Exploring the value of immersive technologies and authentic scenarios to engage students in anti-oppressive praxis

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ABSTRACT

Social work education has yet to undertake research into whether there is enhanced learning in using spatially immersive technologies in simulation methods based on authentic scenarios. The research problem is the lack of teaching resources for engaging students in role plays using authentic scenarios to enable them to demonstrate anti-oppressive praxis. The evaluative research aim is to explore if simulated responses to a real life case study using immersive technologies could engage students to embrace collaborative, experiential learning. The research methods utilised were a survey from the social work subject evaluation and a focus group with participants chosen using a purposive sample of stakeholders. The results show the value of immersive technologies and how they relate to enhancing students' engagement in subject material and learning goals by increasing their ability to create richly crafted roles, and to design finely nuanced scenarios which are context-responsive. This equated with relevant and feasible responses to the real life case study issues. Further research is required to understand the potential for transformatory learning from the interplay of immersive technologies, real life practice issues and anti-oppressive praxis.

Keywords: *Experiential Learning; Student Engagement; Immersive Technology; Authentic Scenarios; Engaged Pedagogy; Anti-oppressive Praxis*

INTRODUCTION

Social work education in western countries is typically provided in universities with dedicated components of the curriculum requiring students to complete experiential learning in human service agencies in a range of fields of practice (Australian Association of Social Work (AASW), 2012). The pedagogical challenge relates to educating students for professional practice in what are complex and contested professional environments (Fook, 2016). Social work students' ability to enact professional values, theory and practice has been recognised (Payne, 2014) as crucial to being work-ready upon graduation. Emphasis by some universities on work-integrated learning is indicative of the need to enable students to translate formal theories and professional values into practice. Work-integrated learning can involve a range of strategies such as practitioners being included in subjects as guest educators; field excursions or projects in agencies as part of class-based assessments, and; field placements in human service agencies (University of the Sunshine Coast, 2017). The uptake of blended learning strategies, where educators are encouraged to use digital resources to augment face-to-face teaching, can also contribute to the overall quality of learning and student engagement (Wivell & Day, 2015).

The university context is itself a field of practice for social work educators and students which some authors describe as *immersive universities* (Boddington & Boys, 2011). For example, how teaching and learning happens in the tertiary sector is intricately influenced by competition for reputation, funds and students and a university context of increasingly managerialist governance and commercialised agendas (White, Carvalho, & Riodan, 2011). The need, therefore, to appreciate the "living curriculum" (Grundy, 1987), that is, how these politics impact on learning and teaching practice and relationships, is as important as the subject content, methods of assessment and learning outcomes. Interrelatedly, contemporary neoliberalist social work and social welfare practice environments can create a range of challenges in maintaining professional integrity and competence (Fook, 2016). Anti-oppressive knowledge can aid students' appreciation of how to resist and challenge the deleterious impacts of neoliberalism (Thompson, 2011). This set of theories, which provide a critical analysis of all forms of inequality, and which suggest how to address the causes of inequality are integral to social work's mandate (International Federation of Social Workers, 2017). In this context, anti-oppressive praxis involves the critically informed alignment of social work values, theories and practices to address issues of social injustice and harm (Clifford & Burke, 2009). Therefore, the acquisition of anti-oppressive knowledge devoid of a range of opportunities to practise and reflect on its relevance is potentially setting students up to fail with unrealistic expectations of what is possible on graduation.

Social work educators can provide an intensification of students' learning to work anti-oppressively through the use of experiential learning methods such as simulation-based scenarios and problem-based tasks (Linsk & Tunney, 2014). An interrelated pedagogical challenge arises if innovation in an anti-oppressive curriculum sits in tension with how students may be experiencing the classroom environment and learning requirements. Researchers (Beaumont & Cemlyn, 2005, p. 52) draw attention to the need to align classroom practice and relationships with anti-oppressive ethics (Clifford & Burke, 2009) to increase the congruence and efficacy of students' experiences with the learning foci.

For present purposes, a movement towards anti-oppressive praxis is located in increasing students' choice relating to how they undertake experiential learning for the subject.

The engaging of students in role plays that are authentic in the classroom is a key consideration in practice-based subjects (Bowers & Pack, 2017). It is expected that increased authenticity will enable students to engage with the learning activities as there will be a closeness of fit to real-life situations. Further, authenticity refers to the possibility of enabling anti-oppressive praxis between educator and students in the classroom (Ross, 2007). Thus, students are learning to become anti-oppressive practitioners, whilst at the same time experiencing anti-oppressive practice in the classroom itself.

