Visioning technology based simulated learning environments in the social work curriculum

Simulated Learning Environments Project Report

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Executive Summary

This report, prepared by QUT Social Work and Human Services, in collaboration with key sector stakeholders, identifies the current and potentially expanded uses of Simulated Learning Environments (SLE) as part of the Health Workforce Australia (HWA) National Project. An expert Reference Group guided the project, facilitated the data collection, and provided feedback and support on the findings and broad recommendations.

Social work is an allied health profession that addresses complex psycho-social issues affecting individuals, groups and communities across a variety of areas including: primary and community health, mental health, Indigenous health, disability, child safety, and family support. Social workers need the cross-cultural and professional skills and knowledge to work within an ethical framework and multidisciplinary environments addressing problems that affect the effective functioning of society works at the social, legal, economic and political levels.

Social work curricula address these needs, and simulated learning environments were examined through a literature and technological review, and consultative research with social work educators and employers. Primary data collection comprised of online surveys, phone interviews, and focus groups. Experts in the creative industries provided high-level advice about the utility of new and emerging ICTs and interactive media technologies including Learning Management Systems (LMS), collaborative technologies, and 3D virtual environments, such as content creation solutions, interactive virtual worlds and gaming media.

Despite an extensive literature review, relatively few relevant sources were found. Some current uses of non-technology and technology based SLEs were identified, covering field education placements, distance education and the teaching of clinical skills. Student learning outcomes benefit from current approaches, but limitations included the teacher time and training required to develop and maintain SLE programs, variable student access, ethical issues and student performance anxiety.

Key Findings

- Non technology based SLEs are currently used extensively and effectively across the social work curriculum, predominately in skills based subjects/units, albeit proving stressful for some students, presenting access issues, and being perceived as time consuming and resource draining for staff.
- Technology based SLEs are used only sporadically, with LMSs and collaborative technology used more widely.
- There was a clear consensus about the potential benefits of technology based SLEs and recognition that their development could lead to significant advancement in social work education, for internal and external students, and for field education placements, potentially resulting in better prepared and trained social workers, and improved practice standards.
• There was widespread support for the expansion of technology based SLEs across the social work curriculum, including for skills training, field education placements, and inter-disciplinary learning.
• There was a consensus that the expansion of technology based SLEs within the social work curricula must be done with clear learning objectives and sufficient scaffolding for students to obtain optimum learning outcomes.
• Appropriate ICT technologies identified were: LMS; collaborative technologies; content creation solutions; 3D virtual environments; and gaming solutions. These can be developed to engage student learning and achieve knowledge, theory and skills development; contextualised learning; cross-cultural practice; critical analytical thinking; and ethical practice.
• Concerns and limitations were identified including variable understandings of the new and emerging technologies, impacts on educator workloads, current ICT skill levels of staff and students, and access issues for disadvantaged, disabled and distanced students.
• Ethical issues such as the impact on students with mental health issues need to be considered and appropriate supports put into place for those students with disabilities.

**Key Recommendations**

Key recommendations made include:

• The expansion of non-technology based SLEs in the social work curricula not be resourced by the National Project due to their limitations and high relative cost.
• Significant and broad-scale development of technology based SLEs across the social work curricula be undertaken and evaluated.
• Interactive 3D, gaming media and transmedia approaches be included in the development of SLEs.
• Specific areas of the curriculum be prioritised including skills development, interdisciplinary learning, and support for field education placements.
• There should be further exploration of the uses of these technologies and resources for other health disciplines.
• A national approach be taken to the development of technology based SLEs, including involvement of key stakeholders and experts.
• Consideration be given to making such teaching and learning resources widely accessible to social work educators and programs.
# Table of Contents

1. Background .......................................................................................................................... 1  
   1.1 Report Structure ............................................................................................................. 2  

2. Project Approach .................................................................................................................. 3  
   2.1 Literature review ............................................................................................................ 3  
   2.2 Review of Technologies ................................................................................................. 3  
   2.3 Consultation Strategy .................................................................................................... 4  
   2.4 Mapping of SLEs .......................................................................................................... 5  
   2.5 Primary Data Collection ............................................................................................... 5  

3. Literature Review: Use of SLEs in Social Work Education .................................................. 7  
   3.1 Introduction ..................................................................................................................... 7  
   3.2 Current uses of SLEs ...................................................................................................... 8  
   3.3 Evaluation – the research to gather views ..................................................................... 10  
   3.4 Benefits and Limitations – a summary of findings and points from the literature ........ 13  
   3.5 Innovation - possible futures and developing uses ..................................................... 14  
   3.6 Summary of Findings from the Literature ................................................................... 17  

4. Review of Technologies - Online or Web based Collaboration Solutions .......................... 18  
   4.1 Introduction ..................................................................................................................... 18  
   4.2 Online Collaboration Solutions .................................................................................... 19  
   4.3 Products and Comparisons .......................................................................................... 22  
   4.4 Recommendation: Elluminate Live! ........................................................................... 25  
   4.5 Other Technologies ...................................................................................................... 26  
   4.6 Conclusion ..................................................................................................................... 27  

5. Primary Data Collection ..................................................................................................... 29  
   5.1 Methods ......................................................................................................................... 29  
   5.2 Current Use of Non-Technology Based SLEs ............................................................... 31  
   5.3 Current Use of Technology Based SLEs ..................................................................... 34  
   5.4 Use of Technology Based SLEs in Field Education Placement .................................... 43  
   5.5 The potential of technology based SLEs and cross-cultural education ....................... 45  
   5.6 Focus Groups ................................................................................................................ 46  
   5.7 Concluding Remarks: Primary Data Collection ............................................................ 47  
   5.8 Potential uses of technology based SLEs in the Social Work Curriculum – visions for the future ...................................................................................................................... 47  

6. Discussion ........................................................................................................................... 50
6.1 Where might the Expansion of Technology Based SLEs Fit into the Social Work Curriculum?.. 50
6.2 Learning Management Systems (LMS)....................................................................................51
6.3 Collaborative Technologies ........................................................................................................51
6.4 3D Virtual Environments (including content creation solutions and gaming technologies) .....52
6.5 Readiness for Technology Based SLEs..................................................................................55
6.6 Key Findings ..........................................................................................................................56
6.7 Timeframes for Implementation.........................................................................................58
6.8 Recommendations ..............................................................................................................59
7. References..................................................................................................................................61
  7.1 Literature Review and report.................................................................................................61
  7.2 Review of Technologies.........................................................................................................66
8. Appendices...............................................................................................................................67
  8.1 Key stakeholders supporting letters ....................................................................................67
  8.2 NHWT Data by skill area (BSW)........................................................................................72
  8.3 NHWT Data by skill area (MSW).........................................................................................77
  8.4 List of literature review search terms ..................................................................................80
  8.5 Survey questions for Universities.......................................................................................84
  8.6 Survey for Key Employers ..................................................................................................86
  8.7 Interview questions – universities .....................................................................................88
  8.8 Interview questions – key employers ..................................................................................91
  8.9 Focus group summary .........................................................................................................94
1. Background

This project has been conducted as part of the Simulated Learning Environments National Project, established by Health Workforce Australia (HWA). The aim which is to contribute to increased capacity of the health system to provide clinical training via the use of simulated learning modalities. This is intended to address the problem of insufficient clinical placement positions as well as the need to train healthcare professionals more efficiently and effectively through the adoption of new and innovative training techniques. Twelve professions are being covered initially, including social work, medicine, nursing, midwifery, paramedicine, oral health (inc. dentistry), occupational therapy, physiotherapy, speech pathology, pharmacy, radiation science and clinical psychology.

HWA’s main objectives in the National Project, as stated on its website (http://www.hwa.gov.au/programs/clinical-training/simulated-learning-environments-sles) are:

- Increased use of simulated learning modalities in clinical training for entry level health professionals.
- Optimized clinical training experiences through the use of learning programs using simulation techniques to develop clinical skills and competencies required by health professionals.
- Increased equity of access for students to experience learning using simulation techniques in regional, rural and remote settings.
- Improved quality and consistency of clinical training.

HWA intends to reach national agreement with the Deans of all the professions on standardizing curriculum delivered through learning using simulation techniques, using best practice education principles.

QUT Social Work and Human Services, in collaboration with the Australian Association of Social Workers (AASW, the accrediting body), the Australian Council of Heads of Schools of Social Work (HOS, the education providers); and the Allied Health Professions Association (AHPA, the inter-professional peak body), was successful in winning the tender to address the use of simulated learning environments (SLEs) in social work training and placement. This report details aspects of the Social Work curriculum that can be delivered via simulated learning programs and is the primary deliverable of the project.

Social work is a four year bachelor degree or a two and two equivalent but can also be completed as a Masters – qualifying, following completion of relevant degree courses. In Australia there are 26 accredited schools of social work (Ballarat University will come online next year bringing the total to 27) with an annual national intake of approximately 1600 graduates in the Bachelor of Social work and an intake.
in the new (since 2008) Master of Social Work—qualifying of approximately 850 students this year. There are approximately 1250 BSW graduates and 400 MSW graduates per annum. Student cohorts are mixed, with school leavers and mature age students being of approximately similar proportion, and overall the cohort is an older one than most other disciplines (Healy and Lonie, 2010).

Social work is an allied health profession that addresses complex psycho-social issues affecting individuals, groups and communities across a variety of areas including: primary and community health, mental health, Indigenous health, disability, child safety, and family support. Social workers need the cross-cultural and professional skills and knowledge to work within an ethical framework and multidisciplinary environments addressing problems that affect the effective functioning of society works at the social, legal, economic and political levels.

One of the primary focuses of the project was on the clinical placements for social work students. During their four year BSW or two year MSW course students are required to do placements totalling 980 hours, typically across two field education placements in which they are supervised by field educators who are professional social workers. There have been concerns about placements regarding the increasing numbers of social work students, in addition to the economic burden it places on them.

The social work curriculum is structured around the AASW Practice Standards and must meet the Education and Accreditation Standards and also reflect the complex nature of social work practice. The Practice Standards include:

- Direct practice work with individuals, groups and communities
- Service management
- Organisational development and system change
- Policy development, implementation and change
- Research and knowledge generation
- Education and professional development

What is taught within the social work curriculum must also meet the AASW Code of Ethics

1.1 Report Structure

Section 2 sets out the overall approach taken to this project, covering both the main activities and the ongoing consultation and feedback processes. An important issue canvassed is the definition of SLEs, in particular, unpacking the implicit assumption that SLEs are made possible by the use of technology, which is not necessarily the case. Section 3 is a review of the literature on the use of SLEs in social work training and placement. Section 4 is a review of the technologies available for technology based SLEs. The advantages and disadvantages of technology options
are discussed and recommendations are made. Section 5 reports the results of surveys of teaching staff and key employers, and incorporates a discussion of the implications of the results. Section 6 presents a synthesis of the findings, implications and recommendations of the preceding sections, and concludes with both general and specific recommendations for the implementation of technology based SLEs in social work curricula to support development of professional knowledge and skills including supporting field education placements.

2. Project Approach

2.1 Literature review

An extensive literature review was undertaken to explore SLEs and emerging teaching and learning approaches, and technologies with a specific focus on social work education and inter-professional applications.

The literature on this topic is relatively modest in scale, and hence the search strategy and numbers of references obtained are described in more detail. The emerging themes from the literature review facilitated the development process for the surveys and interview questions.

2.2 Review of Technologies

The technology review identified and explored information and communication technology (ICT) environments conducive to virtual learning including:

- Learning Management Systems (LMSs): e.g. Blackboard, Moodle
- Collaborative technologies: e.g. Web Conferencing, Elluminate Live, Skype, Google Chat, other open source
- 3D virtual environments:
  - Content creation solutions: e.g. Machinima, Adobe Captivate
  - Interactive virtual worlds: e.g. Second Life, Open Sims
  - Interactive gaming solutions: designed by software specialists in collaboration with social work educators

The review aimed to provide examples of how the ICT environments identified above are being used in teaching and learning, and to identify ICT environments which might support simulated learning in social work, using this information to make recommendations about preferred virtual environment(s), including the advantages and disadvantages of respective environments.
Finally, the review aimed to provide details of technical, financial and human resources implications for the preferred option(s):

- Cost of purchase, license, etc
- Technical infrastructure etc issues
- Staff / student training resource implications
- Implementation / sustainability challenges

2.3 Consultation Strategy

A consultation strategy was developed early in the project to meet several needs: to form a Reference Group to help guide the project to facilitate the survey process by engaging Heads of School (HOS); and (given the tight timeframes) to establish a mechanism for feeding back preliminary findings for comments. Some of these steps are described in more detail in Section 5.

Reference Group

Membership of the Reference Group comprised experts in social work education and adult learning pedagogies, particularly blended learning approaches. The group oversaw the implementation of the project plan and provided expert guidance as the project unfolded. The group met via telephone conferencing every two weeks during the term of the project. They provided input into the mapping and research activities, and the critical thinking necessary to ensure that SLEs are applied appropriately to enhance existing approaches to teaching and learning relevant for professional social work education.

The Reference Group members were:

- Professor Margaret Alston
  Chair: Australian Council of Heads of School of Social Work (ACHSSW)/Head of School, Department of Social Work, Monash University
- Vittorio Cintio
  President: Allied Health Professionals Australia (AHPA)
- Marie-Claire Cheron-Sauer
  National Vice President: Australian Association of Social Workers (AASW)
- A/Professor Wendy Bowles
  Social Work Academic – Charles Sturt University
- A/Professor Sue Green
  Social Work Program, University of NSW – Indigenous Academic
- A/Professor Jenny Martin
  Social Work Academic - RMIT
- Professor Des Butler
  Technology based SLE expert - Faculty of Law, QUT
- Professor Jill Wilson
  President: Australian Association of Social Worker and Welfare Educators (AASWWE), Uniting Care Chair, Social Work and Human Services, U of Q
Consultation with experts in the field

During the course of the research project staff consulted with technology experts. Initially a technology expert was contracted to explore new and emerging technologies including collaborative technologies and 3D interactive environments. Meetings were also held with experts from Creative Industries at QUT and an international expert on the potential use of gaming technology and social media in the social work curricula.

Support from key stakeholders

Support for the report findings and the expansion of technology based SLEs was given by key social work organisations including:

- Australian Association of Social Workers
- Australian Council of Heads of Schools of Social Work
- Allied Health Professionals Australia
  (Supporting letters see Appendix 1)

2.4 Mapping of SLEs

At the outset of the project, the team was supplied with data collected by the National Health Work Taskforce (NHWT) on the use of SLEs at each AASW accredited school across Australia. This information was interpreted according to the AASW Accreditation and Education standards, in order to map what SLEs are currently being delivered, in particular their use in clinical training of students and their potential expanded use. There were some constraints on the usefulness of the data which related to definitions. The NHWT data was therefore reconfigured into two categories: ‘skills’ and ‘SLEs’ (Appendices 2 and 3); and divided into two award categories: Bachelor of Social Work and Master of Social Work. This created easily accessible data that was more meaningful. Rather than reporting the NHWT data separately, it is incorporated into Section 5 (survey data) because several of the survey questions covered similar ground to the NHWT data.

2.5 Primary Data Collection

Ethical Clearance
Ethical clearance was obtained from the Queensland University of Technology University Human Research Ethics Committee.

Two surveys were conducted targeting different Social Work domains:

A) An online survey was used to enhance the NHWT mapping results, and to gain a more detailed understanding of the current use of both non-technology based SLEs and technology based SLEs within Social Work Schools. Links to this survey were sent to HOS, social work educators and field placement educators across the country.

B) A second online survey was developed for key employers, to gain an understanding of the use of SLEs during field education placements of social work students. Once again this involved sending the employers links to the survey.

The methodology and results of the surveys are described in more detail in Section 5. In addition to the surveys, follow-up in-depth interviews were conducted by phone with social work educators, field education placement coordinators, HOSs and key employers. Finally, two focus groups were convened using teleconferencing. These were not intended for data collection as such, but as a forum for feeding back the draft results of the surveys (and other sources of information) for comment.
3. Literature Review: Use of SLEs in Social Work Education

3.1 Introduction

Nowadays students need to engage with learning environments that support well-grounded conceptions and practices designed to help them adapt and excel in ever changing professional worlds (Challis, Holt, & Rice, 2005). This project scoped the use of simulated learning environments (SLEs) within Social Work Curricula and established criteria for identifying where SLEs can expand workforce capacity by reviewing the literature and consulting with stakeholders.

