Meeting the 21st century challenge: The situational learning initiative at the University of Adelaide

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The University of Adelaide is currently undertaking a Situational Learning Initiative in order to make learning more engaging, relevant, interactive and collaborative, and to meet the learning styles of its increasing numbers of digitally literate learners. This paper outlines the rationale for this initiative and its goals and strategies. It reports on progress to date and future directions from a learning and teaching support perspective.

Keywords: situational learning, online role play simulations, scenario based learning, 21st century learners

The context

Education and training institutions are becoming increasingly aware that today's generation of learners is different. Bored with traditional methods they are speaking with their feet as they withdraw from studies and go in search of activities that are more engaging and interactive. For some, this means that they leave the education arena for ever. Educators have been warning of this disengagement and exodus for some time and the need to revolutionise approaches to teaching and learning for a new generation that is wired differently as a result of exposure to new technologies (Laurillard, 2006; Oblinger & Oblinger, 2003; Prenksy, 2005; Van Eck, 2006). The learning styles of these young people are significantly different from learners of the past, who are now their teachers or supervisors.

It is within this context that the Centre for Learning and Professional Development (CLPD) at the University of Adelaide has been promoting seminars on the Net Generation and exploring a range of methodologies that utilise new technologies and give learners more control in constructing their learning through individualised research, interaction and application to real life problems. Situational learning is one of these approaches, and particular attention has been directed to its application in scenario-based learning and online role-play simulations.

Situational learning, also known as 'situated learning' (Lave, 1989), is an umbrella term for a number of methodologies including simulations, case studies, scenario-based learning and online role-plays which present learners (working individually or in groups) with contexts involving concrete, real life problems. To solve these, they must make decisions and deal with the consequences. The content or learning aids required to inform these decisions are accessed as needed.

The online learning environment is particularly conducive to situational learning and new technologies (e.g. images, sound, and access to email or mobile technologies) can be used to boost engagement and immersion in the story. Support features such as discussion boards and facilitated sessions (face to face or online in live classrooms) are incorporated to encourage learners to reflect on what has been happening, what they have been experiencing and what they have been learning.

The Mekong E-Sim online role-play has been operating very successfully since 2001 within the Faculty of Engineering, Computer and Mathematical Sciences. Numerous papers have been written on the pedagogy and process (Maier et al., 2006; Maier, 2006; Maier, 2005; Maier & Baron, 2005; McLaughlan et al., 2001) including research into its effectiveness in promoting higher order learning and graduate attributes (Baron & Maier, 2004). It has also won a number of significant awards including:

- The ASCILITE Award for Exemplary Use of Electronic Technologies in Teaching and Learning in Tertiary Education: Best Web Based Project, 2001 (http://www.ascilite.org.au/index.php/Awards#ascilite_Awards_2001)

- The Pearson Education UniServe Science Teaching Award, 2001 (http://science.uniserve.edu.au/about/award/press01.pdf)

The *Disaster Down Under E-Sim* within the Faculty of Health Sciences is a more recent online role-play simulation that has also proved successful. Its dramatic opening involving a news break about an explosion in a defence installation is particularly exciting and engaging, and the potential is there for customisation by a number of faculty groups.

Despite these successful models, the uptake by other Faculties has been slow and so in 2006, the CLPD proposed the appointment of a Project Manager to drive a professional development initiative in situational learning to increase the use of online role-play and scenario-based learning across all Faculties.

What is the Situational Learning Initiative?

The Situational Learning Initiative, led by a Project Manager, commenced in January 2007 and is funded for 12 months by the Faculty of Engineering, Computer and Mathematical Sciences and a University of Adelaide Business and Resource Learning & Teaching Funding Grant. The aim is to progress developments in online situational learning.

Goals

1. A community of practice of committed staff with a sound understanding of situational learning approaches, able to maintain and support interest, experimentation and research into situational learning within the University beyond 2007
2. The development and implementation of at least two new online situational learning role-plays/simulations
3. Enhancements to existing online role-plays, including cross discipline usage and /or collaboration
4. A minimum of one scenario-based learning object per Faculty embedded in online learning materials
5. Data in relation to the learning journey for staff and students using situational learning to inform the teaching and learning process.
6. A website on Situational Learning to showcase the approach and exemplars developed at the University of Adelaide

Strategies

Implementation has taken a change management approach aimed at informing key players and involving staff interested in innovative approaches to increase the number of champions and exemplars to promote the project goals.

Support for the Initiative had already been received from each of the Faculties during 2006 and each of the Associate Deans of Learning and Teaching was requested to promote it at learning and teaching meetings as well as assist in identifying potential projects.

In 2007, with the appointment of a Project Manager, further strategies were employed to promote the Situational Learning Initiative which was launched early in the first semester. Invitations were extended to senior management, Heads of Schools, Faculty Deans, Deans of Learning and Teaching, as well as interested staff. A series of workshops on scenario-based learning (SBL) was also conducted in the first semester, followed by ongoing support for individual projects. A further strategy was to conduct “50 Minutes” lunchtime sessions on scenario-based learning and online role-plays.

