

Title: Intercultural Sensitivity Learning in a Virtual Learning Environment

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Abstract

In an increasingly global and multicultural society, graduates are required to have intercultural sensitivity skills and competences to enable them to communicate and interact appropriately in diverse cultures. Providing such learning in a university context can be challenging, both in selecting cultures and in providing experiential activities. This paper outlines an alternative approach to intercultural sensitivity learning, Traveller, a Virtual Learning Environment populated by autonomous intelligent agents. Traveller enables students to engage with various synthetic cultures, experiencing different behaviours and attitudes as part of an extracurricular student experience. Students (N=33) engaged with Traveller as part of a university employability initiative, where the impact of engaging with Traveller on learning intercultural sensitivity skills and competences was evaluated. Results demonstrate learning and engagement, with Traveller stimulating discourse and debate. Students were positive about the Traveller experience highlighting its potential for intercultural sensitivity learning.

1. Introduction

With graduates engaging in global, multi-cultural contexts, it is increasingly essential that they are provided with the skills, competences and strategies required to support intercultural engagements (Broch, Madsen, Stevens, & Wiseley, 2013; Feast, Collyer-Braham, & Bretag, 2011). Many countries incorporate intercultural learning into the curriculum (Kirchschlaeger, Rinaldi, Brugger, & Mitrovic, 2012), with intercultural education striving to create culturally sensitive learners (Bennett, 1986), who are empathic, able to understand another individual's experience as it is embedded in their culture (Mullavey-O'Byrne, 1997). To develop cultural sensitivity, there is a need for approaches that extend learner's competences by providing them with a series of concrete skills that can then be applied in unfamiliar situations (Fowler & Blohm, 2004).

Virtual Learning Environments (VLE) populated by autonomous intelligent agents offer an interesting and innovative approach to providing intercultural experiential learning. Most applications that have been developed provide experiences based in real cultures (Endrass, Rehm, & André, 2011; Johnson & Valente, 2009; Wu & Miller, 2010). However, synthetic cultures (Hofstede, Pedersen, & Hofstede, 2002) based on the manipulation of the value orientations of Hofstede's Dimensional model (e.g. Power Distance, Uncertainty Avoidance, etc.) offer an alternative that is not confounded by stereotypes embodied in real cultures. Synthetic cultures enable an understanding of culture as being part of a collective group with shared interdependent goals and collective expectations, negating our understanding of culture being tied to race, religion and nationality. Synthetic cultures provide a useful approach to simplifying the complex notion of culture, providing understandable yet unreal cultures, and allowing the development of transferable skills across diverse cultures.

2. Traveller

This paper discusses Traveller, a VLE populated by intelligent agents (see figure 1), developed to provide synthetic cultures. The aim of Traveller is to help learners to develop intercultural competence following the Learning Framework (Swiderska, Krumhuber, Kappas, Degens, & Hofstede, 2011) (see table 1). This extends Bennett's Developmental Model of Intercultural Sensitivity (Bennett, 1986, 1993), through focusing on the intercultural competence traits that facilitate or moderate the development of intercultural sensitivity (Spitzberg & Changnon, 2009).



Figure : User interacting with TRAVELLER

Attitude Stage of Learner	Emotional goals	Cognitive goals	Behavioural goals
Beginner <i>Conscious incompetence</i> Observation & Acquisition	Recognise emotions (e.g. Fear, anxiety) when dealing with strange behaviours of another group	Start learning the specific practices and values of another group	Fully present in attending to another's verbal and non-verbal messages
Journeyman Conscious competence Relating & Experimenting	Be able to observe the behaviour of another group without feeling prejudice	Understand on a basic level differences and similarities between own group and another	Practice skills learned in previous stage; experiment with different behaviours
Expert Unconscious competence Adapting & Belonging	Share emotions (e.g. Sadness, happiness) of another group and others' experiences through empathy	Discriminate and select appropriate strategies for the cultural context	Be able to unconsciously participate in another group as a native

Table : eCUTE Intercultural Competence Learning Framework

Traveller, (figure 2), provides participants with opportunities to engage in different synthetic cultures represented as different fictional countries. In each country the user interacts with groups of synthetic characters in common social situations. The groups are culturally distinct (e.g. collectivist vs.

individualistic cultural characteristics) in the way they behave and react towards the user. The goal is for the user to gain a greater understanding of how behaviour can differ across cultures on a generic level.



Figure : Interaction options in TRAVELLER

3. Study

Students (N=33) engaged with Traveller as part of the Sunderland Futures programme, focusing on graduate employability through the Sunderland Professional Award (SuPA). Through SuPA students demonstrate additional professional skills, enhancing employability. Extra curricular activities such as volunteering and participation in additional learning opportunities (e.g. intercultural training) are evidenced in an online portfolio and student achievements are recognised with the Sunderland Professional Award (University of Sunderland, 2014).