This literature review will outline the search procedure used, detail the current uses of SLEs in social work education, report on a number of studies that gathered the perspectives of staff and students using SLEs, and provide a summary of the benefits and limitations of SLEs from the literature. Innovations and potential future uses will also be outlined and, finally, future applications and research directions will be discussed.

The search procedure

An initial search of Google Scholar was performed to gain an overview of the literature on the topic of simulated learning environments within social work education in Australia. However this yielded very little, apart from a few articles from Canada. Searches of various social sciences databases, e.g. Proquest, EBSCOhost, Informaworld using combinations of keywords also yielded little useful data, especially for Australian results, although the articles found did point to useful sources like specific journals and potential search terms.

In general, it was found to be more productive to conduct searches within relevant journals. This was due to the somewhat problematic nature of the search terms, in that, the term ‘simulated learning environments’ is used as an overarching expression, rather than the name of a particular type of simulation. Additionally, the terminology for SLEs varies between countries, and some terms were used interchangeably, particularly for web-based environments. A full list of search keywords used and a comprehensive list of databases and journals searched are outlined in Appendix 4. Each search keyword was combined with ‘social work’ or ‘social work education’ or used independently depending on the journal/database searched. The search was restricted to the years 2005-2010 for the most part, with some earlier citations being followed up. SLEs are also used in somewhat disparate ways across social work education, in blended learning, within courses, specific units, and for distance education. Overall, the search term ‘simulation’ was one of most useful and brought up the most articles covering role-plays, problem-based learning, simulated clients, simulated environments and virtual learning worlds.
In total, almost 100 articles on the topic of SLEs and social work education were identified and entered into Endnote along with keywords and abstracts. Of these, 49 are American, 22 are Australian, and the rest are from a variety of countries. However, due to space constraints, and in some instances saturation of content, only 56 articles were included in the review.

Embedded in the literature, usually as background to the topic, are statements about why SLEs have not been as well utilised or accepted in social work education when compared to other areas of higher education. For example, according to Young and Delves (2009), technology is not easily able to reproduce the people-orientated nature of field work, and there is still a continuing resistance by some social work educators to the notion that clinical skills can be taught effectively and practically using web-based learning environments (Coe Regan and Youn, 2008; Moore, 2005). Further, there often exists a lack of technological expertise by lecturers (Lowenthal & Thomas, 2010; Young & Delves, 2009).

There is a lack of suitable ‘Learning Objects’ appropriate to digital teaching (Ballantyne, 2007; Knowles, 2007; Young and Delves, 2009). There is also a lack of time and resources to develop such materials (Challis, Holt and Rice, 2005). Research on academics’ perceptions has identified a reluctance on the part of some social work educators to use technology simply because of the “technology imperative” (Knowles, 2007; Challis et al., 2005).

The themes identified from the literature and relevant to the current study are as follows:

- The current uses of SLEs
- Evaluations of SLEs based on research that gathered the perspectives of staff and students using SLEs
- Benefits and limitations – a summary of findings and points from the literature
- Potential future uses
- Recommendations

An overview of findings from the literature on the benefits and limitations of SLEs is also presented.

3.2 Current uses of SLEs

Field Education

Few articles described the use of SLEs to support students and their learning on their field education placements, for example:

- using discussion boards in Australia (Maidment, 2006);
• video-conferencing to conduct virtual site visits in America (Birkenmaier et al., 2005);  
• for students on international placements (Panos, 2008);  
• critical reflection on a ‘challenging incident’ while on placement using a synchronous online meeting or by using a virtual forum, in Norway (Oterman, 2009); and  
• the use of ‘real world’ problem based scenarios to prepare students for their practicums in Hong Kong (Lam, 2004).

However, the use of online technology is one way of providing additional assistance and input from supervisors to tackle some of the problems found by students while on their placement (Maidment, 2006).

Distance education

A substantial amount of literature was devoted to the use of SLEs in distance education, including:

• using a wiki to create assessable material as a collaborative learning experience between on-campus and distance education BSW students in Australia (Jones 2007; 2010);  
• collaboration between universities to offer a joint online MSW course (Crowell and McCarragher, 2007; Faria and Perry-Burney, 2002);  
• the use of case-based scenarios in ‘telephonic’ seminars for first year doctoral students (Bettmann, Thompson, Padykula and Berzoff, 2009);  
• the use of ICTs in a competency-based child welfare practice course for rural students in Northern British Columbia (Bellefeulle, Martin and Buck, 2005); and  
• the use of virtual worlds, such as Second Life, for medical/health distance education in America (Vernon, Lewis, & Lynch, 2009).

However, while the literature described the various ways SLEs were employed for social work distance education, the main focus was on the benefits and limitations of distance education, particularly in comparison to face-to-face delivery. These evaluations are discussed in the next section.

Teaching clinical skills

The literature also contained articles on the various types of SLEs employed to teach clinical skills, such as:

• an online diversity forum to teach cultural competency (Lee, Brown and Bertera, 2010);  
• a 3-D virtual world and web conferencing to teach counselling skills (Rockinson-Szapkiw & Walker, 2009);
• simulated clients to teach family therapy (Mooradian, 2007) and client–worker interactions (Gelman & Tosone, 2006);
• a web-based environment to teach interviewing skills (Ouellette & Chang, 2004); and
• case studies from 9/11 utilised in a crisis intervention course (Gelman & Mirabito, 2005).

The literature also detailed examples where SLEs were used to enhance students’ understanding about potential client experiences through:

• the use of case studies for racism (Lee, Blythe, & Goforth, 2009);
• a ‘poverty simulation’ for poverty (Vandsburger, Duncan-Daston, Akerson, & Dillon, 2010);
• a simulation to illustrate community social justice, discrimination and oppression (Fineran, Bolen, Urban-Keary, & Zimmerman, 2002); and
• group work role play to help students understand the potential needs of Alzheimer patients Kane (2003).

3.3 Evaluation – the research to gather views

Attempting to strike the balance between harnessing the potential offered by online education while ensuring participating students are not disadvantaged has emerged as a key issue for social work educators (Maidment, 2005, p. 186). The need to manage this tension makes it essential for educators to be knowledgeable about the benefits and limitations of online delivery of education (Maidment, 2005). Few articles focus on the perceptions of academic staff (Challis et al., 2005; Hayhoe & Dollard, 2000; Knowles, 2007; Moore, 2005; Murphy & Ciszewska-Carr, 2007), the majority gathering the views of students who were using the various SLEs (e.g. Ballantyne & Knowles, 2007; Chan, Tsui, Chan, & Hong, 2008; Crowell & McCarragher, 2007; Ellis, Goodyear, Prosser, & O'Hara, 2006; Frey & Faul, 2005; Goodyear & Ellis, 2007; Jones, 2010; Khajak, Ouellette, Barkdull, & Yaffe, 2008; Lee et al., 2010; Roberts-DeGennaro & Clapp, 2005; Trinidad, Aldridge, & Fraser, 2005; Young & Delves, 2009). A summary of these is detailed below.

Staff and student perceptions of SLEs

Staff perceptions- pedagogy

Challis, Holt and Rice (2005) researched the perceptions of ten staff at Deakin University on the role of technology in experiential learning. The participants came from various disciplines, e.g., IT, Education, Nursing, Journalism and Social Work. Their research aimed to (among other things) “ascertain staff perceptions of the nature of experiential learning; and ascertain various ways in which flexible, online experientially based approaches are being used to help develop professional
expertise” (p. 23). Their research indicated that staff had significantly different perceptions of experiential learning even within the same discipline area and campus. Moreover, the lecturers interviewed all saw the benefits of using online programs as providing students with an opportunity to hone professional skills in a safe environment and engage with ‘real world’ issues, but consistently advocated that they should be used solely as a support to learning; the actual workplace experience being seen as irreplaceable.

In a national American study, Moore (2005) explored the perceptions of academics with experience in web-based instruction in social work curricula on the ability of web-based instruction to meet course objectives compared to face-to-face instruction. Moore’s findings suggested that academics viewed face-to-face instruction as more effective than Web-based instruction in all curriculum areas and particularly for teaching practice and clinical skills. Based on his findings, Moore concluded that units which are content based, such as policy and research, are more appropriate for web-based instruction rather than those that are skill based.

**Pedagogy**

Knowles (2007) conducted a study of 30 social work educators and administrators on the pedagogical and policy challenges of implementing e-learning in social work education in Canada. One of the major themes that emerged from the study was that integrating and implementing e-learning in social work education required a pedagogical transformation. “As a result of the influence of information and communications technologies (ICTs), implementing e-learning was requiring the educators in this study to rethink their goals, approaches to teaching and learning, and academic and administrative policies” (p. 34). Participants also identified tensions around the need to clarify the motivation for incorporating e-learning, to respond to shifts and disruption to the teaching-learning process, and the need to carefully evaluate the fit of e-learning with the goals and traditions of social work education.

Knowles also reported that the participants often felt that e-learning was adopted in their programs without enough planning and discussion. They mentioned a variety of concerns, including general comments on the effects of competition and commercialisation in higher education, through to more specific issues such as a perceived imperative to introduce technology for technology’s sake, and the potential impact of e-learning on the quality of professional education.

Another Canadian study conducted by Murphy and Ciszewska-Carr (2007) took a case study approach, interviewing eight ‘instructors’ who used Elluminate Live in their web based, asynchronous courses in Education, Social Work, and Nursing during the Winter of 2004-05. Six of the instructors were from Education; one was from social work, and one from Nursing. The aim of the study was to explore instructor’s experiences of using web-based synchronous communication within their
asynchronous distance courses. Their experiences revealed the need to juggle between audio and text based communication with students, simultaneously dividing attention between the technical, pedagogical and social aspects of learning. The instructors seemed more concerned with the pedagogical aspects, while the students were using text messaging to focus on the technical and social aspects. Murphy and Ciszewska-Carr found that instructors were challenged by the need to balance troubleshooting and teaching, and public versus private conversations.

**Students’ views**

The University of Western Australia trialled the use of blogs in an upper level social work community practice unit, finding that the student blog entries and comments clearly demonstrated that students had developed as a community of learners, despite the fact that students held uniformly negative beliefs about the ‘difficulty’ of the technology (Young & Delves, 2009). The authors concluded that online communication tools can have a deeper relevance to social work education beyond simply gaining generic skills.

**Students’ views - Distance education**

The effectiveness of distance education is still debated (Bettmann et al., 2009), and there is considerable emphasis in the literature on gathering the view of students using distance education, especially in comparison to ‘face-to-face’ education (e.g. Hisle-Gorman & Zuravin, 2006; Oliaro & Trotter, 2010; Petracchi & Patchner, 2000; Woehle & Quinn, 2009). The experiences of students learning online in specific units within Bachelor and Masters of Social Work (Jones, 2010; Roberts-DeGennaro & Clapp, 2005) or whole courses (Crowell & McCarragher, 2007; Faria & Perry-Burney, 2002; Khajak et al., 2008) has also been investigated.

Research on the comparative quality of Monash University’s on and off-campus Bachelor of Social Work program (2002-2003) examined the differences between the demographics of on and off-campus student’s and graduating students’ views about the courses and their academic attainment (Oliaro and Trotter, 2010, p. 330-331). A total of 128 graduates (75 off-campus; 53 on-campus) were interviewed over the phone within four months of completing the course. After taking other factors into account (differences in demographics, age for example) Oliaro and Trotter found that off-campus students were more satisfied with access to staff; on-campus students were more satisfied with their mode of learning; and on-campus students performed slightly better academically (although this was possibly due to the off-campus students being more likely to study part-time). They concluded that although some saw off-campus study as a less satisfactory mode of learning, the off-campus graduates were generally satisfied with the course, and so there is a case for continuing to provide both modes of learning for the study of social work (p. 343).

Coe-Regan and Youn (2008) critiqued the past research on using Web-based learning environments to teach clinical skills and argued that “most of the studies
reviewed indicated no significant differences in grade and/or test outcomes between groups. Some studies indicate that students tended to rate the Web-based and/or distance education learning environment lower when compared with other formats” (Coe Regan & Youn, 2008, p. 107).

3.4 Benefits and Limitations – a summary of findings and points from the literature

Benefits:

Students benefit from the flexibility and responsiveness of online delivery (Madoc-Jones & Parrott, 2005) especially because they can study at times and places convenient to them (Madoc-Jones & Parrott, 2005). Moreover, distance (or off-campus) education is also valuable for a particular group of students because it is often the most convenient (or only) option (Oliaro & Trotter, 2010).

In terms of learning, students benefit from opportunities to engage in a collaborative learning experience, such as developing a wiki (Jones, 2007) and participating in a community of learners (Madoc-Jones & Parrott, 2005; Young & Delves, 2009). Blogs and forums are also useful for critical reflection; students can revisit previous exchanges for reflection (Oterman, 2009). Tools such as virtual simulations can enhance empathy and understanding of sensitive client issues and teach diversity (Lee et al., 2010). Multimedia case studies have been found to enhance learning compared to text based case studies (Ballantyne and Knowles, 2007). Chat rooms and multimedia programs can be effective in ways that are not available in face-to-face classroom environments (Coe Regan & Youn, 2008). Further, learning to use SLEs enhances student computer skills and familiarity with new technology (Jones, 2007) which helps with preparation for the increasing use of technology at the coal face (Young & Delves, 2009).

There are also benefits to using SLEs for academics. For example, many of the methods used in traditional classroom environments can also be successfully employed in an online learning environment (Lowenthal & Thomas, 2010). Virtual worlds also offer experiential learning opportunities and potential ways to hold classes, conduct role plays, exercises, and investigating practice competency issues (Vernon et al., 2009).

Limitations:

Web based learning has implications for academics. Knowles (2007) found in his Canadian study that academics felt that in many instances, e-learning had been adopted in their programs without adequate discussion or planning. Academics have to divide their teaching time between troubleshooting and teaching (Murphy and
Ciszwska-Carr, 2007). In addition, a lot of extra time is needed to develop SLEs (Challis et al., 2005; Samarawickrema, 2007) particularly for them to be less ‘pedestrian’ (Madoc-Jones & Parrott, 2005).

For students, there are limitations tied to using technology. For example, students expect to be learning interpersonal and communication skills, not technology skills (Young and Delves, 2009). Further, students often lack confidence and are uncomfortable using technology, or struggle with new technology e.g. blogs (Young & Delves, 2009) or wikis (Jones, 2007). Programs like Second Life have been found to require a high level of technical mastery for effective use (Vernon et al., 2009).

Maidment (2006) raised the potential ethical issues around intellectual property rights and confidentiality for material posted online via discussion forums, and Waldman and Rafferty (2008) highlighted the issues around a lack of ‘cyber ethics’. There is also the risk of increasing feelings of isolation (Madoc-Jones & Parrott, 2005; Maidment, 2005).

Student broadband access and connectivity needs to be taken into consideration before introducing units with web-based components (Samarawickrema, 2007). Access to adequate resources to participate is also not always guaranteed for low-income, or disadvantaged students (Maidment, 2005) and rural students (Alston, 2007). Additionally, there are website and technology accessibility issues for students with certain disabilities (Curl and Bowers, 2009). Second Life, for example, requires good physical dexterity (Vernon et al., 2009).

Successful e-learning in social work requires more than simply placing lecture notes and tutorial materials online (Maidment, 2005). Many online courses are too heavily text-based; consisting of not much more than readings, PowerPoint presentations, and some online asynchronous discussions scattered throughout the semester (Lowenthal and Thomas, 2010).

The introduction of online delivery without sufficient training for students and lecturers along with the requirement to use online technologies without understanding the skills needed exacerbates academic and student feelings of powerlessness (Maidment, 2005).

