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Web Reflection: The Design and Implementation of a Reflective Journal Using PebblePad

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Abstract

International student mobility is high on the agenda of universities and governments worldwide. One model that enables the internationalization of tertiary programs is found in Study Tours, typically short-term programs of less than one semester and offered by many international universities. Study Tours combine both onshore and offshore learning and teaching activities designed to develop students' professional and personal intercultural capabilities. In this paper a research project that resulted in the design, development and trialling of an online self-reflective journal for Study Tour students is described. Individual learning was described using a reflective journal that was part of the assessment for the subject. PebblePad was the vehicle used to record the reflective journal. The project allowed students to capture the learning experiences of living and studying in another country in real-time through a variety of modes including photos, videos and podcast, to organise and store their personal and professional development histories. The evaluation is guided by constructive alignment where the course objectives, learning activities and assessment task are aligned.

Keywords

Reflective journals, Study Tours, e-Journals, Assessment Tasks, PebblePad

INTRODUCTION

As internationalization of education has become a reality over the past three decades, the need to provide international learning opportunities for students has increased. De Wit (1999) claims "Internationalization is high on the agendas of national governments, international bodies, and institutions of higher education... Internationalization of higher education is the process of integrating an international/intercultural dimension into the teaching, research and service function of the institution".

The recently published Review of Australian Higher Education (2008) emphasizes the strong connection between international education and global engagement, and argues that Australian students have much to gain from the internationalization of education through establishing personal international networks, gaining access to new knowledge and ultimately developing broader cultural understanding. It has been recognized that Australian students "need more and better opportunities to go abroad on study programs, or to acquire international experience through internships or volunteering opportunities related to their education programs and to their future employability and productivity" (Forbes 2008).

Study Tours, typically short-term programs of less than one semester, are designed to provide student experiential opportunities in order to realize the need for students to have a "global passport" to employment opportunities. The program enhances student engagement by developing critical thinking, analytical and reflective skills through learning activities aimed at students assessing the influence of cultural, legal, political, economic and IT infrastructure factors on business. The project described in this paper examined the impact of using the online functionalities of PebblePad to enable students to record their personal and professional journeys. PebblePad was the University preferred product.

LITERATURE REVIEW

This research project was motivated by two major strands of literature. The first related to the development of reflective practice techniques used by students to articulate their individual development of global and intercultural capabilities. While the second addressed the electronic means by which this professional development could be recorded for the benefit (educational, employment and life-long learning) of the graduate/student.

The Reflective Journal

One of the main reasons for introducing the reflective journal was to ensure that all experiences in the onshore and the co-requisite offshore learning activities were recorded and analysed. Students were asked to record observations and activities that supported reflective practice in relation to personal development and business globalization. As the nature of learning was largely experiential it was influenced by personal, interpersonal, institutional, social and historical factors (Foley, 2004). Learning occurred in formal, non-formal, informal and incidental situations. Like workplace learning, cross-cultural learning activities were often designed to occur beyond the realm of the traditional classroom informally, but consciously through experience, or incidentally and unconsciously (Eraut et al., 1998). This means that measurement of learning and capturing individual learner progress was fraught with complexity.

Students participating in study tours are expected to analyse and question experiences using reflective practice to direct the learning process (Schön D 1983). As students' engaged in industry site visits offshore they were expected to examine business practice against Hofstede's cultural dimensions, which are measured using the:

1. Power Distance Index (PDI) that describes inequality
2. Individualism (IDV) versus collectivism
3. Masculinity (MAS) versus its opposite, feminine roles
4. Uncertainty Avoidance Index (UAI) which evaluates tolerance for uncertainty and ambiguity
5. Long-Term Orientation (LTO) which reflects respect for tradition, and protecting one's 'face' (Hofstede G, 2011)

Mant's (1997) plan-do-review incremental change cycle and Kolb and Fry's (1975) learning cycle reflect the steps in Lewin's (1948) change model. Kolb (1984) conceptualises the process of action research as a spiral of action. The reflective journal assessment task at the centre of this research was designed to enable continuous reflective cycles during each phase of the study-tour. This was intended to ensure an individual professional development focus irrespective of the nature of the learning context.

This required the design, development and trial of an emerging technology and e-portfolios. Key terms discussed in this review are capability, particularly, and e-Portfolios, in particular with new technologies such as PebblePad.