Role plays and other experiential methods seek to engage students in active and reflective learning (Kilgour, Reynaud, Northcote, & Shields, 2015) using scenarios and problem-based tasks (Errington, 2010). Educator-constructed case scenarios and tasks attempt to mimic the complexity of the real-life situations social work students may encounter upon graduation. These teaching resources are, however, quite limited in enabling students to enter into and immerse themselves in the intensity, complexity and dynamic nature of practice-like scenarios. Thus, there can be a disjuncture between claims of providing authentic learning experiences for students and how the students may experience the teaching methods. Students typically express dislike for doing role plays (Shepherd, 2010) where this is compounded if role plays are part of assessment requirements. Research shows that embarrassment and discomfort in doing role plays is a factor in some students' reluctance to participate in tutorial activities (Nestel & Tierney, 2007). Positive learning experiences using role plays were related to higher levels of realism in the tasks, previous experience in role plays and adequate preparation and debriefing (Nestel & Tierney, 2007). An anti-oppressive stance also suggests that increasing students' choice in how they negotiate the learning requirements may also be a factor in positive student engagement.

A key question to arises from these considerations is:

What teaching methods may contribute to social work students' engagement and active, reflective learning?

The article outlines the evaluative research undertaken to answer this question in a core social work practice subject about anti-oppressive practice in groups. Thus, the purpose of the evaluation is to explore if simulated responses to a real-life case study using immersive technologies enables students to engage in collaborative, experiential learning. This, in turn, will provide a basis for future research into whether choice in how students undertake the learning tasks may be a movement toward experiencing anti-oppressive praxis in the classroom.

The evaluative research ethics approval process and methods of a survey and a focus group are explained and the themes arising from the data analysis are presented. The evaluation results provide some positive indications that authentic scenarios, supported by immersive technologies, can improve student engagement in experiential learning with their peers. Anticipating future research directions, the discussion explores the implications for anti-oppressive teaching practice that employs these types of innovative methods.

The article proceeds by presenting an overview of the research literature and debates relating to the importance of experiential learning and of creating authentic learning opportunities.

OVERVIEW OF EXPERIENTIAL LEARNING RESEARCH

Tertiary educators in the helping professions and education have written extensively about the importance of students being reflective, active learners (Fook, 1996; Schön, 1983). Friere's (1970) idea of *conscientization* as the critical skills of reflecting and acting on the problem in order to name and change the world, has been of seminal influence, including in social work education (Cooper & Briggs, 2016; Jones, 2015). Social work educators refer to transformative learning, in the tradition of Mezirow (1978), which is summarised by Dirkx (1998), as a capacity for learning to enable ethical and change-oriented social work practice. The concept of transformative learning involves the process of "perspective transformation" and has three dimensions: psychological (changes in understanding of the self), convictional (revision of belief systems), and behavioural (changes in lifestyle) (Mezirow, 1991, 2000).

The purpose of transformative learning is emancipatory practice which is referred to here as anti-oppressive praxis. Key aspects of anti-oppressive praxis are power sharing and avoiding discriminatory and controlling processes with students, clients and communities. There can be considerable challenges, for example, for educators trying to avoid the expert-as-power-over-students role and didactic methods of teaching (Ross, 2007). Thus, inductive methods, such as when students have choices to co-create learning opportunities together in the "Immerse Lab" and through the authentic learning and assessment process is power-sharing and therefore an example of an anti-oppressive stance. Morrison writes about this as the gap between what educators preach and how they practise, and concludes "that critical reflection and creative approaches [may] assist in implementing an emancipatory approach to teaching practice" (2015, p. 98).

These ideas intersect with the aim of authentic learning (Bowers & Pack, 2017) in its various forms which is to engage students in an experience in the classroom that mimics or closely parallels practice realities in the field (Herrington, 2006). How to construct authentic learning opportunities in classrooms for professional education was the main impetus for the evaluative research being presented in this article.

The other impetus was educator-focussed learning on how to design and implement a subject on anti-oppressive practice skills such that students *practise* being anti-oppressive through the way the subject was progressed. This focus is the basis for future action research projects. For current purposes, the adoption of an engaged pedagogy (hooks, 1994) is demonstrated in endeavours to create choice for students undertaking learning activities which are engaging and authentic and thereby may provide a goodness of fit for students to be (social justice) work ready on graduation.

A review of the research literature found two illustrative examples of how case studies and problem-based scenarios are employed to enable students to integrate theory and practice in their undergraduate degrees. Moore, Tschanter, and Rees's (2016) blended learning case study approach comprises a set of mini video vignettes of the processes and nuanced

dimensions involved in discretionary decision-making in an ethics subject at Charles Darwin University. The resource locates the scene for social work practice within an organisational context to avoid de-politicising social issues. The video vignette resource by Moore et al. (2016) provides an example of how to weave the influences of the organisational and policy context into the micro aspects of practice with a client. Students engage as active learners with an already created scenario which is provided on-line, where they respond to questions designed for each vignette and are asked to reflect on discussion that arises. Students can experience the case study in a self-directed or an educator-facilitated manner.

The University of Wollongong has a reputation for practice-based learning which is strongly influenced by problem-based and scenario-based learning approaches (Errington, 2010; Loyens, Kirschner, & Paas, 2011) as the corner-piece to its social work education program. These methods typically require students to reflect upon a poorly constructed practice problem provided in a written scenario format as the baseline of their understanding at the commence-ment of the subject. The pedagogy builds students' understanding during the semester to the point of a sophisticated, collaborative construction of the problem (Bowers & Pack, 2017). According to Errington, "the process … incorporates deep level learning via acts of decision-making, critical analyses, gathering and justification of appropriate evidence, and the consideration of alternative solutions (hypotheses) to any pursued problem" (2010, p. 21).