### 3.5 Innovation - possible futures and developing uses

A section of the literature highlighted innovations and possible future uses for SLEs in social work education, including collaboration between universities, enhancing international connections, and interdisciplinary projects. Cwikel, Savaya, Munford and Desai (2010) conducted an exploratory study on innovations in schools of social work from 11 countries, based on a content analysis of semi-structured
questionnaires. They found a number of technological innovations, such as web-CT courses and web-based course materials, used to stimulate interactive and informative learning environments. However they noted that many innovations had not been documented or evaluated, nor did they include the benefits and limitations experienced in the institutional context. They suggested this may have been due to the extra time and resources required to do this, or because the educators involved do not especially prioritise research or publication.

**Pedagogical potential - clinical skills**

Web-based learning environments, along with other new modes of delivery, provide new opportunities for looking at different ways of teaching clinical skills (Coe Regan & Youn, 2008, p. 108). Oliver and Goerke (2007) suggest using the devices stored in Australian undergraduates’ ‘digital backpacks’ to enhance high quality learning. Laptops, mobile phones and music playing devices can be used for instant messaging, blogging, podcasting, and a whole range of Web 2.0 applications. They bring opportunities for enterprising university academics to use them and social software applications to challenge students to think beyond their use for purely social means, and use them “to be participative constructors of knowledge in engaging learning experiences” (Oliver & Georke, 2007, p. 183).

Vernon, Lewis and Lynch (2009) speculated that ‘standardised clients’ could be created in Second Life through artificial intelligence programs.

> A reliable AI standardized client could provide consistent experiences and measurable outcomes for evaluating student practice competencies. For example, ‘bots”—automatons that look like avatars and are crafted to respond to students through AI—could be programmed to interact with students in predictable ways. This would allow evaluation of student competencies in a way that holds client variation constant against a known standard (Vernon et al., 2009, p. 189).

There are possibilities for using virtual worlds and social networking in social work education (Waldman and Rafferty, 2008). Virtual worlds, such as Second Life have opened up still ‘untapped’ possibilities for simulation and role play as part of structured teaching activities. Further, flexible, familiar and informal student social contact tools such as wikis, blogs, YouTube and Facebook and discussion forums could be used to extend the nature and reach of this contact and to set up groups to network with peers in a national and international context (Waldman and Rafferty, 2008).

**Interdisciplinary projects**

In the UK, according to Cooner (2010), the increasing use of blended learning (particularly collaborative online learning) as a curriculum strategy can facilitate interdisciplinary teaching and learning opportunities. For example, using problem
based case studies to encourage interdisciplinary student groups to collaboratively work on solutions. Moreover, by using technologies such as blogs, wikis, social networking sites and the university’s own virtual learning environment, elements of learning can take place asynchronously outside the classroom. These can be virtual spaces where social work students and students from associated disciplines can meet, unrestricted by geographic issues and time differences to engage in interdisciplinary teaching and learning activities that are interactive and collaborative (Cooner, 2010).

The creation of a virtual community which was the result of collaboration within the Glasgow Caledonian University was recently redeveloped to meet the needs of students from a varied range of disciplines (West, 2008). “Clydetown is a fictitious town that is populated by a number of virtual families, each with their own social and health issues that bring them into contact with a range of services and service providers” (West, 2008, p. 665). Clydetown has a mixture of complex inner-city issues, such as poverty, inequality and social stratification which allowed students to work with online case studies from within their own discipline and also “construct their own understandings of the issues and to discuss and debate these with others” (West, 2008, p. 665). Cooner (2010) believes that Clydetown demonstrates how students can, by contextualising their learning around these complex social and psychological issues, have the potential to engage in interdisciplinary collaboration.

Enhancing international social work connections

Buchanan, Stephen and Gopal (2008) drew on their experiences as three academics from separate universities in the UK, USA and South Africa who used Blackboard to collaborate online to engage their students in a discussion on the issue of racism (past and present). They conclude that using both cross cultural and virtual learning environments had pedagogical merit, and is particularly well suited “to grapple with subject matters that have historically been fraught with ignorance, prejudice and pre-conceived ideas” (p. 671).

Similarly, Ford and Rotgans-Visser (2005) created, delivered and evaluated a pilot course in social work education in two countries (Holland and America) via Blackboard 6, and stated that “internationalizing social work education helps students move beyond their typically ethnocentric perspective, providing a means to enlarge the idea of what constitutes social welfare in theory and in practice” (p. 145). The reflections of the students, both written and oral, demonstrated that the students had formed common bonds and recognised cultural diversity as well as similar professional values. Students saw this type of course as a valuable learning experience and worth repeating (Ford & Rotgans-Visser, 2005).
3.6 Summary of Findings from the Literature

Literature on the use of SLEs in social work teaching is subject to limitations of breadth and depth. There are many technological and other innovations in social work education that are not reflected in the literature, or are embedded in background information. The available sources reveal the use of SLEs in social work education to support students doing their field education placements, for distance education, to teach clinical skills, and to enhance students’ understanding of potential client issues. These uses take various forms, and the literature tends to describe them rather than evaluate them. The limited number of evaluations of SLEs in social work usually focus on perceptions of students and staff about the use of SLEs as an innovative alternative to traditional pedagogy. They reveal a recognition of the potential benefits of SLEs in social work teaching, together with some concerns about implementation that reflect the usual tensions between innovation and accepted practice which will need to be addressed.

Not only do educators need to be willing to become digital learners, but a re-conceptualisation of the learning environment is also necessary in order to fully engage with the digital era. Program transformation is necessary to redesign higher education and to implement e-learning. A holistic understanding is needed for the implications of how Web 2.0 fits with support systems, institutional infrastructures, the implications for its adoption, policy issues, and the re-designing of existing teaching practices. This change process requires academic staff to develop improved connections between the use of ICT potentials and other areas of curriculum design, assessment, pedagogy, and the evaluation of its effects on teaching and learning.

This sort of transformation requires the needs of students to be taken into account by academics so they can be familiar with the ‘culture of technology-based learning’. Students need assistance with these new tools and approaches if they are to optimise the advantages of these new technologies.

It is perhaps worth noting here that ongoing professional development for practitioners was also mentioned as a potential future use of simulated learning environments. Practitioners will increasingly utilise ICTs for ongoing professional development. There should be a commitment to incorporating ICTs into entry level programs, encouraging IT literacy in anticipation of the importance of ICTs to continuing professional development and professional practice.
4. Review of Technologies - Online or Web based Collaboration Solutions

4.1 Introduction

In reviewing this section the project team took advice from an education technology expert, in addition to consulting with experts from Creative Industries at QUT. We acknowledge that while there are many strengths to using technology based SLEs there are some significant issues. One highlighted throughout the project was the problem of internet access (including bandwidth). It is anticipated that the role out of the National Broadband Network (NBN) will largely solve this access problem.

Online learning can include the use of one or more of the following technologies:

- **Website** – as a point of entry, information provision
- **Learning Management System** – learning & assessment resources, track progress & results. These are currently used in social work programs in varying degrees and include platforms such as Blackboard, Moodle and SAKAI
- **Online Collaboration (or Web Conferencing) Solution** – web based, location independent, multipoint, real time, synchronous, voice, video and data software application. Online collaborative tools are use within social work programs and include technologies such as Elluminate Live, Skype and Google Chat
- **3D environments** – we have broken this area down into three classifications to reflect the different delivery and application modes explored later in the report. Although there has been some early exploration of content creation solutions and interactive 3D worlds in social work programs, interactive gaming solutions is a hitherto unexplored option:
  1. **Content creation solutions** – software based applications that can be used to create content e.g. Adobe Captivate, Machinima
  2. **Online interactive 3D virtual worlds** - users generally take the form of avatars e.g. Second Life, Open Sims
  3. **Interactive gaming solutions**: designed by software specialists in collaboration with social work educators
This section focuses on Online Collaboration Solution options that are applicable for use in a virtual (online) classroom context. These solutions can also be used to provide distance learning capability extension to the traditional classroom.

4.2 Online Collaboration Solutions

Although online collaboration solutions have been around for over a decade, in recent years the uptake of this technology for teaching purposes has accelerated rapidly as institutions have become aware of the benefits. Some benefits of this technology include:

- the ability to communicate without the limitations of distance,
- the ability to offer distance classes or distance extensions to traditional classes, and
- the ability to record sessions for later playback or for other uses such as providing access to a recording of a previous class session within an LMS interface.

Required features

There are a number of basic features required in any Online Collaboration Solution:

- real-time voice and visual contact between all participants,
- a shared whiteboard with multiple pages,
- an integrated area for the projection of slides or other visuals,
- the capacity for text based interaction,
- a means for learners to indicate that they have questions or are confused, and
- tools for assessing current moods, opinions, and comprehension as well as for soliciting questions or feedback, and the ability to gauge virtual body language, or a sense of how engaged learners are in the activity at hand.

Additionally, Online Collaboration Solutions should have the following technical features and functionality:

- Multi platform (Windows, MAC, Linux) with a view to supporting technologies like IPAD, IPhone other smartphones PDAs etc
• Ability to operate effectively over TCP Port 80 but also have other port capabilities
• Ability to operate on minimal hardware specifications
• Ability to operate over low bandwidth
• Ability to integrate with popular LMS systems
• Ability to integrate with existing user authentication systems (eg. LDAP etc)
• Offer multipoint, real-time, synchronous, voice, video and data collaboration
• Offer whiteboard, application sharing, desktop sharing, web “follow-me
• Recordings need to be exportable into popular formats (eg. Wmv, avi etc)
• Easy to learn interface
• Ability to pre-plan (sequence) and upload presentations & other content
• Breakout rooms
• Easy web-based administration
• Hosted or Server based solution
• Effectively leverage existing investments
• Accessible support and documentation and
• Active development

**Resources required and other considerations for full functionality:**

• **Technical person** – someone who understands how the product operates and communicates at a technical level. Provides the resource to troubleshoot technical issues quickly.

• **Application Expert** (preferably a person with extensive traditional teaching experience). Someone who is very technically competent in the application use and can provide direction on how best to use the product to achieve the required learning outcomes.

• All persons who will be delivering via the online platform need to have appropriate **application training** (suggest using a “drivers licence” approach). The teachers using the application to deliver need to know the
application so the focus is on teaching and not trying to “drive” the software.

- **Audio** – Excellent audio is critical in any solution. If the audio is not of a reasonable quality the entire session experience will be negative. If the end node is a single user using a single computer the best audio is achieved using a good quality headset with microphone. If there are a group of people viewing a single display (smart board, data projector etc) the use of a USB speaker/microphone device is required. For example a [Phoenix Duet Executive](#) is a good choice for smaller groups. Additional units can be “ganged” together to provide larger group coverage. It is essential all users know how to adjust their computer’s audio settings prior to joining any session. Most vendors provide very good resources to assist with audio setup.

- **Network configuration** – Within an Enterprise network environment, planning the use of any Web based Collaboration solution should be done with input from the people who run the data network. This is because data networks can be configured in a way that can severely impact the performance of a web collaboration application. Data Networks can be configured and optimised to support the use of these products. The best setup is achieved when the end user’s computer can talk directly with the server running the collaboration software, on a dedicated tcp port that carries data as a priority on the network. If connections are forced through a proxy server this can severely impact performance. This is important when dealing with time sensitive voice traffic.

- **Client configuration** – Most solutions perform a client version check at the point when the client computer connects to the server to, for example, join a session. If the client computer is running an older version of the client software than what the server has available, the client computer is usually automatically updated to the server side version. If the client computer does not allow the required update to be performed this may prevent successful connection. In many enterprise networks, users are prevented (by design) from installing or updating software. In most cases the client computers/network can be configured to allow these updates to be performed.

- **Session planning** – best results achieved when users are asked to connect to the session at least 20 minutes prior to the commencement of the session. This allows time for any troubleshooting.

- **Using a hosted solution or hosting your own server** – The main benefit of using a hosted solution is the cost and worry of housing and maintaining the server is handled by the hosting provider. When using a hosted
solution the data from your internal network traverses the organisations internet link to reach the hosted server. Therefore data transmission costs may be incurred. Consideration also needs to be given towards required integration with other systems that may be housed in other locations, for example, integration with authentications systems and LMS systems. Some benefits of hosting your own server are the data traversing the internal network doesn’t usually “cost” anything and you have control over the entire solution. Consideration needs to be given to server hardware, equipment housing and ICT support costs.

4.3 Products and Comparisons

The increased demand for online collaboration has led to more products becoming available in the marketplace. The following link provides a list of some available products http://thinkofit.com/webconf/realtime.htm.

There are a number of products in the market place that include some or all of the features mentioned above. When choosing the most appropriate product for the application, consideration should be given to:

- Existing investments in technology – does your organisation already have a solution in place?
- Products that users are already experienced in using – do your users already have experience using a particular product?
- Product roadmaps – what is the vendor planning for the product?
- Vendor focus – is the vendor solely focused on the product or is it a sideline for them?
- Product support – is telephone support available in Australia? What support options are available?
- Solution costs – this may depend on a number of factors, including the type of solution ie. Server or hosted, the number of rooms & concurrent users required, required features, and potential future business opportunities.

Of the many products available the following Online Collaboration Solutions have become popular with various educational institutions in Australia:

- **Elluminate Live!** – is a web conferencing program developed by Elluminate Inc. Elluminate "rents" out virtual rooms or vSpaces where virtual schools and businesses can hold classes and meetings.

- **Adobe Connect** – software used to create information and general presentations, online training materials, web conferencing, learning modules, and user desktop sharing. http://www.adobe.com/products/acrobatconnectpro/


- **Wimba Collaboration Suite** - The Wimba classroom is an online meeting room in which you can interact with a tutor and fellow students by talking, listening, drawing and writing. You can also use video if you want. Sourced from http://www.usq.edu.au/learningcentre/workshops/wimba

Note – definitions sourced from Wikipedia & USQ website
The following chart provides feature comparison:

**Online Collaboration Solutions Comparison Table** *(Nercomp, 2007)*

<table>
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<tbody>
<tr>
<td>Online Session Features</td>
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<tr>
<td>Whiteboard with annotation features</td>
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<td>X</td>
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<td>Quizzes/Surveys</td>
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<td>with Adobe Connect Training</td>
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<td>X</td>
<td>X</td>
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<td>X</td>
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<td>Over-the-shoulder</td>
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<td>X</td>
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<td>Snapshot sharing</td>
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<tr>
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<td>Private text chat</td>
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<tr>
<td>Multiple simultaneous speakers (aka voice activation)</td>
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<td>Presenter tools (raised hands, attendee lists, emoticons, permission granting, etc.)</td>
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<tr>
<td>Other</td>
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<tr>
<td>Administration</td>
<td></td>
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<tr>
<td>Automated emails to attendees</td>
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<td>Content Development tools</td>
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<td>Reusable content</td>
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<tr>
<td>Registration/attendance reporting</td>
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<td>WebCT integration</td>
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<td>Customizable emails, login screens, etc.</td>
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<td>X</td>
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<tr>
<td>Student self-enroll</td>
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<td>User roles</td>
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</table>
4.4 Recommendation: Elluminate Live!

Of the products listed above, the Elluminate Live! offering is the recommended Online Collaboration Solution for the following reasons:

- Easy to use interface
- Basic features are easy to learn
- Strong education sector focus
- Ability to integrate with popular LMS products eg. Blackboard, Moodle, Desire2Learn etc. Refer to [http://www.elluminate.com/Company/Media_Center/Press_Releases/Detail/19/?id=193](http://www.elluminate.com/Company/Media_Center/Press_Releases/Detail/19/?id=193) for more information.
- Very active product development in line with customer requests and requirements
- Hosted or server based offering
- Robust & reliable solution
- Recent announcement of Elluminate & Wimba collaboration products development roadmap – Project Gemini. Should deliver a product that includes the best aspects of both the Wimba and Elluminate web conferencing products in one solution.

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<tr>
<td>Technical &amp; Support</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>PC only</td>
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<td>Works with multiple browsers</td>
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<td>Low bandwidth</td>
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<td>Available at additional cost</td>
<td>Live 24 hour support; initial response within 2 minutes</td>
<td>24x7 support for all end users included with all licensing options</td>
<td>Available at an additional cost from a third-party provider</td>
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<tr>
<td>End-user support</td>
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<td>Available at additional cost</td>
<td>Live 24 hour support; initial response within 2 minutes</td>
<td>24x7 support for all end users included with all licensing options</td>
<td>24x7 support for all end users included with all licensing options</td>
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<td>Server provided with software for plug-in-play use</td>
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<td>X</td>
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<td>X</td>
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</tr>
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</table>
Elluminate Live!’s main competitors

- **Adobe Connect**
  Although the product looks very nice and is functional, the user interface isn’t as intuitive to use. New users and those unfamiliar with web conferencing technology may not find the product as easy to learn and use.