Constructional Alignment Requires Reflective Practice

Several studies support the concept of aligning assessment with learning (Ramsden, 1992; Biggs, 2003, Henderson and McWilliams, 2008). This constructive approach to learning fits well with the concept of assessment for learning (Ramsden, 1992). In this vein, Hodges et al. (2004) describes a portfolio model for the assessment of workplace learning in a business programme in which the student produces a portfolio of learning based on an evidence-based approach in which the criteria for assessment is jointly developed and is linked to learning outcomes. This approach was used to design the curriculum and assessment for the study tours. The students were equipped with a cultural and reflective practice tool set during traditional classes prior to travelling to an offshore location where they attended traditional classes and visited industry sites. In this paper we have focused on one learning outcome. An e-journal assessment was designed and developed, supporting learning through reflective practice during the Study Tour program. The e-journal was designed to align learning activities and assessment tasks with learning outcomes, as depicted in Figure 1.

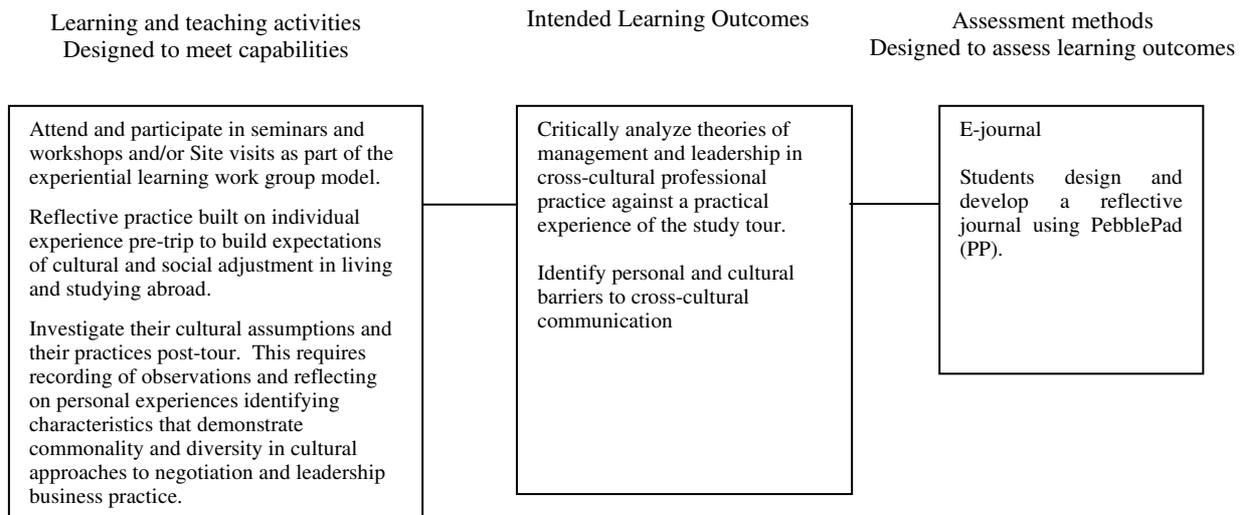


Figure1: Design and development of the reflective journal

A constructive approach to curriculum design was used to design learning activities and assessment for the study tours. Hofstede's cultural dimensions were taught in the pre-tour classes to develop an explicit set of learning expectations for students. This outcome is achieved through site visits, reflective practice and living and studying abroad. It is expected that a large quantum of the professional development will not be gained from traditional lectures and examinations. (Biggs & Tang, 2007). Students' use the knowledge about Hofstede's cultural dimensions and experiences, such as, site visits and their knowledge of reflective practice to reflect on their expectations and understandings.

Anecdotally social networking tools have been used by students embarking on study tours to highlight enjoyable experiences and to organise social events. Freeman (2009), co-author of the Australian Learning & Teaching Council (ALTC), Embedding the Development of Intercultural Competence in Business Higher Education, provides a succinct and up-to-date review of research that is relevant to the identification and development of intercultural competencies in business higher education. "The development of intercultural competence is a dynamic, ongoing, interactive self-reflective learning process that transforms attitudes, skills and knowledge for effective communication and interaction across cultures and contexts" (Freeman et al, 2009, p. 13). At a minimum the use of social networking tools supports interaction irrespective of geographical location.

PebblePad was used to create the environment in which students recorded reflections before, during and after learning experiences offshore. Students' were guided by the reflective journal assessment task that was underpinned by frameworks of cultural analysis, such as Hofstede's (2001) cultural dimensions. The dynamism of the pedagogy was eased by the technology. Creation of intercultural capability and learning activities that build competency, both on-shore and off-shore, aligned with current literature (Deakin University 2010; Treleaven et al 2007) that forms the basis of e-learning modules, e-portfolio templates and web resources.