The use of simulation exercises, both computer- and non-computer-based, is another set of approaches that has found some efficacy in social work education (Cooper & Briggs, 2016; Faherty, 2013; Linsk & Tunney, 2014). Typically, simulations "involve interaction with people who portray standardised clients in a typical social work practice context … [which is] followed by feedback from these 'clients' and from peers and instructors" (Linsk & Tunney, 2014, p. 473). A review of interprofessional, simulation-based education in undergraduate programs found "common … outcomes relating to increased confidence, knowledge, leadership, team work and communication skills" (Gough, Hellaby, Jones, & MacKinnon, 2012, p. 153). At the same time, educators note that "simulations require consideration of student preparation, the roles of facilitator and students, and assessment of practice" (Cooper & Briggs, 2016, p. 79).

There is a burgeoning literature on three-dimensional (3D) immersive worlds (Phillips et al., 2015; Pricer, 2011) which involve life-like avatars and virtual realities. These resources can serve the purpose of authentic assessments which also seek to "parallel or replicate the real world" in the learning experience (West & Heath, 2009). There are a range of types of 3D immersive online environments with *Second Life* being the most popular (Fisher, Exley, & Ciobanu, 2014). As Hew and Cheung note, "virtual worlds may be utilised for the following purposes: 1) communication spaces, 2) simulation of space (spatial), and, 3) experiential spaces (acting on the world)" (2008, p. 33). Realism, particularly "cognitive realism" tends to be valued over "physical verisimilitude" (Herrington, Reeves, & Oliver, 2007, p. 65) in immersive virtual realities.

RESEARCH GAP 1: LACK OF IMMERSIVE LEARNING OPPORTUNITIES

Simulation methods that engage students in performing roles and tasks in an educator-constructed scenario attempt to respond to the well-acknowledged issue of the gap between

theory and practice (Payne, 2014) and, in so doing, provide an opportunity for authentic learning. At the same time, it is suggested that simulation approaches may be further enhanced by the use of immersive technologies which involve students in a personally embodied, socially interactive and spatially dynamic experience. The University of the Sunshine Coast (USC) has an immersive space which is a large, windowless room with minimal furniture, where three of the four walls could display projected images, videos, text and other context-creating materials.

Fig. 1

Thus, the opportunity was afforded of enabling students to be embodied, active learners where cognitive engagement co-existed with emotional intensity and physical realism. This was made possible by being in the spatiality of the (immersive) space, using the space for communication with other real people in real time, and the students experiencing acting on the world while being influenced by the projected images, sounds and colours. It was the mix of aspects of immersive technologies which, when coupled with a real life case study (see further later), resulted in an innovative authentic learning experience. There has been no research in social work education on the value of this particular technology, utilising a real life case study of oppression and where the curriculum underpinning it also seeks to enable anti-oppressive praxis.

RESEARCH GAP 2: LACK OF AUTHENTIC SCENARIO OPPORTUNITIES

The social work subject content and assessment were designed around a real-life case study which enabled a type of augmented reality where real life experience is enhanced (Billinghurst, 2002, p. 1). In this sense the pedagogical approach was a case study method which Johansson describes as involving "a case … [which] should be a complex functioning unit; be investigated in its natural context with a multitude of methods and be contemporary" (2003, p.

2). Thus, the case study teaching method adopted pushed the idea of augmented reality towards actual reality of engagement and direct practice with an actual community and their struggle for social justice. It is expected that, if simulation approaches draw on real-life case studies, the gap between constructed and authentic scenarios closes.

The case study used in the social work subject is presented in *Under Corporate Skies: A Struggle Between People, Place and Profit* (Brueckner & Ross, 2010) which is the required text. Further, the realism of the case study meant students' research about the issues needed to be accurate and comprehensive as well as likely to be of value for the people in the situation being studied. As a result, students and staff became actively involved in the co-construction of a set of group-based strategies for addressing issues of injustice in the case study. The case study approach reflects an engaged pedagogical approach typical of authentic learning (Cooper & Briggs, 2016) but extending what authentic means to include real-life scenarios from an actual situation.

THE RESEARCH PROBLEM AND QUESTION

In previous versions of the social work subject, feedback from students and the educator's own evaluation included a range of difficulties for students in engaging in role plays to develop group-work skills and in designing and demonstrating an anti-oppressive response to an aspect of student-created scenarios. The more traditional teaching approach made this problematic for many students as there was not enough structure in the development of role plays and or in the choice of topic area. Previously, students had to choose a social justice issue and tended to organise into study groups for the skills demonstration according to a shared interest in the chosen issue. This worked when the study group dynamics worked and the scenario chosen had readily accessible material that students could use. Further, students had tended to show group-work skills in the assessed demonstration piece with insufficient attention to impacting contextual and structural factors in the scenario. The ability to link a client's or a community's circumstances with broader socio-economic and political influences, is a defining feature of social work (AASW, 2012). As well, the roles adopted by students during the skills demonstration were not always believable due to the lack of case study material available for students.