- **Centra**
  Centra collaboration offering is a very solid product. Saba – the “owner” of Centra – is focused more on the corporate learning market and a range of products rather than being focused on a single product.

4.5 Other Technologies

3D Virtual Environments

3D environments provide unique interaction and engagement capabilities that may not be able to be achieved using other tools and can also be valuable teaching and learning tools. They are also an excellent choice in situations where students may not feel comfortable engaging over a video conference or other real time technology. We explore these 3D environments under three subheadings; content creation products/solutions, 3D virtual Environments and Interactive gaming solutions.

**Content Creation Solutions:** Content creation products may be required to develop the learning resources. Products such as Adobe Captivate and Machinima can be used to create content such as instructional videos that can then be uploaded to a website, used inside a 3D virtual world, or made available from within an Elluminate session, etc. Microsoft PowerPoint is commonly used to create presentation slide sets which can then be used in an Elluminate session or made available for students to download from a website. Also worth mentioning are products like Skype, MSN Messenger, blogs, chat forums etc as these can prove to be effective tools in certain situations. An example of this technology at work could be social work educators creating scenarios or vignettes to be viewed by students who are taken through a scaffolding of learning directives to achieve the learning outcomes of a particular unit. For example students may be asked to first write their thoughts on the ethics around communicating with an Indigenous Australian. They may then view two vignettes, one showing poor practice and the other showing best practice. Students could be asked to outline their thoughts about what worked and why and then be led through the correct answers through the LMS. The advantage of using this technology is that it is flexible, students could view the material in their own time but also the educators are able to create their scenarios or vignettes without the restrictions of actors, thereby, they are able to change ethnicity, age or gender and
create complex cases otherwise not achievable in the classroom. This type of technology has the ability when used well to suspend disbelief giving students opportunities to explore situations currently unavailable in a safe environment.

**3D virtual worlds:** These technologies include the worlds of Second Life and Open Sims. In these worlds students embody an avatar and this can create a less intimidating environment than traditional on campus SLEs and facilitate more open and comfortable interaction. The capability of a product such as Second Life to facilitate the use of an avatar in role-play based interaction may be of great value and also has great potential for inter-disciplinary learning and collaboration. Here educators from health disciplines could for example purchase an island and create a hospital or clinics and conduct role-plays or scenarios. Although these products have evolved massively over the last the last ten years or more there still doesn’t seem to have been a huge uptake of the technology for teaching and learning purposes in the higher education / university sector. One of the possible downsides of the technology is the extra added complexity that comes when dealing with 3D both from the end user and environment development perspectives.

**Interactive gaming solutions:** This is a relatively unexplored area but offers some potential opportunities across a range of areas, but most importantly skills development. It also is the most flexible technologically and could address some of the limitations currently experienced in the use of 3D environments, for example bandwidth. Gaming solutions could be developed to be in the form of video or computer games whereby students interact in much the same way as they would with games readily available in the recreational domain currently, except here the content would be around learning social work skills and knowledge. The advantage with this technology is that it could be portable and developed to service social work education programs across Australia. It also offers flexibility for not only external students but the increasing number of internal students not attending skills development classes on campus for work or family reasons.

However, consideration also needs to be given to the cost and time associated with building customised virtual environments if these are required. Additionally, benefits gained through the use of 3D simulation should be weighed against those gained via the environment and capabilities of a more traditional web collaboration tool such as Elluminate or Centra.

**4.6 Conclusion**

It is clear that there are enormous possibilities for evolutionary change in the social work curricula. New technologies hold great promise in enhancing and to some degree redefining how social work is taught and the learning approaches and situations. Social work is a very human discipline that relies heavily on personal interaction and skills to negotiate complex and sensitive issues. There is a real need
to provide experiences in which students can acquire the skills and knowledge to be effective practitioners. In these environments educators will be able to create learning experiences that reflect the complex work of social work, in particular cross-cultural issues. Social work directly attends to significant social issues, such as social exclusion, racism, poverty, sexism, disability, violence etc and requires high level skills and specialised knowledge so that practitioners can develop interventions at the micro, mezzo and macro levels. With increasing numbers of students not attending campus these technologies provide a wonderful opportunity to allow students virtual experiences that mimic real life and also enhance the learning experiences of those who do attend campus and also enhance preparation for learning on field education placements.

There is no single easy answer to the question “what is the best solution?” because the best solution will vary due to many factors. The “best” solution may consist of a number of completely different technologies being used together to deliver the required result. For example you might use PowerPoint to create a series of slides that are then loaded into an Elluminate session along with a short video that has been created using Adobe Captivate. This could form the content component of an online class which then is recorded and uploaded into an LMS so students can review the session on demand. The same students could then be required to participate in a role play exercise that is conducted within a Second Life virtual world and undertake a skills development module using gaming technologies.

When choosing the most appropriate technologies it will be important to:

- clearly define the required outcomes before even looking at products. Create a checklist that can be used to select products,
- clearly define the sorts of activities required. For example: displaying PowerPoint slides, facilitating Q&A sessions, accommodating up to 20 students at one time, providing real time video and audio, providing a chat facility, facilitating role playing activities,
- take into account any hidden development costs – some products (especially free products) may require many hours of development/customisation to turn them into usable products,
- understand the limitations of inexpensive or free “limited” versions – these can get expensive if full features are required down the track, and
- avoid a solution that is only cost effective because someone has already spent a huge amount of their own unpaid time getting the solution to where it currently is. Question how the solution will continue to be supported & further developed once that person is no longer available.
5. Primary Data Collection

The primary data collection was conducted over a period of four weeks during October and November 2010. The Heads of School (HOS) or Acting Head of all 26 accredited schools were contacted, initially by email outlining the project and then by project staff via phone. These phone calls were used to garner an overall view of the expanded use of technology based SLEs and to gather the names of appropriate staff to send surveys to. There are approximately 250 full time academics in Australian social work programs, although not all are social workers.

5.1 Methods

Surveys

Two surveys were conducted targeting different Social Work domains:

A) An online survey was used to enhance the NHWT mapping results, and to gain a more detailed understanding of the current use of both non-technology based SLEs and technology based SLEs within Social Work Schools. Links to this survey were sent to HOS, social work educators and field placement educators (Appendix 5).

B) A second online survey was developed for key employers, to gain an understanding of the use of SLEs during field education placements of social work students. (Appendix 6), with employers being sent links to the survey.

In each case, participants were emailed an information sheet and a link to the online survey. The survey itself contained concise definitions of SLEs, explicitly divided into non-technology based SLEs and technology based SLEs to ensure there was no confusion when completing the survey. The survey also included a request for participants to give permission to be contacted by phone for a qualitative phone interview.

In total 89 links to the online surveys were emailed out, each Social Work Program in Australia received at least one online survey request (some of these single emails were then distributed by the recipient). Thirty-nine completed surveys and 14 partially complete surveys were returned, a return rate of 43.8% (completed surveys). Thirty-seven surveys were sent to key employers with nine completed surveys being returned and four partially complete. With only a return rate of 24.3% for key employers this gives limited generalisability to the survey.

A descriptive analysis of the surveys was conducted, including data from partially completed surveys where the question under consideration had been answered. In
the discussion of findings below, the results for the two surveys are discussed together (by comparison with each other) as this provides a more coherent picture than discussion of each separately. Similarly, the NHWT data on use of SLEs by education institutions in Australia is discussed together with the survey data on the same issue.

**Interviews**

Qualitative phone interviews were conducted with a range of participants, including: social work educators, field placement educators, heads of school (Appendix 7) and key employers (Appendix 8). The interview guides were formulated in consultation with the Reference Group and were also informed by the literature and survey results.

Extensive and detailed notes were taken from the phone interviews and these were then thematically analysed. As for the two surveys and the NHWT data, the findings of the interviews have been integrated rather than being listed separately. They are indicated in the text by the use of the labels U (university respondents) or E (key employer respondents).

**Focus Groups**

Two teleconferenced focus groups were conducted. These focus groups were used as a forum to obtain feedback on the key findings of the research project with a summary of key findings and technology definitions being sent to focus group participants prior to the focus groups (Appendix 9). These groups discussed barriers and advantages to the extended use of technology based SLEs in the social work curriculum. Participants were recruited by sending an e-mail to survey participants and HOS and inviting their participation.

**Consultations with Technology Experts**

During the course of the project a technology expert was contracted to review current and emerging technologies. Experts from Creative Industries at QUT and an international expert were also consulted about emerging technologies, in particular the use of interactive gaming solutions.

**Ethical Clearance**

Ethical clearance was obtained from the Queensland University of Technology University Human Research Ethics Committee.
5.2 Current Use of Non-Technology Based SLEs

Using the NHWT data and data collected from project research (surveys, consultations with HOS and interviews) it was evident that the vast majority of SLEs currently being used within the Australian social work curriculum are non-technology based.

**Types of SLE used**

Non-technology based SLEs have been used extensively in the social work curriculum over the years for example using two way mirrors or screens, educators have conducted simulated interviews or have conducted role plays using both staff and students. As seen in the graph below non-videoed role plays, case studies problem-based learning, and scenarios are the SLEs of choice.

![Chart showing the use of non-technical SLEs](image)

Others included:

- Case studies and illustrations from the academics own practice
- Social workers from the field
- Field visits
- Forums and meetings
- Discussions based on research articles and debates
- Students facilitating a group work program for their peers, group critical reflections
- Drama
- Student field experience – sourced materials.

The NHWT data also illustrated a wide use of simulated interviews which were also mentioned frequently during interviews, and noted the use of two way mirrors and screens sometimes being used. Key employers surveyed also reported using
predominately the same non-technology based SLEs: non-videoed role plays, case studies, problem-based learning and scenarios.

**Use as a complement**

Most non-technology based SLEs were backed up with group discussions, reflective thinking or critical papers. It was noted that that these simulations can be labour intensive for staff and although they are generally well received by students there are some who find them intimidating with “performance anxiety” resulting. For these students, particularly performance-related types of SLEs could be stressful and create an environment not conducive to sound learning.

**Subjects/units in which used**

The use of non-technology based SLEs occurs primarily in the skills based subjects/units often related to communications and interpersonal skills needed for field education placements and direct practice. However, some educators have used them in a host of other subjects to engage students, for example one respondent described creating a simulated election to illustrate how elections work. Other areas included:

- Application of theory to practice situations
- Human rights and social justice
- Eco-social justice
- Ethics
- Social policy
- Emerging issues in social work
- Research methods
- Leadership

The use of non-technology based SLEs occurs broadly within the social work curriculum primarily in the skills area but is also linked to theory subjects.

**Limitations**

During interviews, respondents were asked what they thought were the limitations of using non-technology based SLEs. Many of the respondents reported that it was labour intensive and time consuming and there were also problems in accessing the right environments in order to conduct SLEs. Declining numbers of students attending campus was also flagged as a major problem. The major reason given for this was that many students have to work to cover the cost of university study. This was seen as an issue for school leavers as well as mature entry students. Family commitments were also mentioned as preventing students attending classes. Distance students were also seen as being disadvantaged, especially if they were not able to attend campus at any time. Others mentioned the confronting nature of
having to “perform” in front of other students and staff. Concern was also expressed about the possible repetitious nature of using SLEs.

U6: If used too much (non technology based SLEs) it can be boring and there needs to be a balance. It can be more skills driven and then you lose sight of the theory that underpins the skills.

Pedagogical benefits

Educators generally recognise the ability of role plays, case studies, scenarios, mock interviews, mock assessment planning, etc., to engage students and “take learning to another level” (U22). It provides the opportunity to increase face-to-face interaction, which is a “very powerful tool” (U28) to turn abstract social work theory into contextualised practice. All academics recognised the importance of human interaction in social work and, therefore, developing interpersonal skills through the use of role plays and other types of non-technology based SLEs. However, some also emphasised the need to have a certain level of authenticity (and therefore care) when using these types of teaching methods. Ultimately, their success depends on the ability of the lecturer to provide authentic settings and clarified linkages with learning outcomes. Critically, non-technology based SLEs assist the long-term absorption of complex or abstract concepts in a practical way.

Effectiveness

The general feeling among those surveyed is that this use of non-technology based SLEs is effective as a learning strategy with 29.6% (n=13) saying it was somewhat effective and 70.5% (n=31) (total N=44) saying it was very effective. The results of the question on the contribution of non-technology SLEs are similar. Key employers were not quite as enthusiastic with 27.3% giving a neutral response to whether they thought SLEs were effective as a learning strategy, 36.4% thinking it was somewhat effective and 36.4% thinking it was very effective. When asked if they thought SLEs increases student engagement the pattern of responses was the same.

Factors influencing effectiveness

A large number of respondents claim that non-technology based SLEs work for all students, “age regardless” (U12). Respondent U27 added that while “it works for all, some adapt better than others”. This is particularly true if one takes into account the role of the educator, as respondents U28 and U16 both argue; the onus is on the academic to clarify the validity of those methods and to execute them well. Many commented that students from culturally and linguistically diverse (CALD) backgrounds can struggle with the technique. However, the educator was also seen as responsible for attempting to break down those barriers.

All respondents agreed that non-technology based SLEs develop interpersonal skills and problem-solving capacity in a safe environment. It breaks up lectures so that students are more engaged because educators move beyond “the talk and chalk
methods” (U16). Yet it also ventures into the “self” of students (U18), providing SLEs with a ‘human factor’ and authentic flavour. Most respondents agreed this is essential to the success of SLEs in impacting on student’s learning outcomes. However, that the human factor can affect vulnerable students and create ethical dilemmas if not supervised appropriately. The ‘human factor’ is also seen as a disadvantage in that people need to be present to partake in/observe non-technology based SLEs. Respondents also noted that these methods are resource and time intensive for educators, and while they are extensively used already in Social Work curricula, the possibility for expansion relies upon the provision of staff and resources to implement it.

5.3 Current Use of Technology Based SLEs

Types of SLE used

Not surprisingly, the reported use of technology based SLEs is less than that of non-technology based ones. This is reflected in both the NHWT data and the online survey. However, the survey shows more examples of their use than is reported in the NHWT data. Video role plays and the use of Blackboard are the most commonly reported technology based SLEs (see graph below). Second Life was added to the list of possible choices on the survey after phone calls to HOSs suggested it was used at a couple of universities, however, it was not selected by any academics surveyed.
Survey participants were also given space on the survey to add other technologies not able to be selected. During interviews it appeared the use of You Tube and Podcasts were the most popular.

Others included:

- You Tube
- University Online Environments (not Blackboard) such as Chat, Wiki and A-synchronous Online Forum
- Video links
- Podcasts
- Interaction labs
- Adobe Connect
- XtraNormal
- DVDs
- Virtual environment (unspecified)
- SAKAI Interactive Tools (Wimba/Chat/Forum/Wiki)
Key employers however, reported very little use of technology based SLEs, with only one respondent reporting the use of video role plays.

**Uses for technology based SLEs**

The graph below illustrates how technology based SLEs are used in universities, with group collaboration being most popular, followed by scenarios, simulated interviews and problem-solving.

Once again, survey participants were given the opportunity to add other uses that were not given in the choices. None of these listed below were as popular as the choice displayed in the graph above.

Other uses include:

- Assessment and quizzes
- Meetings, committees and forums
- Discussion simulation
- Modeling examples of interviews and actual interviews
- Simulate role play and provide “real life” examples
- Reflections
- Skill learning, rehearsal and self awareness

Technology based SLEs were reported as being used in many of the same units as non-technology based SLEs and heavily weighted towards skills based subjects/units often related to communications and interpersonal skills needed for fieldwork, practicum and direct practice. However, more reported using them across all of their units.

