RMIT University
Learning and Teaching Investment Fund 2009
Final Report
Due date is February 19, 2010 to your LTIF College Coordinator

<table>
<thead>
<tr>
<th>Project title</th>
<th>Student Engagement through E-learning: Using online simulation for small, medium and large class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project leader</td>
<td>Kathy Douglas</td>
</tr>
<tr>
<td>Team members</td>
<td>Sandra Jones, Siew Fang Law, Belinda Johnson, Daniel Druckman, Clare Coburn</td>
</tr>
<tr>
<td>Funds approved</td>
<td>13,400</td>
</tr>
<tr>
<td>Funds acquitted (attach financial statement)</td>
<td>13,400</td>
</tr>
</tbody>
</table>

**Introduction**

Engaging students through online role-plays has been demonstrated as a beneficial learning process, particularly in developing students’ employability skills. There are many potential benefits to the use of online role-plays providing the opportunity for students to demonstrate negotiation skills and collaborative problem solving in an asynchronous environment. Online role-plays are an authentic learning and teaching strategy that allows students to participate in simulated ‘real life’ world experiences which connects to their future professions and scenarios can be drawn from industry. This project brings together teachers at RMIT involved in teaching negotiation theory and practice in the online environment using online role-plays.
The project consisted of a number of initiatives to extend the use of online role-plays at RMIT. This project aimed to foster a community of practice in the teaching of negotiation online at RMIT by experimenting with students designing role-plays online. To assist other academics to adopt online role-plays in their teaching in areas other than negotiation the team developed a web page (see Online Role-playing RMIT [http://rmit.com/browse;ID=1n54owye3eus] that is available on the RMIT website providing information and guidance for teachers regarding online role-plays. The role-plays can be used for a variety of class sizes and contexts. The community of practice experimented with and reported on different online tools for the assessment of online role-plays with a particular focus on using Web 2.0 online tools to debrief the role-plays. The online tools used included e-journals, wikis, blogs and e-portfolios. Additionally, a major initiative of the project was an experiment to test whether there were pedagogical benefits for students to design, as opposed to playing out, role-plays online.

The Research Questions of the Project (the design and playing out of role-plays online).

The research questions for this project were:

- can the gains of the earlier study into designing role-plays in a face-to-face environment be replicated if the activities are completed in an online environment?
- how do the results in the online version of the designing role-plays activity compare with the results of the face-to-face study?

The Research Methods

This project, relating to the experiment with the designing and playing out of role-plays online, used a mix of qualitative and quantitative analysis to ascertain student levels of knowledge retention. The questionnaire was a 21 question self evaluation that consisted of short answer and Likert item questions. Tools were the same as those used in the face-to-face study by Druckman and Ebner (2008) allowing a comparison between the two studies. The study was conducted in three courses in two Colleges at RMIT University (School of Accounting and Law, and School of Global Studies, Social Science and Planning). The courses in which the study was conducted were SOCU1047 Negotiating Transnational Agreements; HWSS2157 Understanding Conflict & Mediation; and LAW1031 Negotiation & Dispute Resolution. The combined number of students across the courses who were involved in the project was around 60. However, due to a low take up rate by students in choosing to be involved in the study, only 11 surveys were completed by participants. Additionally, data was collected by Daniel Druckman in his class on negotiation at George Mason University.

The Methodology

This project was developed from the findings of an earlier international research (in which Australia was represented through University of Queensland), and replicated the research methodology of this earlier study although transferring it to the online environment. Students were randomly assigned into a matched-pair. These pairs were then randomly assigned to either design an online role-play scenario or to play out these role-play scenarios. Immediately following completion of their assigned activity, students completed a questionnaire that asked them to rate their understanding of negotiation concepts and the connections between these concepts. The data was used to determine whether designing role-play scenarios as well as playing them out in an online environment are effective teaching and learning activities to gain a deep understanding of negotiation concepts and the relationship between them. The data was used to compare the study with the previous data obtained by Druckman and Ebner (2008) to determine any significant impact of relocating both learning activities to the online environment. Analysis was conducted by the researchers and Professor Dan Druckman (George Mason University) acted as a consultant, He conducted the face-to-face study originally reported upon and written up in the article Druckman & Ebner (2008). It is planned that more data will be obtained in 2010 due to the relatively poor uptake by students in the
2009 data collection. Once the data has been analysed further publications are planned.