At the same time it was recognised by the educator that changes to the curriculum may create unexpected demands on students. As Coleman identifies, there are three types of response to anti-oppressive teaching:

- A majority who show some heightened awareness[;]

- A minority for whom it is a key point of life discovery, enabling them to make self-connections between self-awareness and cognitive learning, and;

- A minority who remain closed and resistant to this learning. (cited in Beaumont & Cernlyn, 2005, p. 50)

The pedagogical stance assumed was one of giving students scope to choose how much of an upfront role they chose in the group activities and in this way there were a broad range of ways students could complete the subject requirements.

There has yet to be research in social work education on this intersection between students demonstrating learning through a response to a real-life case study issue using immersive technologies to augment their demonstrations. The present focus is on exploring whether this intersection holds promise for enhancing student engagement and experiential learning with their peers. The research question is:

Is the use of a real life case study and immersive technology engaging for students and does it enhance their experiential learning?

THE RESEARCH METHOD

The action research project (Stringer, 2014) is a discrete, exploratory, evaluative, research endeavour. It will inform future research into the potential for anti-oppressive praxis through the cultivation of student engagement and collaboration with the educator in authentic learning scenarios using immersive technologies. The "look" phase of action research involves the collecting of data; the "think" stage involves exploring and analysing the data and the "act" phase relates to the plan for future research (Stringer, 2014). As Stringer writes, this:

…basic action research routine provides a simple yet powerful framework – look, think, act – that enables people to commence their inquiries in a straightforward manner and build greater detail into procedures as the complexity of issues increases. (p. 8)

The two methods adopted were the social work subject's student evaluation survey which included a specially designed research question and a focus group discussion with purposively selected stakeholders.

Ethics approval for the evaluative research was obtained from USC's Research Ethics Committee (approval number: A/16/883) in 2016. Data obtained in the USC student subject evaluation survey were accessed under ethics approval for research purposes. The subject evaluation survey had a range of student comments related to the specifically included question about the use of a real-life case study and the Immerse Lab. These anonymous responses were extracted from the USC-managed survey which is completed by students at the end of the semester. The response rate to the university student survey for the social work subject was 35.7% (N = 20). All survey responses by students were anonymous and students freely chose to complete the USC survey without any risk to their grades or relationships with educators.

The second method of data collection covered by the USC ethics approval was a focus group approach which can have the value of enabling different views in a group-based conversation about the research question (Lewis, 2003, p. 58). Gaizauskaite explains that "focus group research provides … speedy results, simultaneously covering variety of ideas, opinions, experiences, needs, evaluations, or concerns coming from a group of participants" (2012, p. 20). Action research is based on the assumption that "all people who affect or are affected by the issue being investigated should be included in the processes of inquiry" (Stringer, 2014, p. 6). All students were formally invited to participate under the ethics approval guidelines and only one student responded to the invitation. The main reason for this lack of response relates to the focus group meeting occurring between semesters when subject

requirements were completed. The timing was to give students full and free choice regarding how they responded to the evaluative research invitation.

Further to the open student invitation to participate, a purposive sampling method was used to secure the focus group participants. Specifically, a "critical case sampling" method was employed "on the basis that [the participants] demonstrate a… position 'dramatically' or are pivotal in the delivery of a process or operation … this approach is particularly valuable in evaluative research because it helps to draw attention to particular features of a process and can thus heighten the impact of the research" (Patton, cited in Ritchie, Lewis, & Elam, 2003, p. 80).

The focus group comprised five people – the subject coordinator/educator, an interested academic social work colleague who assisted with marking assessments in the Immerse Lab, the Immerse Lab technician, a social work student enrolled in the subject, and the leader of the Yarloop activist group, Community Alliance for Positive Solutions (CAPS). Yarloop is the town at the centre of the case study and the inclusion of the community leader constituted a dramatic position as encouraged by Patton (cited in Ritchie et al., 2003, p. 80). This participant, in particular, could give a considered view on the authenticity of students' role play responses to his town's issues at the centre of the case study material.

Focus group members reflected on the research question from their particular vantage point and all comments were recorded on large sheets of paper during the meeting.

THE RESEARCH RESULTS

The evaluative research data collected consisted of verbatim comments from the research participants. The range of perceptions are presented according to appreciative comments for the two main themes relating to the perceived value of the Immersive Lab learning space and the perceived value of the real-life case study as an authentic scenario. In addition to the results presented below, other critical comments were made by some students which related to the subject design and process matters. For example, several students complained about the delays relating to when students were able to gain access to the Immerse Lab and the time taken to learn how to use the technology. These types of results are not presented here, and will be used to improve future offerings of the course. They correlate with other researcher's reports of challenges with simulation methods in social work education (Cooper & Briggs, 2016).

Table 1. Immerse Space – Appreciative Comments

Students' Survey Views

- I loved the Immerse room/project. It was very powerful and fun to work with.