Although many HOS thought that there would be greater use of online technologies for external students this was not reflected in the survey results, with only 4.9% reporting use with external students and 39% reporting the use of technology based
SLE with internal students. However, 53.7% of those surveyed reporting using these technologies with both internal and external students.

**Advantages**

Respondents were asked what advantages they saw in the use of technology based SLEs. A wide variety of advantages were suggested, of which the most common was that the use of SLEs would make it easier for learning to occur at a distance – this applied to both external students, students on field education placement and students unable to attend classes for other reasons. It was noted by many of the participants in this study that there have been declining numbers of students attending campus for lectures and tutorials. While some believe this is because students are able to access the lecture notes, Powerpoints or Podcasts of lectures, most believe that more and more students need to work to support the costs of attending university making on campus attendance patchy. The greater flexibility offered, in terms of delivery, time of teaching and suitability for different learning styles, was also mentioned by a number of respondents. The next most common response was that use of the technology in learning would better prepare students for the use of technology in their practice, and several respondents also suggested that training with technology based SLEs is a way of bringing the real world into the learning environment.

**U9:** It would overcome distance and you don’t have to be there, it is flexible and done in some degree in your own time

**Effectiveness**

Overall, the survey illustrated a generally positive attitude towards the use of technology based SLEs in the Social Work curriculum as both a learning strategy and in increasing student engagement (see graph below).

**In general, how effective are technology based SLEs as a learning strategy in the Social Work Curriculum?**
In general, how effective are technology based SLEs in increasing student engagement?

![Bar chart showing the percentage distribution of responses.]

However, key employers reported lower levels for effectiveness of technology based SLEs as a learning strategy with 40% giving a neutral response, 30% saying it was somewhat effective and 30% thinking it was very effective and similarly reporting lower responses for student engagement: 30% neutral, 40% somewhat effective and 30% very effective.

**Pedagogical benefits and limitations**

Educators were asked four questions intended to capture their opinions about what technology-based SLEs are best suited for. The questions first asked about the learning approaches and then about the learning situations that they thought technology-based SLEs were best suited for, then asked the same two questions about the converse, i.e. what they were not suited for. In retrospect these questions could have been made clearer, as both “approaches” and “situations” were interpreted in different ways and several respondents stated that they did not understand the intent of the questions.

The most commonly mentioned approach for which technology-based SLEs are considered best suited was problem-based learning, and the mentions of adult learning approaches and case studies probably draw on the same assumptions. A number of respondents focused more on the skills which would be best learned this way (e.g. interviews, collaboration, reflection) and some respondents linked these two kinds of response: SLEs were best suited to teaching skills needed in real life situations by engaging the students in problem-based learning through use of SLEs.

When asked about the situation for which technology-based SLEs are considered best suited, several respondents indicated that their answer to the question on approaches would be adequate as a response. Several other respondents specifically mentioned the benefits for external students, and many referred again to the opportunity to develop skills in close-to-real-world conditions. There were also positive comments about the suitability of SLEs for small groups of students (which was implied by the mention of tutorials, workshops and seminars).
E1: They open up opportunities to focus on skill development and you don’t need everyone one to be there in space/time.

U23: It opens up educational opportunities to distanced people (a whole range of people) and makes education flexible and forces educators to think in student-centred ways, so that lecturers are no longer the single source of information – it opens it up to an enormous amount of authority and resources.

Interestingly, some of the skills considered by some respondents to be well suited to technology-based SLEs were among those mentioned in response to the question about what approaches were not suited to technology-based SLEs, e.g problem based learning and communication skills, and group work. More common was a sense of uneasiness about replacing interaction with teachers with fully online learning, with the implication (sometimes stated, sometimes implicit) that a mixture of approaches is best.

For the question about the question about which situations were not suited to technology-based SLEs are considered best suited, the same concerns were expressed without any particularly strong themes being evident.

Summing up these responses is somewhat difficult. The answers may suggest that some respondents are concerned that there will be a move to replace face-to-face teaching with online teaching, even though this was not suggested or implied in any of the information provided about the research. A communication strategy about the use of technology-based SLEs would need to take these concerns into account. Respondents often found it difficult to distinguish between learning approaches and learning situations, though those who did generally perceive the benefits of technology-based SLEs as applying to problem-based learning approaches aimed at developing skills in situations which expressed the complexity of the real world (bearing in mind that fewer respondents saw these as not suited to technology-based SLEs). With respect to learning situations, teachers involved in face-to-face teaching saw the non-lecture situations (tutorials, workshops, etc) as being best suited, while those who expressed concern about the use of technology-based SLEs were essentially arguing for a mix of approaches rather than the full use of online teaching. Interestingly, some respondents were involved in teaching external students and therefore already lacked face-to-face exposure, however they did not identify this as an issue. There were some limited mentions of student-based issues – access to technology, ability to engage without classroom exposure, etc. – but these did not figure greatly.

Staff, employer and student skills

Concern has been expressed about student and staff capability in using current and emerging technologies, not just because of access to resources but also the skill that is needed to use and access technology. It was difficult to come to any definitive
conclusion about who may be the most skilled and who would need further training and education. Some Heads of School (HOS) reported that younger students have a good grasp of technology while mature students struggle. However, others reported it as varying between individuals with many school entry students having difficulty and some mature students having advanced skills. This was also reflected in interviews with educators. A large number of respondents claimed that technology based SLEs work for younger students who are tech-savvy, although some argued that this is a fallacy and “misconception” (U12). They say younger students are untrained in the new ways of assessment (as opposed to written exams) or are just as technophobic as mature-aged students. What seems to be more representative is that the style of learning works for students who are open to technology, those with unfettered access, and those who are motivated.

The two graphs below show a diverse range of views about students’ capabilities with technology, and similar diversity in self-reported capability. Notably, the majority of staff (68.2%) thought most (52.3%) or all (15.9%) of their students were capable, while tending to rate their own capability as only average (56.8%).

In general, how capable are your students in using these technologies?

In general, how capable are you in using these technologies?
Given that there is widespread support among social work educators for the expanded use of technology based SLEs within the social work curriculum then addressing deficits in both knowledge and expertise in the use of technology for both educators and students is essential. Most of those who were surveyed reported knowing about what technical support was available to them, and HOSs expressed concern about the amount of staff time needed to become competent with technology, as well as gaining knowledge about emerging technologies and trends.

Key employers reported higher rates of technological competence in students (45.5% said most are capable and 36.4% said almost all are capable). This could reflect greater engagement with technologies throughout the social work course, as all would be near completion of their degree. However, key employers self reported lower capability in using technology themselves, as seen in the graph below. During the interviews employers also expressed concern about internet access restrictions imposed by their organisations.

**In general, how capable are you in using these technologies?**

![Bar Chart](image)

**Barriers to implementation**

Regardless of the enthusiasm for the extension of the use of technology based SLEs in the social work curriculum there was also considerable concern among teaching staff about the barriers to integration.
Other concerns emerged around equity. There was a general view that some students who did not have access to computers or other equipment due to economic reasons would be disadvantaged.

Conversely, it was also thought that distance students or students who were not always able to make it to campus due to work or family commitments would no longer be disadvantaged if simulations usually carried out in class could be also be migrated into a virtual environment for use at more convenient times.

Again, time to create and learn how to use the technology was expressed with the addition of the set up costs of the technology.

**U33:** Not everybody is plugged in so we have to be careful not to make assumptions about who can use it and who can’t use it.

**U29:** Time and resources for setting up and becoming familiar with technology and confident

Key employers also reported similar barriers to integrating the use of technology based SLEs into the social work curriculum (see graph below). When employers were interviewed they also expressed concern about internet access within their working environments.
E9: Access to programs, resources and equipment

Response to Key Employer Survey

What are the main barriers (if any) you see in integrating technology-based SLEs into the Social Work Curriculum?

5.4 Use of Technology Based SLEs in Field Education Placement

One of the key interests of HWA is clinical placement (or, for social workers, field education placement). There were several items in the survey which focused on filed placement.

General support

When asked about the potential of using technology based SLE to support student learning on field placement education placements there was overwhelming support.
Response from University Survey

**U13:** Absolutely, online diary, supervision using Skype, email communication, present cases and do skills tests online etc. Using all resources means distance is less of an issue.

**U17:** Oh yeah, without a doubt, absolutely. Setting up scenarios in real time and being able to respond in real time would be fantastic.

Response from Key Employer Survey

**E6:** Definitely. During tutorials when reflecting or discussing it can be most definitely utilised, especially by drawing in practitioners who are isolated.

**E8:** Yeah, there is enormous potential, I am interested to take part and want the opportunity to trial it.

Key employers were also asked if they supported the use of technology based SLEs in the social work curriculum. This gained overwhelming support with 44.4% supporting the concept, 44.4% strongly supporting the concept and 11% reporting a neutral response. When asked if they would support the expanded use of technology based SLEs to assist students on placement, they gave similar responses.

**Limitations**

Most educators and employers saw the “enormous potential” (E8) in providing technological support when students were on field education placement, in terms of
providing support, supervision and group reflection to those dispersed geographically. Yet, there was an evident gap in the ability to provide the infrastructure necessary to technologically link students, educators and field educators. Further, employers demonstrated a considerable lack of knowledge of the innovations in technology based SLEs that are available or could be available to them. Primarily, the problem stems from the capacity of government departments to relax security measures for Social Work students and supervisors, not the recognition that technology based SLEs has the potential to take field education placements to new levels. Importantly, while employers also see the value of face-to-face interaction in non-technology based SLEs, there is an inherent problem with trying to organise a small number of workers “to be in the same place at the same time” (E1).

Feedback from HOSs highlighted the importance in expanding the use of SLEs when concerns were expressed about the readiness of students before field education placement and the problems associated with this. There was widespread agreement that many students were nervous and concerned about their preparedness for field education placement. It was felt that technology based SLEs, particularly the potential of interactive environments could go some way to assisting with this. There was also some support for the suggestion that enhancing and extending the use of SLEs could shorten placements, however, this was not a vision shared by everybody. This was seen by some respondents as important as there was a shortage of placements, particularly first placement in the course along with growing demand for them and the length of time currently in the curriculum posed an economic problem for some students. However, concern remains about the lack of evaluation on the use of technology based SLEs. When asked what had been the impact on learning outcomes with technology based SLEs one responded echoed these concerns:

U10: Limited but holds promise. External students are excited about the participatory nature of (technology based) SLEs but little is done yet and not much is known about the impact. There are positive comments hinged on participation versus isolation. It needs feedback – concrete feedback.

5.5 The potential of technology based SLEs and cross-cultural education

The potential use of technology based SLEs to provide cross-cultural training to students is enormous. On a number of occasions this was mentioned by educators. Currently it is virtually impossible to conduct role-play or set up scenarios that deal safely or effectively with cross-cultural issues except with the use of actors from CALD or Indigenous backgrounds, as there are ethical implications in using students from Indigenous or CALD backgrounds in these SLEs. Technology based SLEs offer a safe environment for students to experience complex situations with “people”, possibly in the shape of avatars from diverse backgrounds. These types of SLEs
allow students to communicate effectively and to problem solve in order to acquire the skills to deal with these issues in their future practices. Through the use of technology based SLEs educators will be able to change ethnicities, gender and geography, moving from urban to rural to remote.

5.6 Focus Groups

Feedback from the focus groups confirmed the accuracy of the project findings. While there was strong support for the expansion of the use of technology based SLEs there were also significant concerns about the impact on educators’ time and resourcing. Interestingly, the tone of the groups differed: while both showed a level of excitement to the expansion of technology based SLEs in the social work curriculum, it was more tempered in one group when weighed up against the perceived impact on academics time and the lack of evaluation of SLEs. However, both groups could see the potential for better learning outcomes and greater engagement of students, especially those unable to attend campuses, as had previously been expressed in the interviews.

The major concerns surrounding the expanded use of technology based SLEs continue to be that of academics time and resourcing: both set-up costs and training of staff and students, not only initially but also to keep abreast of emerging technologies. One focus group participant remarked that the Commonwealth is good at setting things up but asked, “what about continuing support?” There was also concern expressed by an employer that within their organisation technology had not been “picked up” by staff in any significant way and that the phone was still the communication tool of choice, even though the potential offered by technology had been acknowledged within her organisation.

Technology based SLEs were not seen by either group as an alternative to face-to-face interactions but, rather, as an enhancement to teaching and learning. However, there was some concern that these technologies have not been evaluated in the social work curriculum and that this needs to happen. Even so, the general view held by participants was that the expansion of technology based SLEs should happen right across the curriculum, and that while they have a great potential use in making students better prepared before field education placement, their application can be much broader. One participant suggested that they should be introduced in first year, partly because it would give students a much more in depth understanding of the breadth of social work, and also because it would teach students early on how to use technology and engage them into the professional course.

The focus group discussion explored a number of technology based SLE options including more cutting edge technologies such as virtual worlds and gaming technologies. The potential for these could be seen right across the social work
curriculum as long as there were clear learning objective and outcomes outcomes and technical support for both staff and students.

Ethical issues were once again brought up in terms of issues regarding the use of technology based SLEs. There was concern that some experiences could be so real that those students with mental health issues could be at risk. It was agreed that SLEs would have to be carefully designed but also that there was enough scaffolding in place to support and educate students as they use this technology. It was also noted that when designing these tools there may be a need to make modifications for people with disabilities, otherwise equity issues would arise. These virtual technologies can also present difficulties for some students with mental health issues.

Overall, the focus groups expressed support for the expansion of technology based SLEs in the social work curriculum as long as their limitations and problems were acknowledged and attempts were made to address them.

5.7 Concluding Remarks: Primary Data Collection

In practice there were a number of logistical issues which made this research difficult, one of which was the rapid turnaround required. The urgency of the task contributed to lower numbers being obtained for the surveys (particularly for the employers) than would have been desired, because there was not sufficient time to attempt more than a couple of reminders or call backs.

It was evident that many of the respondents did not really have a robust conception idea about what SLEs were or were not, even though the definitions were set out in the participant information sheets. As discussed in the next section, there is a considerable need for academic staff to become more familiar with at least the concepts and potential of technology based SLEs, and this will need to be achieved before implementation of technology based SLEs can be expected to take place on a reasonable scale. The situation may be similar in other professions.

5.8 Potential uses of technology based SLEs in the Social Work Curriculum – visions for the future

New and emerging technologies are creating a host of opportunities for teaching and learning. At present some health disciplines such as nursing and medicine have (to some degree) moved forward to take advantage of this ‘brave new world’ of education through 3D virtual hospitals and other environments, however the same cannot generally be said of social work. Although some social work programs have
embraced emerging technologies, they tend to be isolated cases in an area which remains largely unexplored and mostly due to individual educators who wish to be innovative.

A promising aspect is that within the social work education sector there is a reasonable understanding of the use of learning management systems (LMSs), such as Blackboard, and collaborative technologies, but many participants in this study think that we can “do this better”. There are potential benefits to be realised both with university-based learning and in field education placement. University-based learning becomes easier for remote students and those who cannot readily access the campus, and there are more avenues for interacting with other students, increasing cooperation and sharing of ideas. Issues associated with declining class attendance can also be addressed, albeit partially. As mentioned previously in this report, many students have to work to support their university education, making coming to campus difficult and for some sporadic. Technology based SLEs can provide flexible options for learning and interacting with educators and fellow students which goes in some way to addressing issues in learning related to non-attendance at lectures and tutorials. The opportunities can go beyond the traditional curriculum, as new technologies begin to be more widely used in the workplace for tele-counselling and to keep in contact with rural and remote clients. Preparing students to use these technologies prior to placement provides significant advantages for professional practice, as well as giving students a more flexible and enriching learning experience in preparation for the real world.

Perhaps the greatest potential for social work lies with interactive virtual 3D worlds such as Sims and Second Life which is already being used in other disciplines and by some social work educators. Within these virtual worlds educators and students can build hospitals, communities, clinics and agencies where simulated counselling sessions, interventions and interviews could be conducted for both on and off campus students. Here students would be able to practice skills and gain knowledge in a safe environment through the use of avatars.