<table>
<thead>
<tr>
<th>Attach the full and detailed report and evaluation of your project outcomes including evidence of the impact the project has had. Also make reference to how the outcomes address the five key objectives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved student learning experiences, outcomes and employment opportunities</td>
</tr>
<tr>
<td>Innovation</td>
</tr>
<tr>
<td>Strategic alignment</td>
</tr>
<tr>
<td>University wide application</td>
</tr>
<tr>
<td>Value for money</td>
</tr>
</tbody>
</table>

A growing body of literature on online role-plays and simulations in tertiary learning and teaching recognizes the potential of these activities to provide students with ‘real world’ authentic learning environments through which students develop graduate attributes and employability skills. Role-play provides learning opportunities in simulated authentic experience that engage both the affective and cognitive domains of the learner. Online role-plays and simulations can be used to assist students to develop negotiation and mediation skills and also to assist in the development of complex decision-making. Online role-plays provide the opportunity for active learning that incorporates collaborative problem solving. These types of role-plays and scenario simulations have been successfully used in politics, economics, psychology, engineering, history and education (Project EnRole). Several studies, however, suggest that it is the simulation designers who learn more about the concepts being simulated than do the actual simulation role-players (Druckman & Ebner, 2008).

The research element of the project aimed to develop an innovative approach to online role-play expanding current approaches that only focus upon students playing out allocated scenarios online. This part of the project engaged students in the design component of role-plays, developing scenarios collaboratively online that are then actively played out online by their peers.

Previous research has found that students engaged in designing role-play scenarios in face-to-face teaching and learning environments rather than just playing out such scenarios has been found to increase and deepen the conceptual knowledge they retain about the theory and practice of negotiation. This was shown in a study conducted by Druckman and Ebner (2008). That project found that students engaged in scenario design showed better concept learning and understanding of the way concepts are related, were equally (in one case more) motivated, and, over time, retained more learning, than both their role-play counterparts and a control group. This project replicated this earlier research to ascertain whether these results will also occur in the online environment.

Overall aims of the project included:

- The project aimed to improve teaching and learning in negotiation through developing an innovative online method of engaging students in activity-based learning. This expanded existing approaches to online role-plays by incorporating design of role-plays online.
- The project aimed to contribute to the RMIT web resource for online teaching and learning, sharing their experience of implementing online role-plays in teaching and learning. The project contributed to Phase 2 of the RMIT E-Learning (REAP) initiatives. Online simulation learning opportunities have been identified by RMIT staff through a survey conducted in 2007 as an important area of future innovative development. This project contributed to meeting this need.
- This project aimed to expand the potential of virtual placements in online delivery of work integrated learning (WIL) through understanding the potential of designing ‘real world’ scenarios online. The design of role-play scenarios allows students to link innovation and industry and build on the University’s record of creating work-ready students by synthesizing various disciplinary learning and teaching. The project developed resource material accessible online through placement on a RMIT website.
- The project aimed to contribute to comparisons of online and face-to-face learning experiences. The project transferred a face-to-face learning innovation to the online environment which meant that data could be compared between the two studies.
- The project members experimented and reported on, in a refereed conference paper at the ATN conference (2009), the use of different online tools for the assessment of online role-plays. The community of practice has a particular focus on using new online tools to debrief the role-plays. The online tools used included e-journals, wikis, blogs and e-portfolios.
- The project identified further research opportunities, namely testing whether the designing
of online or face-to-face role-plays contributes to the development of empathy in students in their role as a professional in industry with prospective clients.