This supports the RMIT University, strategic priorities to enable 'work-readiness' and the employability of its graduates (RMIT University 2010). Technologies such as e-portfolios and social networking sites offer all stakeholders the opportunity to connect and share information, resources and experiences.

E-portfolios and Web Technologies

Hallam, et al. (2008, pp. 4-5) identify a study commissioned in 2007 by the ALTC "to identify the scope, penetration and reasons for use for ePortfolios for students in Australian universities. The purposes for which ePortfolios are currently used include assessment, presentation and personal development". The main use of e-portfolio applications, like PebblePad according to Hallam (2008) were the:

- Use of ePortfolios to record and reflect on coursework activities
- Collection of evidence of learning and reflecting on learning activities
- Embedding of ePortfolio activities into curriculum.

For the purpose of this project Web 2.0 technologies were defined as any of the following: blogging and microblogging, audio and video podcasting, social bookmarking, social networking, wiki writing or virtual worlds; using any tools, such as Twitter, Flickr, WordPress, Second Life, YouTube, Delicious, Facebook, or

tools bundled in Learning Management Systems (e.g., Blackboard's wiki tool). The choice of technologies to support a reflective journal being constructed over a long time period is large. In this instance PebblePad was used to support reflective practice whilst completing a study tour.

As PebblePad exhibited major affordances of social web technologies, which enable collaboration, co-creation of web content by large numbers of people and an assessment task staged over a long time period it was deemed suitable for the pilot. Not all of the attributes of web 2.0 technology were needed for the student to create a reflective journal. It was an individual assignment so the affordances of Web 2.0 that enable co-creation of content by a number of participants was not necessary. However, the assignment was opened by the student for the academic to mark the final product at the end of semester. (O'Reilly & Battelle 2009).

Academics in higher education institutions are innovating to effectively use Web technologies to assess student work. Reports assessing the value of such uses of the social web by students are not yet common. Accounts of these pedagogies involve mainly formative and low stakes assessment task which is the nature of this project (Gray, Thompson, Sheard, Clerehan & Hamilton, 2010).

The technology was appropriate because the study tour required students to engage both offshore and onshore. In addition to the specific Study Tour "intercultural competence" and reflective practice capabilities around which the PebblePad artefact learning activities and assessments were designed, the use of PebblePad enabled transfer of social networking skills privately acquired skills to the professional domain. The University in question chose to adopt PebblePad and the researchers re-designed the curriculum and assessment tools to enable a trial of reflective writing using PebblePad.

Subsequent to the creation and trial of PebblePad student and academic perspectives relating to the usefulness of the application were evaluated. Hallam (2008) includes the improvement of information technology skills; connections among formal and informal learning experiences; the enabling of an archive of individual artefacts and reflections; and efficient management of students' work as benefits of e-portfolio use.

METHOD

The research which has informed the student perspectives reported follows a case study method, specifically the trial of PebblePad to complete a reflective journal assessment task. Yin [2002] defines a case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. Case study methodology is particularly well-suited to the field of IT, where the focus is on organizational rather than technical issues [Benbasat et al, 1987]. The form and content of case studies vary greatly depending on the audience and context. Yin [2002] proposes the use of multiple sources of evidence as the distinguishing feature of case studies; whereas, McBurney [2001] maintains that it is the *individuality* of the case or situation that characterize case studies. Case studies may include information gathered from a single source and focus groups with the case subject and with those who regularly interact with them.

The case study is interpreted in this paper using ideas drawn from the literature that recognizes the need for pedagogy to be underpinned by constructional alignment [Biggs, 2003]. It should be noted, however, that evidence to support the resources and technology enabling the acquisition of intercultural competencies is not available from this research to date. Students' ability to apply their appreciation of cross cultural issues associated with business practice in a global context has not yet been tested. However the process used by the academics to align the planned learning activities with the learning outcomes followed the processes requisite to establish constructional alignment.

This project included four phases: review of literature, design and development of a sample student e-journal and instructional resources for reflective practice and PebblePad, training student groups to write a reflective-journal and to use PebblePad and conduct focus groups to evaluate the effectiveness. An examination of existing practice enabled the identification of the appropriate features of PebblePad to augment current assessment practice. This enabled the creation of an exemplar and guidelines for use of PebblePad to replace the traditional construction of a journal.