Existing text-based case studies, problem-based learning and scenarios can be used in these existing digital applications. They make for better learning because they are richer in detail and provide greater contextual knowledge and application. These virtual worlds also allow for variation of key demographics. Educators would be able to change gender, ethnicity or age and factors such as socio-economic factors thereby changing the context of the scenario or case study. Students would have the ability, in many cases, to stop the scenario and ask questions or interact or watch the application again to gain better clarity. It could be flexible allowing students to participate at times convenient to them and give more variety in learning situations for all students, whether on campus or not.

Although it is not real life, these environments can engage participants to the point that they temporarily suspend disbelief, giving them an experience closer to real life
than non-technology based SLEs can offer. For example, students would be able to interact with avatars designed and used to create personas from diverse cultural, social and economic backgrounds, something not achieved through traditional simulations. These technologies also provide the means to create life-like vignettes and scenarios without the expense of using actors. These can be uploaded onto LMSs as unit resources, giving students greater and flexible access to enriched learning tools. Many of the participants in this research were keen to learn more about such applications, especially in regards to preparing students for field education placements, but could also see their use throughout the curriculum.

This style of blended learning could also include gaming solutions. Here students might be led through a scenario in which at certain points, decisions have to be made about which action or intervention will be used, leading students on to the next part of the scenario linked to the decision they have chosen. The end result, i.e. the consequences of their decisions, would be presented to the student. Critical reflections would then be required.

One of the advantages of these technologies is that they offer different levels of interaction giving educators valuable options in designing their units. For example content creation solutions like Machinima and Adobe Captivate can be used for problem-based learning. Mini movies can be created and uploaded to an LMS, students are then taken through activities scaffolding by the learning objects. At a more interactive level, case scenarios could be played out in an interactive virtual world, for example, Second Life. Students would gain both skill and knowledge while being led through the scenario. Finally, fully interactive, real time technologies could be used for skill acquisition. For example, social work educators could conduct a fully interactive, real time suicide risk assessment with a student.

Another real advantage of these technologies is the great potential for interdisciplinary collaboration and learning. Virtual hospitals or clinics or even gaming solutions could be used across disciplines to foster mutual understanding, collaboration and coordination. The sharing of resources also makes economic and resource sense, as the burden of designing, maintaining and resourcing these learning tools can be shared across disciplines, across a university, or even between universities, or even across the country and wider.

Ultimately, the use of the technologies canvassed in this report will lead to social work education converging on transmedia approaches, whereby the learning experience occurs across a range of media forms. This approach allows for a narrative with each of its elements able to make a distinct contribution to the student’s understanding of the complex knowledge needed for social work practice. Students could be taken through a case study in the form of a narrative throughout the semester, receiving information and learning skills to manage complex cases though a variety of different but common media and communications tools, including video, interactive 3D experiences, social networking and even text messaging. This
type of approach could mimic some of the situations faced by social work practitioners, giving the students a real taste of clinical practice.

Although these technologies do come with some limitations, not least the need to upskill social work educators and employers and maintain support to them, many of these technologies have already been taken up by the younger generations. These “digital natives” as they are sometimes termed, particularly because they are often using various forms of media on a daily basis, from the likes of their iPods and iPhones, Play Stations and X-Boxes, to immersion in Second Life, to social networking sites. Since these students are the future of social work and these technologies have relevance to them, it seems that there is an imperative to engage them in the familiar to impart knowledge and skills and make a pedagogical shift from analogue teaching to digital teaching. It should be noted that students whether mature age or young who are not familiar with the technologies need to be given support and training, and as these technologies become more common and accessible this need is likely to decrease.

6. Discussion

6.1 Where might the Expansion of Technology Based SLEs Fit into the Social Work Curriculum?

Traditionally, SLEs have been used as a method to enhance skills based learning. However, the emerging technologies particularly interactive environments have opened up a range of new possibilities in teaching and learning. Participants in this study have shown a desire to move forward and embrace these technologies in order to prepare better social work students, however, a lack of knowledge and vision of what is possible remains one of the biggest barriers.

There remains a huge divide in “technical know how” of academics and the future uses of technology including collaborative platforms, learning management systems (LMS) and virtual interactive environments. In particular, most educators and employers interviewed saw the “enormous potential” (E8) in providing technological support when students were on field education placement, in terms of providing support, supervision and group reflection to those dispersed geographically. Yet, there was an evident gap in the ability to provide the infrastructure necessary to technologically link students, educators and field education supervisors.

Further, participating employers demonstrated a considerable lack of knowledge of the innovations in technology based SLEs that are available or could be available to them. Primarily, the problem stems from the capacity of government departments to relax security measures for social work students and supervisors, not the recognition that technology based SLEs has the potential to take field placement to new levels.
Importantly, while employers also see the value of face-to-face interaction in non-technology based SLEs, there is an inherent problem with trying to organise a small number of workers “to be in the same place at the same time” (E1).

However, the potential for the expansion of technology based SLEs should not been seen in isolation to providing support or learning opportunities in preparation and during field education placement. From the moment when a student enters a social work degree there is an imperative to teach or skill up students in areas of interpersonal communication skills. These skills are embedded throughout the degree and are essential if students are to successfully master other skills such as counselling, inter-professional collaboration, social work interventions, organisational management of successfully communication in diverse and complicated situations.

The use of technology based SLEs could be used across a number of key areas laid down by the AASW Accreditation and Education Standards. In order to do this we have split technology based SLEs into three categories; Learning Management Systems (LMS), online collaborative technologies and 3D virtual environments (including content creation solutions and interactive gaming). At the end of the section we present a table with the social work curriculum elements and the technologies that can be applied to teaching them.

### 6.2 Learning Management Systems (LMS)

Learning management systems such as Blackboard and Moodle were widely used in university social work programs and provide a platform to run some online collaborative systems on such as Elluminate Live and upload videos, You Tube, podcasts etc. LMSs have now become an integral component of teaching and the applications available through these platforms can enhance subjects/units across the social work curriculum. However, they are not being used to their full potential due to reluctance by some academics to embrace new technology and the time needed by staff to invest in learning all the functions and how to best use them. Students, too sometimes struggle with this technology.

### 6.3 Collaborative Technologies

There was a reasonable amount of collaborative technologies already used in the social work curriculum for example Elluminate and Skype and those associated with Blackboard. These were seen by many as adding value to teaching and learning across a range of subjects/units.
The use of these technologies was best understood by the participants in this study, however, there was acknowledgement that “we” need to do it better. They were often seen as a good way to engage with students particularly those who may traditionally not have as much contact with staff including distance students and those students on rural or remote placements. It can also connect those students unable to attend campus due to work commitments to their educators.

These technologies allow for real-time voice and visual contact between participants and so are potentially a solution to the tyranny of distance. There are also the benefits of text-based interactions, file exchange, shared whiteboards and many other benefits as outline in the technology literature review.

6.4 3D Virtual Environments (including content creation solutions and gaming technologies)

These technologies were the least familiar to the participants and many had not heard of Second Life, for example, thereby visioning the possibilities of these technologies was not necessarily straightforward. Furthermore, there is little in the social work literature about its use or evaluation of its impact on learning or student engagement advantages. However, given this lack of knowledge when the technology was explained to participants who had direct contact with project staff there was widespread support for its expanded use in the social work curriculum. One participant described it as an “in between current forms of teaching and real life. Some participants thought that some current non-technology based SLEs could be migrated to a virtual environment creating more opportunities for students, especially those who could not attend campus or those who felt intimidated by traditional SLEs. As with collaborative technologies, the 3D environments could be used over a range of subjects/units.

3D virtual environments were seen as potentially valuable in providing safe environments to engage with SLEs in order to prepare students for field placements. There were particular mentions of creating virtual hospitals or agencies where scenarios could be played out to allow students a more life-like experience than that provided by traditional scenarios or roles plays, especially when the suspension of belief can be fulfilled. It is also possible to create tailor made scenarios in the form of DVD or video with the use of content creation solutions such as Adobe Captivate and Machinima. These could be manipulated to change key demographics such as ethnicity, gender or age to change the context of the scenarios.

We also include gaming technologies in this section as many are incorporated into 3D environments. This is one area that is completely untapped in social work and is perhaps the most innovative. Gaming has the potential to be used in both theory and skills units and could be provided to students through LMSs or more portable
technologies such as DVD or CD. After consultation with experts from Creative Industries about the possibility of developing and using 3D interactive gaming this was then brought up as a possibility during focus group discussions and was received with enthusiasm, as long as there were clear learning objectives and outcomes.

There is real potential in these technologies to engage students at a higher level through the ability to mimic the complex issues faced in social work practice. Students will be able to experience situations currently unavailable to them through existing teaching methods, giving them greater opportunity to develop professional identities and roles in a more considered and informed way. Through the three levels of 3D interactive technologies students will venture into evolutionary ways of learning that promise to better prepare them for their professional working life.

The main barriers to their adoption are a lack of knowledge of some of the technology based SLEs particularly 3D environments and gaming solutions, although there is some knowledge about content creation solutions. It is difficult to gain a consensus about their adoption or expansion when there is little or no understanding in the sector of the capability of the technology. Two other important barriers also need to be addressed. First, the training needed by staff to grapple with new and emerging technologies is significant. Many academics already are working long hours and this would have to be responded to promote widespread adoption. Second, the technical equipment and the time required to invent and set up technology based SLEs. For example, a reference group member who is an award winning teacher reported that it took 15 weeks full time to prepare SLEs for one of his units. There would have to be investments of time and money if technology based SLEs were to be professionally and appropriately created for the social work curriculum. However, it is clear that there is widespread support for technology based SLEs, including for clinical training purposes, but vision along with financial investment for staff training and infrastructure is needed to make this a real possibility.

The following table included social work curriculum elements. LMSs are used throughout universities as management platforms and are therefore need for all subject/units. To engage students who do not attend campus collaborative technologies are essential for each subject/unit. A rating system has been used for the last three technologies in the table, to show which technologies are more appropriate for each curriculum element.

One star – partially appropriate
Two stars – moderately appropriate
Three stars – highly appropriate
## Curriculum Elements and Technologies

<table>
<thead>
<tr>
<th></th>
<th>LMS</th>
<th>Collaborative Technologies</th>
<th>Content Creation Solutions</th>
<th>3D Virtual Environments</th>
<th>Gaming Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence of socio-political and economic factors on individual need</td>
<td>✔</td>
<td>✔</td>
<td>***</td>
<td>*</td>
<td>*</td>
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<tr>
<td>Social work ethics</td>
<td>✔</td>
<td>✔</td>
<td>***</td>
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<td>**</td>
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<tr>
<td>Introductory knowledge, practice skills and values:</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>• to enable identification and appropriate response to people with mental health problems and mental disorders</td>
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<td>• regarding Aboriginal and Torres Strait Islander cultures, cross cultural practice and child protection</td>
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<td>• regarding all methods of social work intervention</td>
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<tr>
<td>Practice skills, including interpersonal skills, communication skills (oral for counselling, written for case noting, and report writing), reflective and critical thinking and analysis, data collection and management, and advocacy, negotiation and mediation.</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Skills to make assessments and decide on interventions, and to make judgements and recommendations</td>
<td>✔</td>
<td>✔</td>
<td>*</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Critical analysis of the structure of society and related systems, interpretation of processes that facilitate and constrain change, and the evolution of systems, and the application of empowering and non-oppressive practice</td>
<td>✔</td>
<td>✔</td>
<td>***</td>
<td>*</td>
<td>*</td>
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<tr>
<td>Field practice offering experience with individuals, groups and communities across different fields of practice, settings, client groups and geographical locations</td>
<td>✔</td>
<td>✔</td>
<td>*</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Relevant knowledge from other disciplines</td>
<td>✔</td>
<td>✔</td>
<td>***</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Understanding of society’s development and organisation and how these contribute to the politico economic distribution of resources</td>
<td>✔</td>
<td>✔</td>
<td>***</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Knowledge of the individual including human behaviour and development, personality development, life-cycle stages, family and social networks, physical and mental health, disability, vulnerability and resilience, and the social construction of these concepts</td>
<td>✔</td>
<td>✔</td>
<td>***</td>
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</tbody>
</table>
6.5 Readiness for Technology Based SLEs

There is a real gradient in the use of technology-based SLEs in universities across Australia. Generally, universities with external students tend to have a greater understanding and use of technology than other universities, because of the need to link up with those students. Taken overall, the extent of technology incorporated into SLEs remains within the audio visual world of DVDs, YouTube, vignettes, and the use of learning management systems (LMS) such as Blackboard and Moodle. One university, however, combines non technology based SLEs and technology based SLEs in an innovative way; it involves a laboratory with 10 rooms that each have a camera, microphone, and glass windows so that the educator can watch each setting simultaneously (U4). While some respondents showed a limited understanding of technology based SLEs innovations, it was clearly understood that their use in social work curricula enriched the learning experience. Many also commented that it is still early days and is therefore “hard to say yet” (U22) what the extent of the learning outcomes are for students.

What is apparent is that there is scope for the expansion of technology based SLEs in both the teaching of skills and the knowledge and theory that underpin those skills in the social work curriculum. This is especially relevant to cross cultural training and interdisciplinary collaboration, which are increasingly emphasised. However there is not a widespread vision of their embedded use in the social work curricula, which was also evident in both the interviews with HOS and academic staff. There is some knowledge of the emerging technologies and their uses in higher education but this knowledge is patchy and there is variable understanding of how some virtual technologies such as Second Life can be incorporated into the curriculum, although a couple of social work programs are starting to experiment with them. When these sorts of 3D virtual environments were explained to people there was widespread interest in knowing more about how they worked and how they could be used in teaching and learning. There was also, however, concern about gaining skills and the time it would take to establish these types of SLEs.

Given that development of these technologies could be a critical evolutionary step in social work education, there is clearly some preparation to be done to ensure that academics are willing and able to fully utilise their potential.
6.6 Key Findings

Current situation

At present, non technology based SLEs are extensively used in the social work curriculum, predominately in skills based subjects/units, however they are also used successfully in knowledge and theory subjects/units. They are seen as being effective as a learning tool, but also time consuming and resource draining for staff. Another additional point raised was that non technology based SLEs are seen by some as not being “real” enough, yet it was also stated that some students do not feel comfortable participating. Given their limitation and relatively high costs in expanding their use we have not recommended such an approach.

Technology based SLEs are seen to have potential for external students and those who have difficulty getting to campus, who are currently disadvantaged by not having the same access to these non technology based SLEs as internal students, thereby presenting universities with equity issues. However, technology based SLEs are used only sporadically across social work courses. LMSs and collaborative technology are more widely used but in varying degrees within and across universities

Potential use

The potential for the expansion of technology based SLEs in the social work curriculum received widespread support. Support for their expansion was not just in the area of field education placements but right across the social work curriculum, and there was acknowledgement that technology based SLEs could potentially promote and foster inter-disciplinary learning and collaboration. They were seen as a potentially effective learning tool, although there was concern at the lack of evaluation of these technologies in teaching at higher education level, particularly the emerging technologies such as gaming and interact 3D worlds.

There is also huge potential for inter-disciplinary learning through these technologies. Although, this is already a reality, these technologies would foster far greater mutual understanding and collaboration. For example, a virtual hospital could be created where students for health disciplines work together on a complex case or work together on an online community project.

Concerns and limitations

Overall, there was not a good understanding of the technology both new and emerging which led to a lack of visioning. Instead, there was a focus on barriers, including concern about an increase in workload for educators with technology based SLEs. There was also concern about the skills need by staff and students in both the setting up and maintenance of technology based SLEs, which would need
to be addressed. Other technology issues were also raised, for example, access to equipment for disadvantaged students and bandwidth needed for some applications.

Development and implementation issues

There was a consensus that the expansion of technology based SLEs within the social work curriculum must be done with clear learning objectives and sufficient scaffolding for student to obtain optimum learning outcomes. It was also felt that ethical issues such as mental health issues for students need to be considered and appropriate supports put into place prior to engagement with technology based SLEs as well as after. There is also a need to consider modifications to technology based SLEs for those students with disabilities.

There were mixed views expressed on technology based SLEs in relation to field education placement. On the one hand, there was consensus on technology based SLEs enhancing the preparedness of students and supporting students on field education placements; on the other hand, doubts were expressed as to whether this could lead to a reduction in the hours students spend on placement. Key employers also expressed concern over internet restrictions in the workplace which would also have to be considered.