- I enjoyed the Immerse Lab, a dynamic space to deliver group work and to create.

- Use of the Immerse Lab was a good experience.

- I appreciated doing a different form of assessment.

- I agree that the approach is worthwhile continuing. I found it interesting but did not understand all that was required and added to being in a team of people who did not co-operate with each other, it made it difficult. Once it was settled, I found the process enjoyable and it expanded my knowledge considerably.

- It was an amazing learning experience with the tutor.

- The Immerse Lab was interesting and Jason, the Immerse Lab technician, went above and beyond to assist students, but I think the time it took understand the technology and co-ordinate access to the lab detracted from the learning experience.

- The Immerse Lab was awesome. So was the guy in the lab. He was knowledgeable. The Immerse Lab was very effective and brought the atmosphere to life. I enjoyed that piece of work.

- The case study and use of immersive technologies helped me to gain more knowledge and idea on the topic.

Focus Group Members' Views

- The Immerse Lab definitely increased the complexity that could be conveyed.

- Creative materials created by students, for example the time line, could be used again going forward.

- Multiple levels of the issue could be conveyed visually very quickly and potently.

- Students in the audience became strongly engaged in watching each other's presentations.

- Visual communications made possible with the Immerse Lab meant students get to feel the passion of people living through the issue.

- Blown away, WOW! This is amazing, the whole immersed in it – so much more effective than a typical class role play.

- 100% prefer this, especially if we have a student study group that works.

- It enabled students to step strongly into characters and convey a believable representation of aspects of the issue.

- Scope for activism beyond the subject – e.g., disruptive aspect in public issues.

- Authenticity, reciprocity aspect.

- Enables an experience of art-ivism as a social work strategy for social change.

The evaluative research results in Table 1 provide details of how a number of students, support staff and the Yarloop community leader perceived the value of using an immersive space to augment student engagement in the subject's learning activities. Respondents' language was indicative of the Immerse Lab's multi-dimensional value such as: "relevant"; "powerful and fun"; "blown away! Wow!"; "amazing learning experience"; "engaging and moving"; "authenticity, reciprocity aspect"; "100% prefer this" and the Immerse Lab was "very effective and brought the atmosphere to life". Further, some respondents appreciated how use of an authentic scenario in the Immerse Lab enabled "students get to feel the passion of the people living through the issue" as well as providing scope to "experience art-ivism as a social work strategy for social change".

Table 2. Authentic Case Study – Appreciative Verbatim Comments

Students' Survey Views

- The case study, because it's real and important to us as developing social workers, was highly relevant to learn from.

- The passion that Dyann, subject educator, had for the Yarloop-Alcoa case study.

- The readings and themes were highly relevant for my degree, as well as interesting. Many readings were also easily understandable, and therefore also easy to actually use in the field.

- I really liked learning and becoming more aware of the issues affecting people in Yarloop.

- Doing a case study of an actual social justice issue made it more relevant.

- Being able to have a main player visit and discuss the issues involved added more depth to my understanding of the complexity of dealing with vested interests.

- The subject provided me with a task that involved complexity. Having a group task such as this challenges groups to collaborate effectively, and, maintain good group processes in order to reach consensus, to provide a positive outcome. Whilst working in a group to reach a positive outcome may have been considered a challenging process for students, as third and fourth year students however, these are processes that students should have reached some proficiency in. Whilst this task demonstrated difficulties that may be associated with a group analysis and presentation, it is also reflective of how group processes might play out in the workplace, and also represent how as individuals we may be required to learn new technologies more and more.

- Viewing other student group presentations demonstrated how our differing lens' can alter interpretation, thus also open up new learning pathways for us to see things differently.

Focus Group Members' Views

- The use of a real-life case study was essential for the aims of the subject.

- I 100% loved it!

- The subject provided an opportunity for students to deeply understand a real situation that more people need to 'get' to make sure the issue is not dead in the water and is carried forward.

- In studying the case, students become part of the forward 'story' and can potentially have an influence in real time with the issue.

- Tina, community development educator, is considering providing the Yarloop issue as a case study in her Community Development subject.

- Perhaps Skype Vince, the Yarloop community leader, in earlier to lectures to build connection, prior to his campus visit.

- Vince's inclusion in the subject was invaluable as you can't replace authentic experience.

- The subject made a difference with a Western Australian family being influenced by a student's knowledge regarding the issue (that is, the student was able to challenge the claim that many Yarloop people grabbed the money [from Alcoa] and were not sick).

The results in Table 2 provide details of how a number of students, support staff and the Yarloop community leader perceived the value of an authentic real-life case study to engage students in experiential learning. Respondents' language was indicative of the considerable value placed on the opportunity, such as: "highly relevant to learn from"; "I really liked learning and becoming more aware of … the people in Yarloop"' "I 100% loved it!"' "students become part of the forward story of Yarloop". The involvement of Vince Puccio, the Yarloop community leader, further added to the value of the case study as one student noted, "it was invaluable as you can't replace authentic experience". Vince was clear that "more people need to 'get' it [as the students have] to make sure the issue is not dead in the water and [is] carried forward".