PebblePad

The technology trialled in this research was PebblePad; a web-based Personal Learning Environment or ePortfolio system (PebblePad 2010). The Web folio feature was used for students' travelling on Study Tours to record journal reflections; an assessable task. PebblePad enabled students to insert hyperlinks, choose who had access to their web presence, add multimedia (pictures, video), write their story and work on their reflections before, during and after the tour. Students' work was guided by classes teaching reflective practice, introduction to the technology and assessments that aligned course capabilities, learning activities and assessments, and in accordance with Biggs (2003) constructive alignment. The technology adoption was perceived to support:

- On-shore and off-shore interaction between academic staff and students
- Reflective journals built as the learning occurs before, during and after the Study Tour experience
- Assessment tasks that directly link to the defined course capabilities but enable students to make the connection through reflections based on a range of scheduled or student-driven learning experiences
- Students' use of multimedia objects, such as, video and pictures to augment the traditional text-based personal narrative contained in their reflective journal
- Staff constructing course capabilities, learning activities and assessments. The PebblePad user interface and implicit requirements as well as the assessment task were underpinned by frameworks for cultural analysis, including Hofstede's (2001) five cultural dimensions
- The PebblePad framework and assessment task guided the intermittent construction of the student web folios. Students could add reflections at any time but were required to provide access to staff at stipulated times.

Learning Activity and Assessment Design

Prior to the implementation of the University preferred application PebblePad students communicated using culturally dominant technologies, such as, FaceBook and Hoffstede's cultural dimensions had not been used to clearly underpin the pre-tour curriculum and the reflective practice assessment. Workshop activities were used to explore reflective practice and journal writing, and training sessions were conducted to familiarise students with the PebblePad functionality and its application.

The key elements of the e-journal as a reflective journal assessment task were:

- Each student was required to record their observations and reflect on their personal experiences, identifying similarities and differences in the cultural approaches and interpretations of social, cultural, educational and business practices.
- Students were required to undertake the assessment task using theoretical frameworks for cultural analysis, such as Hofstede's cultural dimensions.
- Students were encouraged to include the following items as evidence of their critical reflection – photos, readings, newspaper articles, videos, mind maps, etc.

The assessment tasks are aligned with the learning and teaching activities to achieve the intended learning outcomes as in Figure 1. Examples of student work that constitutes best practice and reinforces the important benefits to student work of using PebblePad are displayed below under the headings Pre-Tour, During Tour, and Post Tour Web Reflection.

Pre-Tour Web Reflection

During classes prior to each of the Study Tours students were taught how to use PebblePad and how to write a reflective journal that recorded their intercultural competence development. Using frameworks of cultural analysis, such as Hofstede's (2001) five cultural dimensions, the students detailed their expectations for the trip. Figure 2 displays an entry in a student PebblePad web folio prior to departure for, in this case, Aarhus.

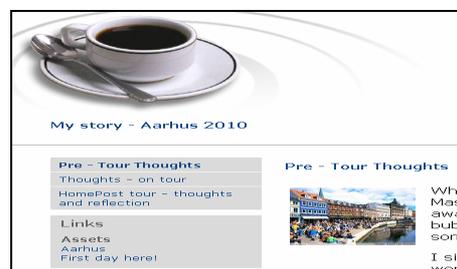


Figure 2: Student 1 - Reflective journal pre-tour

During Tour Web Reflection

While offshore, students created journal entries that recorded their personal intercultural development using frameworks for cultural analysis, including each of Hofstede's cultural dimensions as benchmarks. PebblePad enabled students to organise their thoughts, write a reflective journal entry, add pictures to illustrate emotional content and finally to allow staff access to their web site upon request. The decision to provide access to others

mirrors the functionality of familiar applications, such as Facebook. Figure 3 displays student entries in the PebblePad web folio while attending classes in Denmark.

<p>Denmark</p>  <ul style="list-style-type: none"> Introduction Food Education Equality and Tolerance Culture Conclusion 	<p>wide-spread in Denmark. Foreigners are apparent amongst other things blamed for the draining of the social security system.</p>  <p>I did not have any specific or special expectations about the business school in Denmark. I found it to be very similar to the RMIT school. It was easy to get around the place and the facilities such as the library and printing were fairly good. The lecturers appeared to be experienced and knowledgeable. They were very helpful and really trying their best to make us feel comfortable while studying there. In general, I would say the quality of teaching in Denmark was at a higher standard if compared to Australia. However, the examination system was rather different. The exam atmosphere was very formal and we were requested to place our mobile phones at a designated area and attendance signatures were taken. And at the end of the examination, we were required to sort our answer sheets into four copies for different recipients. It was interesting to experience the highly formal and structured Danish examination system.</p>
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Figure 3: Students 2 and 3 - Reflective journal during tour

Post Tour Web Reflection

Student entries after they returned from their Study Tour demonstrated changes in attitudes towards Hofstede's cultural dimensions. Evidence of learning from activities scheduled by the academic coordinators and independently was displayed in the e-portfolio. In Figure 4 the student has acquired knowledge about the traditions of a foreign country and compared their initial expectations pre-departure to what they have discovered. Figure 5 depicts a student's subsequent research and application of knowledge to what was learnt and observed during the Study Tour.