To some extent these conflicting views could reflect a lack of knowledge about how these technologies could be used, which might be influenced in turn by the lack of evaluation of these technologies. It appeared that some educators were wanting to see the finished technological product before making up their minds.

Types of application

A variety of technologies are (or could be) used for technology based SLEs, and there is no easy way to classify them. Based on the review of technologies and information from participants, five categories of application have been identified: learning management systems (LMS); collaborative technologies; content creation solutions; 3D virtual environments; and gaming solutions.

LMS include platforms such as Blackboard and Moodle which are already widely used in university social work programs, although not to their full potential. Collaborative technologies include Elluminate Live and Skype, and other programs which make use of LMS platforms, such as those associated with Blackboard. There is already a reasonable degree of use of collaborative technologies in the social work curriculum, and they are seen by most educators to add value, such as providing means of better engaging with students, especially external students. However, there was acknowledgement that their use can be developed further.

Content creation solutions, 3D virtual environments and gaming technologies are related, and were also the least familiar to the participants. Content creation solutions such as Adobe Captivate and Machinima can be used to create tailor made scenarios in the form of DVD or video, often by capturing graphics from 3D virtual...
environments. The most well known 3D virtual environment is Second Life, but many of the participants had not heard of it. This, together with a lack of coverage of Second Life in the social work literature, restricted the visioning of its possibilities. There were suggestions about creating virtual hospitals or agencies where scenarios could be played out to allow students a more life-like experience than that provided by traditional scenarios or roles plays.

Gaming technologies are often incorporated into 3D environments, but their potential remains relatively untapped in social work. Gaming could be used in both theory and skills units and could be provided online to students through LMSs or more portable technologies such as DVD or CD. The possibility of developing and using 3D interactive gaming was raised in focus group discussions and was supported as long as there were clear learning objective and outcomes.

**Future development**

Throughout this research, even when reservations were expressed, there was a clear consensus about the potential benefits of technology based SLEs. Pursuit of the use of the different applications could lead to significant advancement in social work education, for internal and external students, and for field education placements. Anticipated outcomes include, more engaged students, better prepared and trained social workers, and increased satisfaction among employers and ultimately better outcomes for social work service users.

**6.7 Timeframes for Implementation**

Although there was clear interest and support in the expanded use of technology based SLEs, most participants had little detailed knowledge about emerging technologies and their applications. Participants therefore highlighted that, their use has not been rigorously evaluated. Universities were also at different levels of engagement with these technologies, with some grappling with the introduction of LMSs through to those experimenting with Second Life. Technical issues were mentioned as barriers, including limitations on bandwidth. It is therefore timely that the National Broadband Network is being rolled out over the next few years.

The following recommendations have been formulated in an attempt to address these issues and put in place processes to address limitations and concerns, and move forward in a framework of collaboration and mutual interest for accredited social work programmes. This collaboration would also extend across discipline to create an atmosphere of inter-disciplinary learning.
6.8 Recommendations

It is recommended that:

1. The expansion of non-technology based SLEs in the social work curricula should not be resourced by the National Project due to their limitations and high relative cost.

2. Significant and broad scale development and use of LMS, collaborative technologies, content creation solutions, 3D virtual worlds should be actively undertaken, in order to develop SLEs as components of national teaching tools for use throughout the social work curriculum. In part, current non-technology based SLEs could be transformed to these environments. An evaluation process should be included to provide an evidence based-approach to their use.

3. As part of this, priority should be given to further exploration and development of the use of interactive gaming solutions and transmedia approaches in teaching, along with evaluation processes.

4. Areas in the curriculum should be prioritized for development, including interdisciplinary applications and support for field education placements. Some areas will be relatively more difficult to develop than others, which should be taken into account.

5. There should be further exploration of the uses of these technologies and resources for other health disciplines.

6. Consideration should be given to making these technology based SLEs available to all Australian accredited social work schools either through shareware arrangements, licensing, or other suitable agreements.

7. A national approach should be taken, making use of the National Broadband Network and providing easy access for higher education social work programs, but within the context set for the NBN rollout as whole, (i.e. market and other pressures), so that distance students have access.

8. Development should include key stakeholders and utilize noted social work educators and other academic experts, in particular those experienced with technology based SLEs.

9. Development should be based as much as possible on widely available software and technology, so as to minimalise access issues.

10. The content and materials used should be evidence-based and evaluated, culturally appropriate and safe.

11. Education and training should be provided to social work educators, field education educators and key employers to support them in the national roll out and implementation of teaching with new and emerging technologies, including advanced skills in the use of LMSs as well as collaborative technology and 3D environments and gaming technologies.
12. A working party with representatives from accredited social work schools should be formed to as a consultative group to consider barriers and solutions to the expansion of technology based SLEs in the social work curriculum.

13. A technology advisory group should be set up at the university leading further projects in the expansion of technology based SLEs in the social work curriculum. This advisory group should provide support and advice to address these technology concerns expressed in the research and possible solutions to the problems. This would also include internet access issues experienced by employer groups and alternative modes of delivery.
7. References

7.1 Literature Review and report


7.2 Review of Technologies


Further reading:

http://www.elearninglearning.com/adobe-connect/comparison/elluminate/
http://www.nercomp.org/data/media/Web%20conferencing%20tool%20comparsion-NERCOMP.pdf
http://open-tube.com/7-free-web-conferencing-tools
http://www.techsoup.org/learningcenter/internet/page5975.cfm
http://thinkofit.com/webconf/realtime.htm
http://www.highbeam.com/doc/1G1-18806805.html
http://www.thefreelibrary.com/DataBeam+ships+neT.120+Conference+Server+for+real-time+collaboration...-a018654201
http://www.elluminate.com/Company/Media_Center/Press_Releases/Detail/19/?id=193
8. Appendices

8.1 Key stakeholders supporting letters
24 November 2010

Professor Bob Lonie
Professor of Social Work
Social Work & Human Services
Faculty of Health
Room 605, B Wing, O Block
Queensland University of Technology
Kelvin Grove Campus
Victoria Park Road, Kelvin Grove, QLD 4059

Dear Professor Lonie,

This letter confirms the support of the AASW for QUT’s Simulated Learning Environment project.

The Australian Association of Social Workers (AASW) is the professional representative body of Social Workers in Australia, with 5,000 members nation-wide. The AASW is the formal accrediting body for Social Work Education programs, offered at university level, that lead to entry level qualifications in the Social Work profession. The AASW Australian Social Work Education and Accreditation Standards, January 2010 (ASWEAS) stipulate the minimum requirements for Social Work Education Programs, which lead to eligibility for membership of the AASW, for graduates of those programs.

The AASW Board, at its most recent meeting, in November 2011, passed a motion that supports the expanded use of technology based SLEs in the social work curricula to facilitate the preparedness of social work students for undertaking field placement.

The Board also supported the motion, that further consideration be given to the extended use of technology based SLEs across the entire social work curricula, including consideration of the appropriateness of a reduction in the number of field placement hours and substitution with the use of technology based SLEs to augment practice experience. The ASWEAS currently stipulate a minimum of 480 placement hours for successful completion of the social work program.

As the AASW is currently undertaking a review of the ASWEAS, the Board has referred this matter to the Chair of the ASWEAS Review, AASW National Vice President – Education, Ms Marie-Claire Cheron-Sauer. The ASWEAS review is currently considering a range of matters pertaining to the accreditation of social work education programs, including issues pertinent to field education and clinical placements.
It must be noted that, while the AASW Board has referred this matter to the ASWEAS Review Chair for further consideration, it has not formed a view at this point regarding the efficacy of the partial substitution of current field placement hours requirements with the use of technology based SLEs. Further decisions about this will be subject to consideration of the ASWEAS Review recommendations and other evidence presented to the Board about the usefulness of technology based SLEs.

It is already the case that universities employ a variety non-technology and technology-based SLEs as tools in coursework units and in preparation for clinical placements. The AASW supports the use of technology-based SLEs as preparatory tools for clinical placements and considers also that, used in a limited fashion within a clinical placement, SLEs may be of value to contributing to achieving the desired educational outcomes.

In the context of possible future development and implementation of mandatory supervision training for social work field educators, the AASW would also support the inclusion of training regarding SLEs in an overall package of training for field educators.

Yours sincerely

[Signature]

Kandie Allen-Kelly
Chief Executive Officer
November 25, 2010

To Whom It May Concern

As Chair of the Council of Social Work Heads of School, I am writing to endorse the Simulated Learning project undertaken at QUT.

Social Work is an area of critical workforce shortage and, as such we have difficulties finding suitable placement opportunities for students. SLEs may assist us to work with students to build on students’ knowledge of social work and to provide a new and exciting teaching tool in line with the expectations of new students.

We are very much looking forward to the final outcomes of this project and commend the government for introducing new ideas and testing new models.

Yours sincerely

Margaret Alston OAM

Professor and Head of Department, Monash University

Chair, Australian Council of Heads of Schools of Social Work
November 26th, 2010
Bob Lonne
Professor of Social Work
Faculty of Health
Queensland University of Technology
 Kelvin Grove Campus
Victoria Park Road, Kelvin Grove, QLD 4059

Dear Bob
Allied Health Professions Australia (AHPA) was pleased to offer support to the Queensland University of Technology, Social Work and Human Services proposal to the HWA, in relation to simulated learning environments.
As you know, I have since had the pleasure of being on the reference group for this project. The research undertaken and the subsequent project report will, I believe, prove to be a key document in informing future work on SLEs in the social work profession. I congratulate your group on their work. There is clear potential for SLEs to significantly enhance skills development and preparation for field education placements.

It is already apparent that the intention of the HWA to fund the development of SLEs will make an important contribution to enriching the professional development of social work and other Allied Health professional students across the nation.

Vittorio Cintio,
President,
AHPA
8.2 NHWT Data by skill area (BSW)
## Description of SLEs from NHWT Data

### Bachelor Level

<table>
<thead>
<tr>
<th>Skill Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance social work Practice</td>
<td>Under supervision increase praxis and casework with a real client environment</td>
</tr>
</tbody>
</table>
| Social work/professional practice       | Under supervision students commence praxis with a real client environment  
                                    | Students participate in case study scenarios to role play and discuss in small groups to practice social work skills and explore practice approaches and to develop critical analyses  
                                    | Role plays (some courses will use professional actors) are used to simulate real life scenarios and how to exercise judgement and practice.                                                                 |
| Counselling skills                      | Students participate in role play (sometimes filmed) then group discussion                                                                                                                                 |
| Engagement skills (and building rapport)| Students participate in role play (sometimes filmed) then group discussion  
                                    | Advanced social work practitioners engage in a role play simulation in which students must demonstrate their skill in engagement and rapport building with a ‘client’. The practitioner and lecturer both assess the students’ performance. Students must pass this assessment to be passed as ready for placement. |
| Interview skills                        | Students participate in role play (sometimes filmed) then group discussion  
                                    | Role Playing (verbal)  
                                    | Role Playing (verbal)  
                                    | Students conduct role-play interviews which are recorded and assessed by academic staff to assess skill levels obtained prior to real life field placements  
                                    | verbal role play with peers, then in real time videoed to enable feedback and then with Lecturer as physical/virtual client |
| Therapeutic skills development          | Students participate in role play (sometimes filmed) then group discussion                                                                                                                                 |
| Group facilitation/Team work            | Students practice group facilitation skills (how?)  
                                    | Role Playing (verbal)  
                                    | Role Playing (verbal)  
                                    | Students work in groups to practise case work scenarios  
<pre><code>                                | Students undertake group work in teams to meet their set goals in a structured manner and analyse the group dynamics which |
</code></pre>
<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
</table>
| Listening skills              | Recorded interview and reflective paper  
| Interpersonal skills – active listening/communications skills | Students undertake role plays to learn active listening and attending within the Introduction to Professional Helping.  
Students role play interviewing and counselling scenarios  
Students participate in videoed role plays in communication skills laboratories (Human services?)  
Students observe & practice written and verbal skills  
Students engage in role plays with peers and with professional actors. Role play assessments with actors are video recorded and assessed by academic staff and social workers from the field.  
Students role play a variety of interpersonal communication skills in classroom and produce a video of themselves interviewing. Feedback is provided by classmates and the teacher on the skills demonstrated |
| Research                      | Practice in-depth interview skills and co-operative inquiry Skills  
Students must utilise their research skills in keeping with AASW code of ethics on placement  
Students undertake projects including interviewing key informants, running focus groups, surveys, analysing data and writing final reports. |
| Interview and assessment skills| Role play                                                                                                                                 |
| Interview skills working with grief and loss | Role play and video recorded interview |
| Organisation context          | Students must work within organisational contextual restraints under guidance from a field educator |
| Self learning and professional development | Students must actively negotiate their learning goals on placement, and must participate in the Inter-professional Unit online where they simulate being in a multi-disciplinary team |
| Social policy                 | Students must work within policy guidelines in |
| Social work ethics and professional practice | • Students work with clients to develop social work practice skills and negotiate ethical dilemmas faced in practice whilst under the guidance of a field educator  
| Use of knowledge in practice (theory into practice) | • Students must participate in case work under guidance and/or observation of a field educator and/or other agency employee  
• Social Work students participate in the Theory to Practice Ward simulation conducted each year by the Nursing Program.xxx. Students interviewing 'patients' and complete psychosocial assessments in a multidisciplinary environment  
| Ethical thinking | • Students undertake an oral examination by being asked to read a case scenario from practice and discuss their ethical position on helping in this scenario. Practitioners from the field form part of the examination panel  
| Networking skills | • Classes are held in specific social work agency settings to give students the opportunity to meet practitioners. Practitioners are invited to participate in the activities of the class for that week  
| Agency visits | • Students arrange visits to agencies that they are interested in and carry out interviews with social workers on staff  
| Working in practice situations | • Students work through a range of common practice situations/scenarios with feedback provided by peers and lecturers (role plays).  
| Group work (clinical) | • Students facilitate and evaluate group work  
| Mental health and assessment skills | • students role play and act out conducting assessments and evaluations  
| Counselling | • Role Playing (verbal)  
• Role Playing (verbal)  
• Students participate in role plays in class of counselling skills. They undertake videoed practice sessions which they critique as part of their assessment.  
• face to face role plays for the development of technical skills, and opportunities to link theory to practice  
| Problem Solving | • Students work in groups and individual on case studies and apply problem solving techniques  
| Working with clients and communities/community practice | • Similar role-play interviews and conducting group and community meetings also occur while students are on placement in community and government organisations  

relations to the provision of social services whilst on placement

QUT | 7B8. Appendices 75
| **Community observation, asset-based assessment and community development** | • Community observation, asset-based assessment and community development  
• Capacity inventories, team building skills, collaborative problem solving, submission writing, networking and group work are used in practice sessions of real world community work techniques. |
| **Violence in families** | • Role plays: screening & risk assessment, court observation, child sexual assault, same sex relationships counselling & interagency collaboration simulation |
| **Assessment skills** | • Case studies are used to simulate the assessment activities that will be required of students |
| **Aged care assessment and intervention** | • ACAT assessment |
| **Initial interview and interventions skills** | • Role playing: Interviewing strategies, use of questions, empathic and non-judgemental manner applied to topics such as suicide, domestic violence, AOD. |
| **Inter-professional practice** | • Interdisciplinary team building exercises, team project planning and management |
| **Kinship** | • Experiential exercise in Indigenous culture and beliefs |
| **Skills in working with people (1 and 2)** | • Role plays: Assessment, advocacy, mediation, conflict resolution, cultural competence, engaging involuntary clients, group work. Report writing, values and ethical practice |
| **Case work with individuals and family** | • Case studies of individuals and families are used as problem-based learning. Students demonstrate their case work skills applied to case studies. |
| **Mental health** | • Literature and film case studies of mental health/illness from consumer/carer perspectives are used to assist students develop skills, sensitivity and plan appropriate interventions. |
| **Therapeutic interventions skills/intervention planning** | • Students engage in role plays with peers, using group practice scenarios generated by academic staff.  
• Students engage in role plays with peers, using individual and family work practice scenarios generated by academic staff.  
• Case studies are used to simulate the assessment activities that will be required of students |
8.3 NHWT Data by skill area (MSW)
# Description of SLEs from NHWT Data