DISCUSSION OF RESEARCH RESULTS

The research question generated considered feedback from students and staff. The discussion commences with a summary of the ideas from the collectivity of responses obtained across both methods of data collection. The range of themes are:

1. The Immerse Lab was exciting and engaging both for the presenters and the audience of students and staff.

2. The Immerse Lab was interesting and created a dynamic, intense and authentic learning experience.

3. Students designed and enacted well-crafted and richly nuanced responses to real-life issues.

4. All students' group-based presentations were substantially located in, and responsive to, the complex, conflictual context of the case study.

5. Even when some student study groups were not well prepared, they were able to improvise and create high quality demonstrations.

6. A leader from the community at the centre of the case study verified that the quality of students' research, the accuracy of character and issue portrayals and relevance of student demonstrations were of very high quality.

7. The subject curriculum provided anti-oppressive, group-based literature which was modelled in classroom relationships and activities. Students and educators were practising anti-oppressive praxis.

8. Finally, student feedback not directly related to the research question suggested that the technical aspects of preparing to use the Immerse Lab need streamlining to avoid frustration and time issues.

The results show the value of immersive technologies and how they relate to enhancing students' engagement in subject material and learning goals. There was a perceived increase in their ability to create richly crafted roles and to design finely nuanced scenarios which are context-responsive. This equated with relevant and feasible responses to the real-life case study issues.

The purpose of the evaluative research was to explore whether the use of an authentic real-life scenario in an immersive space might enhance student engagement in experiential learning. As this appears to be the case, it will be the basis for future research on whether the teaching methods can increase the potential for transformatory learning and anti-oppressive praxis. The initial line of discussion centres on how to enable changes in curriculum that are innovative and may require something different from students as learners. Social work students at USC had not experienced the Immerse Lab before and there was only limited use of educator-constructed case studies in some subjects so there was a notice-able change in what was expected of students. Literature on anti-oppressive and engaged pedagogy in social work suggests there needs to be a focus, therefore, given to normalising and reassuring students about the innovation (Beaumont & Cernlyn, 2005). This, in turn, cautions the researchers to temper their expectations on the first offering of the curriculum innovation, particularly when it was occurring in an academic social work program without a foundation experience in earlier subjects (Beaumont & Cernlyn, 2005, p. 51).

Thus, in a traditional teaching culture which focuses on formal theory acquisition, there is a "distanced understanding of [oppression, for example] racism and sexism" (Beaumont & Cernlyn, 2005, p. 53). This can occur to the extent students engage with formal theoretical material in a didactic way with the emphasis on written assessments about the knowledge as evidence of learning. In comparison, subjects which require demonstration of an ability to integrate values, theories and practice can be personally challenging and unwelcome (Kilgour et al., 2015). Further, when social work students are obliged to complete the assessment requirements of core subjects, it can be a challenge to their expectations to undertake experiential learning methods, especially if these are tied to assessments. Cree (2005) argues that students should not be forced to do role plays and Beaumont and Cernlyn acknowledge that "anti-oppressive education should not be experienced as oppressive" (2005, p. 52). This phenomenon of how social work students experience the need to engage with innovative curriculum is poorly researched, especially in relation to experiential-based learning in small group work which can mirror or refract broader inequalities. It is suggested that giving students a choice in types of learning methods (for example to use immersive technologies, other creative modes, traditional role play approaches or written assessments) may be a feasible option and a small step towards anti-oppressive teaching processes.

In particular, valuing student choice recognises that the impacts are likely to be felt unequally for students from oppressed groups where educators need to ensure that "widening participation doesn't descend into an assimilation strategy" (Beaumont & Cernlyn, 2005, p. 54). According to Beaumont and Cernlyn:

We also [need to] recognise the importance of balancing the provision of safety for personal exploration and challenge with avoiding the over-exposure of students, which can exacerbate oppression. Mechanisms for ensuring safety in very different [teaching] contexts need wider exploration. (2005, p. 54)

There may be a disjuncture between attempts to create authentic learning experiences for students and how the students experience the teaching methods. This disjuncture may be experienced by some students as oppressive in so far as it breaks with conventional teaching methods and student expectations of what learning involves and what is being asked of them.

Notwithstanding these important considerations, the main message from the evaluative research, which is reflected in the literature on simulation strategies (Moore et al., 2006; Cooper & Briggs, 2016), is that immersive technologies have potential to engage and enable students in experiential learning where there is a skills development component to a social work subject. Further, the use of a real-life case study, where one of the community's leaders was available for student discussions and questions, was a highly valued dimension to the subject. Providing opportunities for the student study groups to design their own assessment responses with access to the Immerse Lab and a real case study provides more choice and, possibly, more engaged learning. The downside is that it requires a lot of them – to do the group work processes, and think through the range of possible responses – to be relevant to the actual people in the case study, and then use the technology in the Immerse Lab.