The Situational Learning website was developed at http://www.adelaide.edu.au/situationallearning by March and a community of practice website, SCoPE (Situational Community of Practice for Educators) has also been developed in MOODLE and officially launched. The SCoPE launch attracted interest and representation from the University of South Australia, Flinders University and TAFESA.

A partnership has been established with the national EnRoLE project which is funded by a Carrick grant and operates out of the University of Wollongong. (http://cedir.uow.edu.au/enrole/what.html)
This project is also building a community of practice and aims to “double the number of role-play designers by scaffolding beginners and establishing national and international role-play partnerships."
The University of Adelaide has been asked to take the lead role for a South Australian cluster, linking SCoPE with the EnRoLE project and promoting its activities.

A scenario-based approach has also been applied to the University of Adelaide's Copyright Induction for Staff online course, giving the methodology excellent exposure and beginning the process of infusing it into common practice.

Progress to date

From January to the beginning of August 22 staff had been involved in workshops, lunchtime and individual sessions and three scenario-based activities have been completed. More needs to be done to engage with staff as attendances have been lower than expected. Options include the Project Manager attending staff meetings and conducting "Have a Go" sessions with pre-defined content that participants can quickly build into an online object to experience the process and skills. This may motivate and enable them to create their own learning objects.

Another key issue is that staff appear to become daunted by the challenge. The interest is there but the academics just do not have the time and mental space to redesign the pedagogy and materials in their courses and gain the technical skills to do the build whilst maintaining their workload. It's like opening a Pandora's Box. Supports are needed so that change can be achieved in manageable steps and that the skill sets required come from a team rather than just one person. We intend to approach the Faculties about sharing responsibility for the project goals by offering their staff financial grants for proposals to develop an online role-play or scenario. Funding would provide an incentive and allow staff to organise release from teaching duties or contract learning developers to build the online activities.

Enhancements have been made to the Mekong e-Sim to improve the pedagogy and support learners and teachers from other disciplines. This year, nine students from the Centre for Asian Studies participated as an alternative to the class-based activities and written assessments. They did this for various reasons: they had timetabling clashes; they were doing complementary programs of study; or they wanted 'to experience exciting adventures'. Despite a number of technical and logistical problems, verbal comments from staff and students and the quality of assessments indicate that this pilot for Asian Studies was successful and lessons have been learnt to improve processes for 2008.

According to the Centre for Asian Studies lecturer, the new arrivals from China and the media student would normally have been silent in class but they had felt involved in the e-Sim activity as the online environment gave them the opportunity to have a voice. Participation had been good and was strengthened by their coursework on the Chinese communist perspective of the world. In their role as the China Bank, the Asian Studies students had to use this to inform their response to a Public Inquiry into a proposed dam on the Mekong - the focal task of the Mekong E-Sim. As such, the role-play reinforced the objectives of the Asian Studies course.

The lecturer reported that her own involvement in the eSim "opened a new door" in online teaching and learning, particularly in relation to its use in language teaching in the normal classroom. Cooperation with the lecturer from Civil and Environmental Engineering was a positive, refreshing experience and a chance to be mentored in running an eSim whilst obtaining support from an experienced colleague, the Situational Learning Project and the CLPD. Although she was given one hour release for this initiative, the time required far exceeded this.

Further progress will be reported at the ASCILITE conference in Singapore, including feedback on the pilot of the Copyright Induction for Staff module which has been designed using a series of scenarios.

Future directions

If we are to continue to prepare our learners for the 21st Century we also need to give increased attention to Digital Games-Based Learning (DGBL). According to Prensky (2005) engagement is key factor in meeting the needs of this group and DGBL is one way of achieving this. The short attention spans attributed to Net-Geners and G-Geners is only for "the old ways of learning"(p.64). Van Eck (2006b) correlates gamers with skills required of 21st Century learners "Gamers have amassed thousands of hours of rapidly analysing new situations, interacting with characters they don't really know, and solving problems quickly and independently" (p. 20). Van Eck (2006a) provides a good précis of the effectiveness of DGBL, guidelines for implementation, faculty integration, and institutional support requirements. He proposes integrating commercial off-the-shelf digital game-based learning (COTS DGBL) into the classroom.

This does not mean turning our backs on online role-plays and scenarios: many of the well-established principles, models and strategies that have been applied within the situational learning initiative need to be maintained. This presents a series of challenges with regard to implementation, integration and institutional support. Commitment from senior management is vital to embed the situational approaches and pursue DGBL. Targeted grants, secondments and special projects would confirm the organisation's commitment to change and provide staff with the mental space and resources to make a difference to teaching and learning practices. We will need to employ game designers to team with our learning designers, curriculum developers and Faculties. Pursuing funding to continue the situational learning initiative into 2008 will be the first step. In the meantime we will continue to fulfil the goals for 2007 and seek ongoing organisational support.

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