<p>Although I appreciate that European countries have much to offer in terms of <u>culture, history, architecture, arts, technology and education</u> I tend to perceive that continent as old, somewhat slow moving and lacking the kind of dynamism and youthfulness. The knowledge that Denmark has more residents over the age of 65 (Encyclopaedia Britannica 2009) appears to support my perception.</p> <p>I am not aware of any particularly large or prominent business Danish companies. I wonder if there are significant differences in Hofstede's cultural dimensions my initial impression is one of two nations. Both countries have a low power distance (although Australia has a middle class with small income differentials while both value individualism). Denmark is a very individualistic nation, although it is more so than Australia's. Both nations highly value individual privacy. Differences are most prominent, with Australia being more masculine, i.e. conservative, and uncertainty avoidance, Denmark receives a higher score.</p> <p>Two striking differences between Denmark and Australia are their attitudes towards art and sport. Based on data from the Royal Danish Ministry of Foreign Affairs (2007) immigration and</p>	<p>Title: Thorvaldsens Museum, Copenhagen Filename: CIMG0286.JPG Description: Preview</p> 
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Figure 4: Student 4 - Reflective journal post-tour

<p>Welfare State</p> <p>Listening to lecturer and students and discussing the topic of government funding for schooling, unemployed as well as people who have left the workforce the Danes actually thrive on what the governmental systems offers them, especially around free schooling. This is backed up by the fact that the Danes and their concern for their children's education is actually a little shocked to learn that in Australia, there are some lessons learned for Australia. In Australia, the government often state that the tax system does have to provide for the ageing population as well, however with Denmark, Ageing population, the real question is how to fund it.</p> <p>Ageing Population</p> <p>It is no secret about the <u>ageing population</u> of Denmark many people in Denmark will tell you that because of the higher taxation in Denmark, according to the Economist (2008) "some 35%" there is "brain" drain (people moving out of Denmark for better pay and less tax) in the economy and not enough taxable income is being drawn to sustain the Welfare state model. In fact Andersen (n.d.) discusses this at length under the changing composition of the demography and the effects it is having on the Danish Welfare system, especially on the "labour system" (p. 24)</p> <p>Couple this with an immigration policy that is certainly set to attract skilled</p>	<p>Title: Fertility Rates vs GDP Filename: Fertility rate vs GDP.gif Description: Preview</p> 
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Figure 5: Student 5 - Reflective journal post-tour

Evaluation

Qualitative data was collected from student respondents during focus groups conducted at the end of this project. Questions were designed to elicit student opinions about the effectiveness of PebblePad for their reflective journal assessment task. The reflective journals had been created in previous iterations of study tours but the technology use had not been pre-determined. PebblePad was trialled with the postgraduate study tour student cohort. These students participated in the Study Tours to Denmark and the USA. A sample of thirteen students participated in focus groups in April/May 2010, following the final workshops upon returning to Melbourne.

FINDINGS

The findings from the reflective journal pages informs the patterns where the students have time to explore PebblePad and put emphasis on the images as well as text to describe their experiences. Prior to viewing the reflective journal as a final product the students have the opportunity to reflect and trial different methods to convey the meaning of their learning experiences. PebblePad enabled students' to not only document the events of their tour but to convey to the reader the meaning of the highlights in such a manner that the learning was apparent. The use of the audio and video components provides the means to make the reader feel as if they are in the same place and situation as the student. The post tour document was more focussed on writing text that connected student experiences to the readings completed prior to the tour. Each documented expectation derived from the geographical and political information received was reflected upon to draw out the learning acquired through offshore experiences. The students managed to relate their experiences back to Hofstede's cultural dimensions.

The responses of students to the focus group questions were mixed. Although some students found the use of PebblePad generally useful in the completion of the reflective assessment task, some students found it did not add value to the learning experience. It was difficult to dissociate the student perceptions of the technology from their experience with social technologies used to reflect and communicate outside the academic domain. Students reported, however, that software features such as the ability to incorporate weblinks, photos and other multimedia options, made the experience more interesting.

Table 1. Focus Group Responses to 'Did you find the software useful for the reflective practice assessment tasks?'