Research limitations

The evaluative research is exploratory and, as such, it does not attempt to claim definitive outcomes, but rather potential lines of promising inquiry for future research. The main limitation was that the survey method did not afford an in-depth appreciation of each student's experiences and views about the real-life case study and Immerse Lab. The use of a pre-existing student survey may also have had an in-built bias as to who completed the survey. The lack of uptake by students to participate in the focus group has also limited the representation of their views in the research. The response rate in the survey was perhaps skewed towards students who were either really positive about the learning experiences or students who were dissatisfied with the additional time and effort involved in learning about the case study and learning how to use the Immerse Lab.

The present evaluative research has not been able to explore the diversity of students' experiences and it is possible that some of the students who did not provide survey responses or participate in the focus group meeting were not represented in the data obtained. As Coleman identified, there are three types of response to anti-oppressive teaching (cited in Beaumont & Cernlyn, 2005, p. 50) ranging from heightened awareness about oppression through to resistance to this teaching method. A limitation of the evaluative research is that it has not placed sufficient

focus on whether students considered the learning opportunities to be indicative of anti-oppressive praxis.

SUMMARY AND FUTURE RESEARCH

The evaluative research project set out to explore if the use of immersive technologies and the application of an in-depth, real-life case study could aid social work students' engagement and experiential learning about complexity and group-work processes. The action research project provided encouragement in further developing an engaged and authentic pedagogy. The findings suggest that the use of the immersive technologies applied to one in-depth case study has increased the authenticity of the practice setting and has aided student engagement in the learning opportunity.

The evaluative research has highlighted the need to align social work's anti-oppressive mission, curriculum content and the living curriculum to provide anti-oppressive praxis learning opportunities in the classroom. This alignment may be necessary for enabling transformatory learning whereby students' learning in the university setting is transferable and responsive to complex practice contexts upon graduation. That is, how social work educators mirror anti-oppressive values in engaging and collaborating with students is another layer of complexity in crafting authentic scenarios for experiential learning. The exploration of these matters will be the overarching goal of the next research project. Future research will also explore whether increasing student choice and agency in how they negotiate the learning opportunities can enable transformatory learning. The questions that may be productive to research are:

1. How do students' choice and engagement with experiential learning methods enable their agency as an emerging practitioner?

2. Is transformatory learning possible if students freely engage in authentic learning activities where the living curriculum mirrors the anti-oppressive ethics of social work?

The common thread in the current and future linked research projects is building knowledge about the value of immersive technologies and real-life case studies in practising social work as anti-oppressive praxis in the university setting.

References

Australian Association of Social Work. (2012). *Australian social work education and accreditation standards.* Barton, ACT: Author.

Beaumont, B. & Cernlyn, S. (2005). Promoting equality and inclusion. In H. Burgess & I. Taylor (Eds.), *Effective learning and teaching in social policy and social work* (pp. 41-54). London: Routledge.

Billinghurst, M. (2002). Augmented reality in education. *New Horizons for Learning*, 12, 1-5.

Boddington, A., & Boys, J. (Eds.). (2011). *Re-shaping learning: A critical reader.* Rotterdam, The Netherlands: Sense Publishers.

Bowers, E., & Pack, M. (2017). Designing and embedding authentic learning opportunities in a social work curriculum: Reflections and lessons learned. *Aotearoa New Zealand Social Work, 29*(1), 99–110.

Brueckner, M., & Ross, D. (2010). *Under corporate skies: A struggle between people, place and profit.* Fremantle, WA: Fremantle Press.

Clifford, D., & Burke, B. (2009). *Anti-oppressive ethics and values in social work.* New York, NY: Palgrave Macmillan.

Cooper, L., & Briggs, L. (2016). The great shakes: Disasters, simulations and learning. *Advances in Social Work & Welfare Education, 18*(2), 79–93.

Dirkx, J. (1998). Transformative learning theory in the practice of adult education: An overview. *Journal of Lifelong Learning, 7,* 1–14.

Errington, E. (Ed.). (2010). *Preparing graduates for the professions using scenario-based learning.* Brisbane, QLD: Post Pressed.

Faherty, V. (2013). Simulation and gaming in social work education: A projection. *Journal of Education for Social Work, 19,* 111–118.

Fisher, A., Exley, K. & Ciobanu, D. (2014). *Using technology to support learning and teaching.* London, UK: Routledge.

Fook, J. (1996). *The reflective researcher: Social workers' theories of practice research.* Melbourne, VIC: Allen & Unwin.

Fook, J. (2016). *Social work: A critical approach to practice* (3rd ed.). London, UK: Sage.

Freire, P. (1970). *Pedagogy of the oppressed.* New York, NY: Herder & Herder.

Gaizauskaite, I. (2012). The use of focus group method in social work research. *Social Work Research Journal, 11*(1), 19–30.

Gough, S., Hellaby, M., Jones, N., & MacKinnon, R. (2012). A review of undergraduate interprofessional simulation-based education (IPSE). *Colleagian, 19*(3), 153–170.

Grundy, S. (1987). *Curriculum: Product of praxis?* London, UK: Falmer Press.

Herrington, J. (2006). *Authentic learning environments in higher education.* Hershey, PA: Information Science Publishing.