Students participated in a three-phase activity over a month, see figure 3. This involved pre-interaction questionnaires, an interaction and evaluation of Traveller and post-interaction activities using resources and further questionnaires. Students' near transfer or immediate learning was assessed through the completion of the EEQ (Engagement Experience Questionnaire) and a focus group providing a brief overview of the key issues raised during the "Intercultural Training Programme." A control group completed the pre and post interaction phases only and did not interact with the Traveller application.

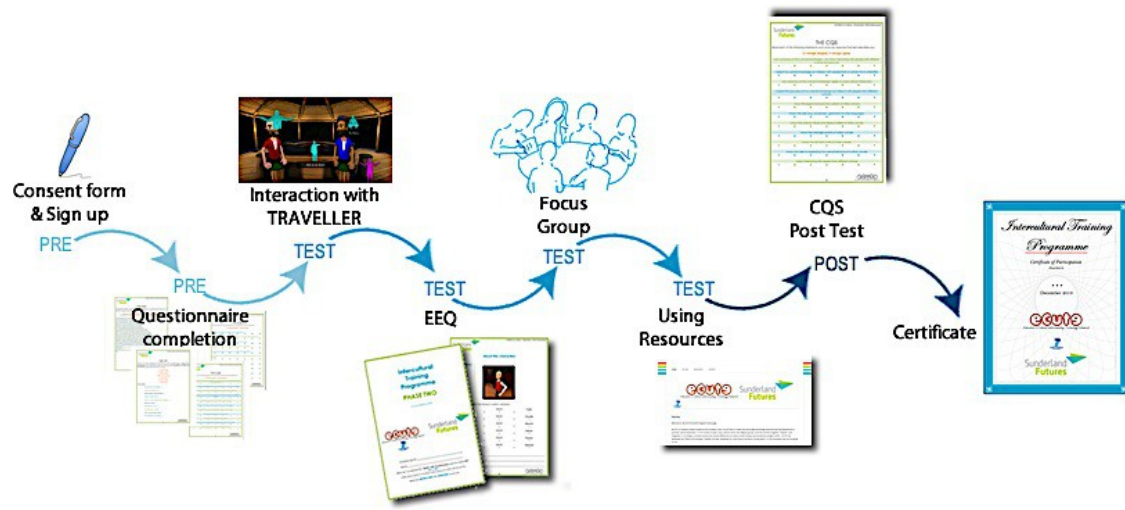


Figure : Three Phase study design

4. Results: Cultural Awareness and Understanding

All of the students successfully completed their interaction with Traveller, completing all of the scenarios and progressing through the learning framework (see table 1), with interactions typically lasting around 30 minutes. In the EEQ, students responded to a range of questions about their understanding, interest and engagement. A total engagement score for Traveller was computed (possible range from 3-15), revealing a mean of $M = 10.86$ ($SD=2.30$, median = 11, min = 4, max = 14), demonstrating relatively high levels of engagement, comprehension and understanding of the intercultural issues addressed in Traveller story.

Interacting with Traveller stimulated discussion and interest in cultural sensitivity as demonstrated in a focus group activity. Participant perceptions of Traveller were enquired about as a learning experience. Example response themes included:

“It was a fun way to make you think about interactions with others”

“The application itself was fun but it didn’t teach me anything new but this discussion has given me lots to think about. So I guess it’s a good starting point to open up more challenging conversations”

Participants also commented that Traveller was a novel experience, unlike any previous learning experience:

“It was totally different to any learning I’ve done before”

“It was like playing a game but then discussing it and thinking about it in a really serious way. It was good.”

Focus group results demonstrated that students enjoyed the novel learning experienced through Traveller, viewing it as a valuable 'direct' learning experience, or as a "conversation starter" to discuss and learn more about cultural understanding from peers.

5. Discussion

Providing training for HE students using a VLE appears to offer considerable potential for engaging students in intercultural learning and development. Students who interacted with Traveller had high engagement scores highlighting that they had understood the story and engaged in the intercultural experiences encountered in Traveller. The synthetic cultures were credible and sufficiently interesting to engage the students, with all of the students completing the interaction, providing evidence of immediate learning.

Using Traveller as part of an intercultural training programme complemented through discussion and reflection supports students in gaining valuable transferable skills. Students were enthusiastic and motivated, finding Traveller an interesting and exciting way to engage with intercultural experiences. Through engaging with Traveller, students gained intercultural training, providing evidence that could be used to enhance their CVs; along with first hand contact with a cutting edge research team and an innovative experience.

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