General Findings	Quotes
Thirteen students responded to this question and eleven clearly stated that the software was not useful for the reflective assessment task.	Quote 1: 'I didn't find it anymore useful than using Word. It really was just a different way of presenting our reflective journal. It enabled the use of pictures and video (but even then both those functions were quite limited)
	Quote 2: No No No and a thousand No's!!!! It was easier and far more practical to use Microsoft Word to do the tasks
Two students stated that they found the software useful in completing the assessment task of the reflective writing piece.	Quote 3: 'Yes, The Pebble Pad is a reliable tool to store information everyday which is very helpful when I am doing the reflective practice'.

Adoption was influenced by students' use of other social networking technologies for similar purposes. In Table 1, some students used PebblePad in the same manner as they would construct a reflective journal using Microsoft Word. The continuous contribution of journal reflections whilst offshore, irrespective of access to the internet and computing facilities, was not fully utilised. The features of the application that enabled students to create soft hyperlinks to important digital evidence of reflection, frequently input small amounts of data, collaborate with students and staff and the ability to retain access to reflections beyond enrolment in the course were not used.

Students were then asked to evaluate the technology and their responsiveness to recommend the system to others. The results are displayed in Table 2. The majority of the students stated that the application did not improve the quality of their work. Without further research it is difficult to ascertain the direct issues but the frustration could have been caused by the imposition of a change of web application to accomplish a task that they could complete using their own software. As the functionality of PebblePad was not markedly different to a range of Web 2.0 applications readily available resistance to learning to operate the new interface was apparent amongst the students and staff. Arguments were posed about the application being less user-friendly and accessible than products, such as, FaceBook that have better market penetration.

Table 2. Focus Group Responses to ‘How easy to use was the application (PebblePad)?’

General Findings	Quotes
Seven of the thirteen students stated that it was difficult to use and they would not recommend that it be used again.	Quote 1: It’s one of the WORST examples of Content Management System (CMS) I’ve ever seen in my life. I’ve worked professionally with CMS systems. PebblePad is an immature, childish, limited, un-professional, difficult to use, poor user interface systems and basically overall an annoying CMS software system to have use Pebble Pad = sad. I like using CMS systems! – so PebblePad was a shock when I first used it and I would never recommend it.
Six of the thirteen students stated that the software was easy to use, it was user-friendly and they were able to navigate and use the software effectively.	Quote 2: It is easy to understand and use. It has moving pads that can help users. It is easy to do the process of creation of a variety of record types. These include records like action, plans, abilities, achievements, experiences and thoughts.

The research then explored whether students felt the technology improved their work. Table 3 shows some of the findings. Most students did not feel the software added a new dimension and quality to their work. In some cases it was claimed that the application detracted from the outcomes. While a smaller cohort thought the environment was easy to use in a context that is always ‘switched on’.

Table 3. Focus Group Responses to ‘Did the software improve the quality of your work?’

General Findings	Quotes
Eight of the thirteen students surveyed stated that the software did not improve the quality of their work in any. The students stated that there was no competitive advantage in using PebblePad as opposed to Word.	Quote 1: No, in short – It most certainly did not. There is a saying in desktop publishing and that is ‘Content is King’, so what I write is improved only by design and PebblePad fails on many fronts to improve the quality of my work. I cannot stand PP. Quote 2: A juvenile attempt at ‘relevance’ in an era of Blogging, Twitter and Social Networking on the rise. PebblePad detracted from the quality of my work.
Five students gave PebblePad a positive review concerning the improvement of the quality of the work that they submitted. The students commented positively on the formatting features of PebblePad and how it kept the journal interesting.	Quote 3: Yes it is web-based Personal Learning Environment, you can easy log on and write your reflective journal anywhere and anytime and may record types can help me use the suitable way to write my journal.

The focus of the students was on writing convenience (ease-of-use) meant they would have been doing the task given any tools. The technologies should not enhance the quality of reflective journals. They are tools to ease the creation process. The students are the ones that create the content of the journal based on their learning experiences in this case, Study Tour. The students that like structures would favour the embedded types of journal they can choose to just put in the appropriate content without hassle in designing an interface, while the ones that are more creative and more experience in using better web applications, would like more flexibility in creating their own interface/pages.

Table 4. Focus Group Responses to ‘Were their features of the software that enabled you to complete your reflective practice in different ways to past exercises - video, photos text?’

General Findings	Quotes
Nine students commented favourably on the features that PebblePad made available to them in the completion of the reflective assessment task. Favourable comments focused on the ability to add audio, pictures and other visuals that would not have been possible with a	Quote 1 Yes, When I have these features, I can take video and photos during my trip, which is very meaningful. I can make my reflective journal very vivid and interesting to avoid only using words to record my work. Quote 2: Yes it helps me a lot to complete my reflective practice with providing text, photos, video, and hyperlink

Word Document.

reference which is very useful for reflection.