Herrington, J., Reeves, T., & Oliver, R. (2007). Immersive learning technologies: Realism and online authentic learning. *Journal of Computing in Higher Education, 19*(80), 65–84.

Hew, K., & Cheung, W. (2008). Use of three-dimensional (3-D) immersive virtual worlds in K-12 and higher education settings: A review of the research. *British Journal of Educational Technology, 41*(1), 33–55.

hooks, b (1994). *Teaching to transgress: Education as the practice of freedom.* New York, NY: Routledge.

International Federation of Social Workers. (2017). *Global definition of social work.* Retrieved from: http://ifsw.org/policies/definition-of-social-work/

Johansson, R. (2003). *Case study methodology.* Retrieved from http://www.psyking.net/HTMLobj-3839/Case_Study_Methodology-_Rolf_Johansson_ver_2.pdf

Jones, P. (2015). Transformative learning theory: Addressing new challenges in social work education. In M. Li & Y. Zhao (Eds.), *Exploring learning and teaching in higher education: New frontiers of educational research* (pp. 267–268). Retrieved from https://link.springer.com/chapter/10.1007%2F978-3-642-55352-3_12#page-1

Kilgour, P., Reynaud, D., Northcote, M., & Shields, M. (2015). Role playing as a tool to facilitate learning, self reflection and social awareness in teacher education. Retrieved from http://research.avondale.edu.au/cgi/viewcontent.cgi?article=1075&context=edu_papers

Lewis, J. (2003). Design issues. In J. Ritchie & J. Lewis (Eds.), *Qualitative research practice: A guide for social science students and researchers* (pp. 47–76). London, UK: Sage.

Linsk, N., & Tunney, K. (2014). Learning to care: Use of practice simulation to train health social workers. *Journal of Social Work Education, 33*(3), 473–489.

Loyens, S., Kirschner, P., & Paas, F. (2011). Problem-based learning. In K. Harris, S. Graham, & T. Urdan (Eds.), *APA educational psychology handbook* (Vol. 2.). Washington, DC: American Psychological Association.

Mezirow, J. (1978). Perspective transformation. *Adult Education,* 100–110.

Mezirow, J. (1991). *Transformative dimensions of adult learning.* San Francisco, CA: Jossey-Bass.

Mezirow, J. (2000). *Learning as transformation: Critical perspectives on a theory in progress.* San Francisco, CA: Jossey Bass.

Moore, S., Tschanter, E., & Rees, N. (2016). Development of a web-based resource for supporting social workers' decision making in practice. *Charles Darwin University Project.* Retrieved from http://bit.ly/discdecmaking

Morrison, J. (2015). Emancipatory social work education: Why it is so difficult to practise instead of preach. *Advances in Social Work and Welfare Education, 17*(1), 98–111.

Nestel, D., & Tierney, T. (2007). Role play for medical students learning about communication: Guidelines for maximising benefits. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1828731/

Payne, M. (2014). *Modern social work theory* (4th ed.). Basingstoke, UK: Palgrave Macmillan.

Phillips, A., Waltz, A., Bergner, A., Graeff, T., Heistermann, M., Kienzler, S., Zeilinger, G. (2015). Immersive 3D geovisualization in higher education. *Journal of Geography in Higher Education, 39*(3), 437–449.

Pricer, W. (2011). Immersive education: An annotated webliography. *Community College Enterprise, 17* (1), 41–50.

Ritchie, J., Lewis, J., & Elam, G. (2003). Designing and selecting samples. In J. Ritchie & J. Lewis (Eds.), *Qualitative research practice: A guide for social science students and researchers* (pp. 77–108). London, UK: Sage.

Ross, D. (2007). A dis/integrative dialogic model for social work education. *Social Work Education,* iFirst article, 1–15.

Schön, D. (1983). *The reflective practitioner: How professionals think in action.* New York, NY: Basic Books.

Shepherd, C. (2010). Why does everyone hate role plays? [Web log post]. Retrieved from http://clive-shepherd.blogspot.com.au/2010/08/why-does-everyone-hate-role-plays.html

Stringer, E. (2014). *Action research* (4th ed.). Thousand Oaks, CA: Sage.

Thompson, N. (2011). *Promoting equality: Working with diversity and difference*. London, UK: Palgrave Macmillan.

University of the Sunshine Coast (USC). (2017). *Work integrated learning – Academic policy.* Retrieved from https://www.usc.edu.au/explore/policies-and-procedures/work-integrated-learning-academic-policy

West, D., & Heath, D. (2009, July. A learning community approach: Embedding authentic assessment in a social work curriculum. In *The Student Experience: Proceedings of the HERDSA Annual Conference* (pp. 463–472).

White, K., Carvalho, T., & Riodan, S. (2011). Gender, power and managerialism in universities. *Journal of Higher Education Policy and Management, 33*(2), 179–188**.**

Wivell, J., & Day, S. (2015). Blended learning and teaching: Synergy in action. *Advances in Social Work & Welfare Education, 17*(2), 86–99.