Ethics

An ethics application was completed in relation to the research on designing role-plays online. Ethics approval was granted through the Business College.

- Improved student learning experiences, outcomes and employment opportunities

Employability skills are defined as: communication, teamwork, problem-solving, initiative and enterprise, planning and organisation, self-management, learning and technology (DEST, 2009). Developing negotiation skills requires students to be able to master many desirable cross-disciplinary abilities related to particularly communication, team work and problem-solving that are useful for employment including analysis, creativity, adaptiveness, problem exploration and solving. Students need to analyse problems, find creative solutions and adapt to changing circumstances. Co-operative behaviour, regarded as one of the key strategies in negotiation, can be mirrored in the learning context. By using the online environment for “teaching” negotiation the area of learning and technology is effectively engaged with.

- Innovation

The community of practice involved in this project demonstrated innovation in the identification and trialing of online tools, such as e-journals, wikis, blogs and e-portfolios for the debriefing of online role-plays. Additionally, the experiment relating to the pedagogical benefits of designing role-plays online has not been tried previously in Australia.

- Strategic alignment

The project contributed to Phase 2 of the RMIT E-Learning (REAP) initiatives. Online simulation learning opportunities have been identified by RMIT staff through a survey conducted in 2007 as an important area of future innovative development. This project contributed to meeting this need. This project aimed to expand the potential of virtual placements in online delivery of work integrated learning (WIL) through understanding the potential of designing ‘real world’ scenarios online. The design of role-play scenarios allows students to link innovation and industry and build on the University’s record of creating work-ready students by synthesizing various disciplinary learning and teaching. The project developed resource material accessible online through placement on a RMIT website.

- University wide application

To assist other academics to adopt online role-plays in their teaching in areas other than negotiation the team developed a web page (see Online Role-playing RMIT [http://rmit.com/browse;ID=1n54owye3eus]) that is available on the RMIT website providing information and guidance for teachers regarding online role-plays. The role-plays can be used for a variety of class sizes and contexts.

- Value for money

The project provided a number of benefits including the development of a community of practice, an online web page for the professional development of staff, data gathered regarding an experiment in teaching through design of role-plays online, use of innovative online tools such as e-journals, wikis, blogs and e-portfolios and identification of further research opportunities. There were a number of presentations and refereed publications (see below for details).

Dissemination of project outcomes both completed

This project assisted in the forming of a community of practice in online negotiation teaching at RMIT. Notable outcomes for the project included the production of a website for RMIT staff.
and planned. This should include both within RMIT and externally.

<table>
<thead>
<tr>
<th>Development in encouraging teaching using online role-plays and a number of presentations and refereed publications produced by members of this community of practice:</th>
</tr>
</thead>
</table>
| **RMIT Webpage:**
  *Online Role-playing* RMIT [http://rmit.com/browse;ID=1n54owye3eus](http://rmit.com/browse;ID=1n54owye3eus)
| **Conference Presentation:**
  Presentation of project at the *E-learning seminar of LTIF Recipients* 2009.
  

**Two Refereed Conference Papers:**


**One Refereed Journal Article**


<table>
<thead>
<tr>
<th>Summary of the project, outcomes, impacts and dissemination</th>
</tr>
</thead>
<tbody>
<tr>
<td>The project developed a community of practice of academics in online negotiation learning through the use of online role-play. Online role-plays of this kind can contribute to the development of employability skills. The project provided a professional development web page on the RMIT website that gives guidance in using online role-plays in teaching negotiation and other curriculum areas. The materials online encourage RMIT teachers to experiment with online role-plays in teaching small, medium and large classes. The community of practice also experimented with and reported upon the use of Web 2.0 tools to debrief online role-plays including e-journals, wikis, blogs and e-portfolios. An experiment was also conducted to test the pedagogical benefits of designing role-plays online as opposed to playing out role-plays online. A number of presentations and refereed publications resulted from the project including two refereed conference papers for the ATN Assessment Conference (2009) held at RMIT.</td>
</tr>
</tbody>
</table>