Students commented favourably about the availability of multimedia support provided by the application for the practice of reflection. Thereby students' learn to augment traditional text form by constructing their reflective journals incorporating images and videos that personalize the space.

Academic staff followed the appropriate Learning and Teaching development methods in class time to ensure the underpinning of the assessment task and the specific learning outcomes were explained and discussed. Time was also allocated to instruct the students on how to use the technology with exercises to reinforce understanding. The pedagogical groundwork with the chosen application did not translate into a successful pilot study, with the majority of students finding the experience using PebblePad negative and believed that it hindered their completion of the assessment. There are a number of factors that could influence this outcome. It may be that the student responses reflect early adopter limitations, increased adoption difficulty due to the requirement for usage offshore, difficulty due to the nature of the course, lack of mobility of the platform and a postgraduate trial (comparison with an undergraduate cohort would be beneficial).

This is evidence of the success of the tools in the current marketplace. Students were annoyed to be asked to learn to do something they already do with the need to change to new web application that is superfluous and did not improve their practice. The nature of what is asked to do with it may have already being done and can be done using web application that they are familiar with, their chosen technology. There may have been an element of frustration due to the directive with respect to the teaching tool. However, students did learn to use PebblePad which provides them with a skill that may be useful in the current job application market. If they used PebblePad for business report or online application where multimedia is needed to impress top management or staff with similar attitude would the response be different?

CONCLUSION

The Review of Australian Higher Education (2008) emphasized the strong connection between international education and global engagement, and argues that Australian students have much to gain from the internationalization of education through establishing personal international networks, gaining access to new knowledge and ultimately developing broader cultural understanding. One popular type of international learning activity that is offered by many universities is the Study Tour program. The program enhances student engagement by developing critical thinking, analytical and reflective skills.

This research project has resulted in the design, development and trialling of an online self-reflective assessment task for Study Tour students that allow students to store and record information throughout the program, and document observations and lessons learnt. Students are able to capture the learning experiences of living and studying in another country through a variety of multi-media modes, such as photos, videos and podcasts. Students could use the e-journal software to organise and store their personal and professional development histories.

The findings of this study are that while the students actively engaged with the technology to assist in the reflective task, the overall experience of using the technology was negative in nature. Students did not utilize the technology except to add photographs to their text. More sophisticated use of multimedia or real-time reflection was not explored by many of the cohort. There are a number of limitations that could be factors that influence the apparent lack of adoption, such as time, mobility, training and other 'early adopter' issues. Online presentation of student work is an important pedagogical tool and allows for students to use similar technology tools in a class setting or on a Study Tour that they would in 'real life'.

This study is designed to build the student capacity through web reflection, online reflective journal, using PebblePad. It investigates the technology that facilitates building cross-cultural capabilities through reflection. While identifying the shortfall in the study we can identify areas of further research and application with a deeper assessment of the early adopter factors that influence technology acceptance; the technological difficulties of offshore access; further development of the assessment task to lend itself to 'real time' information capture; use in a mobile environment and piloting with a larger and more technologically 'savvy' cohort. This work reinforces the issues that early adoption of technology often faces.

REFERENCES

- Benbasat, I., Goldstein, D., Mead, M. 1987. "The Case Research Strategy in Studies of Information Systems", *MIS Quarterly* (11:3), September, pp. 369-386.
- Biggs, J., and Tang, C. 2007. *Teaching for Quality Learning at University*. Maidenhead: McGraw-Hill and Open University Press.