## Master Level

<table>
<thead>
<tr>
<th>Skill Area</th>
<th>Description</th>
</tr>
</thead>
</table>
| Social work/professional practice | - Students participate in case study scenarios to role play and discuss in small groups to practice social work skills and explore practice approaches and to develop critical analyses  
- Role plays (some courses will use professional actors) are used to simulate real life scenarios and how to exercise judgment and practice. |
| Counselling skills | - Students participate in extensive role plays and case management scenarios.  
- Face to face role play for the development of technical skills and opportunities to link theory to practice  
- MSW [Q] students will have the opportunity to engage in work in the counseling clinic |
| Engagement skills (and building rapport) | - Students participate in role play (sometimes filmed) then group discussion |
| Interview skills | - Students participate in videoed role plays in communication skills laboratories  
- Students conduct role-play interviews which are recorded and assessed by academic staff to assess skill levels obtained prior to real life field placements |
| Therapeutic skills development | - Students participate in role play (sometimes filmed) then group discussion |
| Group facilitation/team/group work | - Students work in groups to practice case work scenarios  
- Students participate in role playing scenarios  
- Students work in teams to prepare and run a small group activity |
| Listening skills | - Students role play a variety of interpersonal communication skills in classroom and produce a video of themselves interviewing. Feedback is provided by classmates and the teacher on the skills demonstrated |
| Interpersonal skills – active listening/communications skills | - Students must utilise their research skills in keeping with AASW code of ethics on placement |
| Research | - Students participate in role play (sometimes filmed) then group discussion  
- Students participate in videoed role plays in communication skills laboratories |
| Organisation context | - Students must work within organisational contextual restraints under guidance from a field educator |
| Self learning and professional development | • Students must actively negotiate their learning goals on placement, and must participate in the Inter-professional Unit online where they simulate being in a multi-disciplinary team |
| Social policy | • Students must work within policy guidelines in relations to the provision of social services whilst on placement |
| Use of knowledge in practice (theory into practice) | • Students must participate in case work under guidance and/or observation of a field educator and/or other agency employee • Role plays - students work through a range of common practice situations/scenarios with feedback provided by peers and lecturers. |
| Ethical thinking | • Students work with clients to develop social work practice skills and negotiate ethical dilemmas faced in practice whilst under the guidance of a field educator |
| Mental health and assessment skills | • Students role play and act out conducting assessments and evaluations |
| Counselling | • Students participate in role play (sometimes filmed) then group discussion |
| Working with clients and communities/community practice/engagement | • Similar role-play interviews and conducting group and community meetings also occur while students are on placement in community and government organisations • Role plays and case scenarios. |
| Assessment skills | • Case studies are used to simulate the assessment activities that will be required of students |
| Therapeutic interventions skills/intervention planning | • Case studies are used to simulate the assessment activities that will be required of students |
8.4 List of literature review search terms
SLE keywords and search terms used

Simulated Learning Environments and social work education

e-learn environments and social work education

e-learning

Information technology and social work

Digital learning environments

Distance education

Blended learning

Web-based learning

Simulation-based learning

Simulated learning

Technology

Simulation

Role-play

Open learning

Online learning

Internet in education

Computer assisted education

Interactive multimedia

Web 2.0

Problem based learning

Experiential learning

Collaborative learning

Australia, social work and e-learning

Experiential learning

Virtual
Main journals searched:


Websites:
Search in ASCILITE (Australian Society for Computers in Learning in Tertiary Education) website / conferences for ‘social work’ (as technology and Australian was assumed).

Google Scholar

Databases:

Proquest

EBSCOhost

Informaworld
8.5 Survey questions for Universities
SECTION A:

Definition of SLE: a simulated learning environment (SLE), in the context of social work, involves the construction of situations, interactions and clients which mimic real life situations, interactions and clients, for the purpose of fostering the training of social work practitioners in the skills and knowledge necessary for their professional practice.

General Questions:

What is your role?

Does your university offer a Bachelor of Social Work?

In total how many students are enrolled in your BSW?

Does your university offer a Master of Social Work – Qualifying?

In total how many students are enrolled in your MSW - Qualifying?

Does your university offer a Master of Social Work – Advanced?

In total how many students are enrolled in your MSW - Advanced?

Would you be willing to participate in a brief phone interview with one of our research team? We will follow-up some survey questions in more detail and will be interested in finding out what you think about the impact of SLEs on clinical training days, and impacts on staff and students, as well as what innovative SLEs are already in use now and suggestions for their use and implementation. The phone survey should take about twenty minutes.

If you said Yes, please enter your contact details:

SECTION B:

Definition of non-technological SLE: a non-technological SLE is constructed without the use of technology, or in which technology is incidental; for example role plays in a classroom setting, or text-based case studies

What non-technological SLEs (e.g. text-based) do you personally use in class?

You can indicate more than one.

Please enter the title of the unit/s or subject/s in which you use non-technological SLEs in the space provided.

Please enter new items on a new line.

Please rank the following by choosing the item that best reflects your opinion:

SECTION C:

Definition of technology-based SLE: a technology-based SLE is constructed using technologies which might be as simple as video-recording, through to the use of virtual worlds in which students act and interact through avatars, or the use of social networking; the crucial point is that the use of the technology affords opportunities for learning which go beyond what is possible for non-technological SLEs

What technology-based SLEs (if any) do you use in your subjects/units at present?

If you do use technology-based SLEs how do you use them?

Please enter the title of the unit/s or subject/s in which you use technology-based SLEs in the space provided.

Please enter new items on a new line.

In general, how capable are your students in using these technologies?

In general, how capable are you in using these technologies?

What technical support does your university provide in using Information Communication Technology (ICT) platforms (these provide the architecture for the technology based SLEs)?

Which students are these technology-based SLEs used with?

Please rank the following by choosing the item that best reflects your opinion:

What types of learning approaches are best suited to using technology-based SLEs in the Social Work Curriculum?

What types of learning approaches are best suited to using technology-based SLEs in the Social Work Curriculum?

What types of learning approaches are not suitable for using technology-based SLEs in the Social Work Curriculum?

Do you see potential in using technology-based SLEs to support student learning on field education placements?

In general, what advantages do you see in using technology based SLEs?

What are the main barriers (if any) you see in integrating technology-based SLEs into the Social Work Curriculum?

In general how capable are you in using these technologies?

SECTION D: Further Information

Do you know of anyone who is working with these sorts of technologies who this survey should be forwarded to?

Please enter names, phone numbers and emails (separate each person with a new line).

Do you have any additional comments?
8.6 Survey for Key Employers
SECTION A:

**Definition of SLE:** a simulated learning environment (SLE), in the context of social work, involves the construction of situations, interactions and clients which mimic real life situations, interactions and clients, for the purpose of fostering the training of social work practitioners in the skills and knowledge necessary for their professional practice.

**General Questions:**

- What is your role?
- What area do you work in?
- How many students would your Organisation/Agency have on placement per year, who are enrolled in a BSW?
- How many students would your Organisation/Agency have on placement per year, who are enrolled in a Master of Social Work - Qualifying?
- How many students would your Organisation/Agency have on placement per year, who are enrolled in a Master of Social Work - Advanced?
- Would you be willing to participate in a brief phone interview with one of our research team? We will follow-up some survey questions in more detail and will be interested in finding out what you think about the impact of SLEs on clinical training days, and impacts on staff and students, as well as what innovative SLEs are already in use now and suggestions for their use and implementation. The phone survey should take about twenty minutes.
- If you said Yes, please enter your contact details:

SECTION B:

**Definition of non-technological SLE:** a non-technological SLE is constructed without the use of technology, or in which technology is incidental; for example role plays in a classroom setting, or text-based case studies.

**What non-technological SLEs (e.g. text-based) does your Organisation/Agency use for training or educational purposes?**

- You can indicate more than one.

Please rank the following by choosing the item that best reflects your opinion:

SECTION C:

**Definition of technology-based SLE:** a technology-based SLE is constructed using technologies which might be as simple as video-recording, through to the use of virtual worlds in which students act and interact through avatars, or the use of social networking; the crucial point is that the use of the technology affords opportunities for learning which go beyond what is possible for non-technological SLEs.

**What technology-based SLEs (if any) does your Organisation/Agency use?**

- If you do use technology-based SLEs how do you use them?
- In general, how capable are your students in using these technologies?
- In general, how capable are you in using these technologies?

Please rank the following by choosing the item that best reflects your opinion:

**What types of learning approaches are best suited to using technology-based SLEs in the Social Work Curriculum?**

<table>
<thead>
<tr>
<th>What types of learning approaches are best suited to using technology-based SLEs in the Social Work Curriculum?</th>
</tr>
</thead>
<tbody>
<tr>
<td>What types of learning situations are best suited to using technology-based SLEs in the Social Work Curriculum?</td>
</tr>
<tr>
<td>What types of learning situations are not suitable for using technology-based SLEs in the Social Work Curriculum?</td>
</tr>
<tr>
<td>In general, what advantages do you see (if any) in using technology based SLEs?</td>
</tr>
<tr>
<td>To what extent do you support the use of technology based SLEs in the social work curriculum?</td>
</tr>
<tr>
<td>Would you support the expanded use of SLEs to assist students on placement at your Organisation/Agency?</td>
</tr>
<tr>
<td>What are the main barriers (if any) you see in integrating technology-based SLEs into the Social Work Curriculum?</td>
</tr>
<tr>
<td>What Information Communication Technologies (ICTs) or social networking platforms (if any) do you use personally (not for teaching)?</td>
</tr>
<tr>
<td>In general how capable are you in using these technologies?</td>
</tr>
</tbody>
</table>

**SECTION D: Further Information**

- Do you know of anyone who is working with these sorts of technologies who this survey should be forwarded to?
- Please enter names, phone numbers and emails (separate each person with a new line).
- Do you have any additional comments?
8.7 Interview questions – universities
Simulated Learning Environments (SLEs) Project

Definition of SLE: a simulated learning environment (SLE), in the context of social work, involves the construction of situations, interactions and clients which mimic real life situations, interactions and clients, for the purpose of fostering the training of social work practitioners in the skills and knowledge necessary for their professional practice.

Non-technology based SLES

Definition of non-technological SLE: a non-technological SLE is constructed without the use of technology, or in which technology is incidental; for example role plays in a classroom setting, or text-based case studies.

1. Please tell me about your experiences in using non-technology based SLEs.
2. What has been the impact on learning outcomes?
3. In what areas do you use them?
4. Who do non-technology based SLEs work for?
5. Who do non-technology based SLEs not work for?
6. What are the advantages of using non-technology based SLEs?
7. Can you tell me about what you think their limitations are?
8. Could you see their use in social work curricula expanded? How?

Technology based SLES

Definition of technology-based SLE: a technology-based SLE is constructed using technologies which might be as simple as video-recording, through to the use of virtual worlds in which students act and interact through avatars, or the use of social networking; the crucial point is that the use of the technology affords opportunities for learning which go beyond what is possible for non-technological SLEs.

9. Can you tell me what you know about the use of technology based SLEs?
10. Can you tell me about your experiences in using technology based SLEs?
11. What has been the impact on learning outcomes?
12. Who do technology based SLEs work for?
13. Who do technology based SLEs not work for?
14. What are the advantages of using technology based SLEs in teaching?
15. Can you tell me about what you think limitations are in using technology based SLEs?
16. Can you tell me about any innovations in the use of technology based SLEs?
17. Generally speaking, what do your students think about the use of technology based SLEs?
18. Can you see how they could be used in the delivery of clinical training through field placements?
19. How would you see the use of technology based SLEs in the future?
20. In what areas of the Social Work Curriculum do you believe using technology based SLEs could have an advantage in learning outcomes?
21. What if any of your current SLEs that are non-technology based can you see being migrated to a virtual environment?
8.8 Interview questions – key employers
Simulated Learning Environments (SLEs) Project

Questions for employers

Definition of SLE: a simulated learning environment (SLE), in the context of social work, involves the construction of situations, interactions and clients which mimic real life situations, interactions and clients, for the purpose of fostering the training of social work practitioners in the skills and knowledge necessary for their professional practice.

Non-technology based SLEs

Definition of non-technological SLE: a non-technological SLE is constructed without the use of technology, or in which technology is incidental; for example role plays in a classroom setting, or text-based case studies

1. In what area do you work – e.g. Government, NGO – ask if neither of these
2. Please tell me tell me about your experiences in using non-technology based SLEs
3. What has been the impact on learning outcomes?
4. In what areas do you use them?
5. What are the advantages of using non-technology based SLEs
6. Can you tell me about what you think their limitations are?
7. Could you see their use in social work curricula expanded? How?

Technology based SLEs

Definition of technology-based SLE: a technology-based SLE is constructed using technologies which might be as simple as video-recording, through to the use of virtual worlds in which students act and interact through avatars, or the use of social networking; the crucial point is that the use of the technology affords opportunities for learning which go beyond what is possible for non-technological SLEs

8. Can you tell me what you know about the use of technology based SLEs?
9. Can you tell me about your experiences in using technology based SLEs?
10. What has been the impact on learning outcomes?
11. What are the advantages of using technology based SLEs in teaching in the placement environment?
12. Can you tell me about what you think limitations are in using technology based SLEs?
13. Can you tell me about any innovations in the use of technology based SLEs?
14. Generally speaking, what do your students think about the use of technology based SLEs?
15. Can you see how they could be used in the delivery of clinical training through field placements?
16. How would you see the use of technology based SLEs in the future?
17. In what areas of the Social Work Curriculum do you believe using technology based SLEs could have an advantage in learning outcomes?
18. What if any of your current SLEs that are non-technology based can you see being migrated to a virtual environment?
19. Are there any barrier to using technology based SLEs in your organisation? If so what are they?
8.9 Focus group summary
Simulated Learning Environments Project
Focus Group Information

Terminology

**Learning Management System (LMS):** Learning and assessment resource, track progress and results (Blackboard, Moodle)

**Online Collaboration Solution:** Web based, locations independent, multipoint, real time, synchronous, voice, video and data software application (Elluminate)

**3D environments:** Online interactive virtual worlds, users generally take the form of Avatars (Second Life, Open Sims)

**Content creation Solutions:** Software based applications that can be used to create content (Adobe Captivate)

**Gaming Technology:** played over some form of computer network—could be online or software driven.

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**Key Findings**

1. Non technology based SLEs are extensively used in the social work curriculum, predominately in skills based subjects/units, however they are also used successfully in theory subjects/units
2. They are seen as being effective as a learning tool but are time consuming and resource draining
3. External students and those who have difficulty getting to campus are disadvantaged by not have the same access to these SLEs
4. They are seen by some as not being “real” enough
5. Technology based SLEs are used sporadically across social work courses, however, collaborative technology was more widely used in varying degrees
6. The potential for the expansion of technology based SLEs in the social work curriculum was given widespread support and they were seen as an effective learning tool
7. Support for their expansions was not just in the area of fieldwork placement but right across the social work curriculum
8. Overall, there was not a good understanding of the technology both new and emerging which leads to a lack of visioning
9. There was a variety of views on the use of technology based SLEs leading to a reduction the hours students spend on placement, but this could reflect the lack of knowledge in how these technologies could be used
10. However, there was consensus on them enhancing the preparedness of students and supporting students on placement
11. Limitations in knowledge and use of new and emerging technologies was acknowledged for both staff and students, as well as access to resources
Other points of interest

- Some social work programmes are already exploring Second Life
- Others have used content creation solutions to create scenarios—there can be a suspending of disbelief in using these to create “real” situations
- Gaming technology has been suggested as a possible tool in teaching

Focus Group discussion

1. Feedback on results
2. What are the barriers and the advantages of the expanded use of technology based SLEs
3. What are your thoughts on the use of 3D interactive virtual environments as a learning tool—what are the advantages and disadvantages, limitations or barriers
4. What do you think the use of gaming technology—what are the advantages and disadvantages, limitations or barriers
5. How do we move forward—how do we overcome the limitations and barriers?
6. What are the visions for the future use of technology based SLEs
7. What would this mean for staff workloads and training?
8. Any suggestions for the recommendations?
9. Discussion

Thank– you for your participation