learning journals. The key benefits they expressed were:

- Sharing of ideas, which they were reluctant to do in front of a large class
- Deeper thinking on the topics
- Made writing easier
- Finding a voice and speaking their mind thus giving them more confidence
- Being able to receive individual and regular feedback from the tutor.
- "I found I could speak out more on Pebblepad and get comments from the lecturers, which I wouldn't have done in class"

"It made me realise that my work is noticed and it made me write more and share my thoughts"

"The feedback really helped me with my grammar and spellings as I am a foreign student and I find English difficult. The lecturer's comments made me think more deeply about what I was writing"

The drawbacks were similar for both postgraduate and undergraduates. Those with weaker IT skills found it difficult, slow process and needed regular facilitation support which was demanding of staff time. There was confusion at the varied range of IT initiatives offered by the University and how they supported each other. A lack of rigorous induction into these systems was highlighted by both groups as a barrier to enthusiastic engagement. For some students the lack of access to appropriate resources outside University was also problematic. A few students found the technology impossible to use when they didn't have access to broadband technology.

The comments by students who actually participated were generally favourable, it was those students who didn't make a concerted attempt that were most critical. For staff the more critical factor was the amount of time that was required to meet the expectations of participating students. The tutors had only received at this stage brief familiarisation with the technology themselves and were very much self- taught. This impacted on their own confidence to present the optimal way of utilising the technology to good effect. Some staff themselves were unwilling to try out new methods of technology supported learning.

## **Impact on Assessment**

It is difficult at this stage to give detailed analysis of the impact of the innovation on assessment grades. Those who chose to take up Pebblepad from the postgraduate group achieved A or B grades for both their projects and reflective journals. It is impossible to say whether or not they would have achieved this anyway apart from the fact that they reported themselves that the feedback had helped them to explore new possibilities in their research. Again the undergraduate group in Semester 1 although representing a large group of students, was spread over five cohorts with various take-up of the technology. The more useful comparison is with the Semester 2 group of undergraduates who all engaged at some level with Pebblepad. The cohort results indicated a shift of almost three points with the average grade achieved being a B12 compared to C9 for other groups.

# **Implications and Future Developments**

Whilst the use of the Pebblepad technology demonstrated in this innovation has not been without its problems, there are indications that it has potential to create more independent learners capable of developing a stronger focus to their critically reflective practice. There are some important considerations for anyone setting out to use this as a support mechanism in relation to staff training and development. I would not recommend others to learn alongside the students as it was sometimes a painful process. For the University there are also some key considerations. The Pebblepad product offers some excellent features for both staff and student development, but requires careful thought about the way it is presented and supported. Resources need to be available in terms of hardware and facilitation time and much more input during induction on how

students can use the facilities offered. Future research on the impact of the technology on the assessment profiles of students would be valuable.

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