- Biggs, J.B. 2003. *Teaching for Quality Learning at University: What the Student Does*. Buckingham, Philadelphia: Society for Research into Higher Education/Open University Press.
- De Wit, H. 1999. "Changing Rationales for the Internationalization of Higher Education," *International Higher Education* (15), Spring, pp 2-3.
- Deakin University 2010. "Literature Review. Intercultural Understanding and Competencies," Institute of Teaching and Learning at Deakin University. Retrieved 1 May 2010, from <http://www.deakin.edu.au/itl/pd/internationalisation/documents/iuc-lit-review.doc>
- Eraut, M.E., Alderton, J., Cole, G., and Senker, P. 1998. *Development of Knowledge and Skills in Employment*. East Sussex, UK: University of Sussex.
- Foley, G. 2004. *Introduction: The State of Adult Education and Learning*. In Foley, G. (Ed.) *Dimensions of Adult Learning: Adult Education and Training in a Global Era*. Crows Nest, NSW: Allen & Unwin.
- Forbes, D 2008. *Policy Frameworks and Settings Regional and Global Perspectives for University Sector Policy*. Canberra: Academy of the Social Sciences in Australia University Policy Futures Roundtable.
- Freeman, M., Sykes, C., Chamberlain, A., Leask, B., Ramburuth, P., Simpson, L., Ridings, S. and Treleaven, L. 2008. "Developing Intercultural Competence in Australian Business Higher Education: A Literature Review." Retrieved 1 May 2010, from <http://www.altcexchange.edu.au/book/export/html/1811>
- Freeman, M., Treleaven, L., Ramburuth, P., Leask, B., Caulfield, N., Simpson, L., Ridings, S. and Sykes, C. 2009. *Embedding the Development of Intercultural Competence and Business Education*. Australian Learning and Teaching Council, Project Number CG6-37, Final Report, July.
- Gray, K., C. Thompson, J. Sheard, R. Clerehan and M. Hamilton. 2010. "Students as Web 2.0 Authors: Implications for Assessment Design and Conduct," *Australasian Journal of Educational Technology* (26), pp 105-22.
- Hallam, G. 2008. "The Australian ePortfolio Project and the Opportunities to Develop A Community of Practice," In Hello! Where are You in the Landscape of Educational Technology? Proceedings ASCILITE Melbourne, pp 368-372. <http://www.ascilite.org.au/conferences/melbourne08/procs/hallam.pdf>
- Hallam, G., Harper, W., McCowan, C., Hauville, K., McAllister, L., Creagh, T., van der Lee, J., Lambert, S., and Brooks, C. 2008. *Australian ePortfolio Project: ePortfolio Use by University Students in Australia: Informing Excellence in Policy and Practice*. Queensland University of Technology, Final Report, http://www.eportfolioppractice.qut.edu.au/docs/Aep_Final_Report/AeP_Report_ebook.pdf
- Henderson, F., and McWilliams, A. 2008. "Enhancing Student Engagement with Industry: A Curriculum Approach to Scaffolding Employability Skills," *Work Integrated Learning (WIL): Transforming futures*, WACE Asia Pacific Conference, The Australian Collaborative Education Network (ACEN), Sydney, pp. 47-60.
- Hodges, D., Smith, B. W., and Jones, P. D. 2004. *The Assessment of Cooperative Education*. In R. K. Coll, & C. Eames (Eds.), *International Handbook for Cooperative Education: An International Perspective of the Theory, Research and Practice of Work-Integrated Learning*, pp 49-64. Boston: World Association for Cooperative Education.
- Hofstede, G. 2001. *Culture's Consequences, Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. Sage Publications, Thousand Oaks.
- Kolb, A. and Fry, D.A. 1975. *Toward An Applied Theory of Experiential Learning*. In G. L. Cooper (Ed.) *Theories of Group Process*. London, UK: John Wiley.
- Kolb, D.A. 1984. *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, New Jersey: Prentice Hall.
- Lewin, K. 1948. *Resolving Social Conflicts: Selected Papers on Group Dynamics*. New York: Harper & Row.
- Mant, A. 1997. *Intelligent Leadership*. Sydney: Allen and Unwin.
- O'Reilly, T. and J. Battelle. 2009. *Web Squared: Web 2.0 Five Years On*. Special report [white paper] for the Web 2.0 Summit. San Francisco, CA. http://assets.en.oreilly.com/1/event/28/web2009_websquared-whitepaper.pdf
- Ramsden, P. 1992. *Learning to Teach in Higher Education*. London: Routledge.
- Review of Australian Higher Education 2008. *Review of Australian Higher Education*. Final Report. Retrieved 15 February 2010, from

http://www.deewr.gov.au/HigherEducation/Review/Documents/PDF/Higher%20Education%20Review_one%20document_02.pdf

RMIT University 2009. *ISYS2373*. Study Tour Course Guide.

RMIT University 2010. *RMIT Strategic Plan 2007-2010*. Retrieved 21 April 2010, from <http://mams.rmit.edu.au/gp8g92gupcho.doc>

Schön, D. 1983. *The Reflective Practitioner, How Professionals Think In Action*. Basic Books. ISBN 0465068782

Treleven, L., Freeman, M., Leask, B., Ramburuth, P., Simpson, L., Sykes, C and Ridings, S 2007. "Beyond Workshops: A Conceptual Framework for Embedding Development of Intercultural Competence in Business Education," *HERDSA News*, December, pp. 9-11. Retrieved 1 May 2010, from <http://www.altcexchange.edu.au/system/files/HERDSA.%202007.pdf>

Yin, R. K. 2009. *Case Study Research: Design and Methods*. California, USA: Sage Publications, Thousand Oaks.

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