Chapter 3
Intercultural Competence and Virtual Worlds

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Introduction

The wide use of virtual worlds, such as Second Life, in education reflects their effectiveness for experiential activities and discovery learning. Studies show, however, that despite growing evidence of their efficacy for engaging and promoting learning, there are issues with students' negative perceptions, anxiety and resistance (Childs and Peachey 2013; Dalgarno et al. 2011; Warburton 2009), which indicate that it cannot be assumed that all students will adapt to these virtual environments. Second Life, for example, has its own culture and subcultures, identities, language and social practices, as well as the culture inherent in the application of the technology itself. Interacting in the culturally diverse Second Life environment involves a process of cross-cultural adaptation, requiring attributes of intercultural competence such as flexibility, resilience, respect for different perspectives and communication styles, and critical awareness of one's values and beliefs Corder and U-Mackey 2015.

However, research shows that these attributes of intercultural competence will not automatically develop by merely encountering a different cultural environment; they need to be intentionally developed (Deardorff 2011; Stier 2006). Studies such as the one by Salt et al. (2008) show that the demands of Second Life technology could impact on motivation and engagement, and attention is paid to preparing students for the technological challenges. It would seem, therefore, that there is an

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equal need to prepare students for the emotional and behavioural challenges of an environment that is, perceptually and conceptually, so culturally different from what many are used to.

This chapter explores the symbiotic synergies between the affordances of virtual worlds for intercultural competence development and the need for intercultural competence for effective engagement in virtual worlds. It is based on action research on the efficacies of using Second Life to develop intercultural competence in an undergraduate intercultural competence module at a New Zealand university. Case studies of student experiences in Second Life are used to gain a deeper understanding of the challenges faced by students, different ways in which they might manage their emotional and behavioural reactions to the challenges, and what is needed in addition to technical preparation and support, in order for them to engage more effectively in the virtual environment for the required learning to take place.

Characteristics of Intercultural Competence

As outlined by Spitzberg and Changnon (2009), there are many models and frameworks for intercultural competence, and the construct is debated and challenged from various theoretical stances. This can present problems for the research practitioner who needs to apply the construct for learning and teaching. However, according to an extensive study by Spitzberg and Changnon (2009), a good model should include common intercultural competence elements such as motivation (attitude, values, beliefs), knowledge (cultural, theoretical), skills (flexibility, openness), context (relational/conflict management, environment) and outcomes (critical self-assessment, awareness of identity, maintaining relationships). They also identify the common goal as being "the appropriate and effective management of interaction between people who, to some degree or another, represent different or divergent affective, cognitive, and behavioural orientations to the world" (Spitzberg and Changnon 2009, p. 7).

Models developed for teaching by Byram (2008) and Deardorff (2011) have been influential, particularly in language learning and teaching. Both models contain the common intercultural competence elements identified by Spitzberg and Changnon (2009). According to these models, the characteristics of the interculturally competent person include flexibility, adaptability, being able to move out of one's comfort zone and cope with uncertainty. A fundamental element in both these models is critical cultural self-awareness of one's own culture, and how culture, underpinned by values, beliefs and norms, influences one's identity, worldviews, behaviour and use of language. Without this ability to question and analyse one's own cultural framework, it is not possible to understand and respect personal and cultural differences, be open to multiple perspectives and develop the necessary behavioural characteristics or outcomes. However, Witte (2011) believes that for critical cultural self-awareness to develop, the assumptions underlying one's values and beliefs must be challenged.

Intercultural Competence Pedagogy

A number of researchers, such as Kohonen (2005) and Witte (2011), recommend an experiential, explorative and holistic pedagogical approach for intercultural competence teaching, learning and assessment. This approach encompasses socio-constructivist and sociocultural theories in order to address affect, attitudes and construction of identity and knowledge, and allow for the differing worldviews of students. Intercultural interactions and experiences need to be relevant, and there should be opportunities for discussion and critical reflection (Deardorff 2011; Kohonen 2005; Witte 2011). Witte (2011) maintains that collaborative and explorative activities facilitate construction of knowledge, challenge learners to analyse and interpret, find connections, discover cultural patterns and evaluate the new knowledge in relation to their own cultural frameworks. Collaborative and explorative activities are reliant on rich learning experiences such as group work, tandem work, critical incidents and virtual classrooms. Such activities enable the development of awareness of differences, similarities of cultural constructs and underlying values, beliefs and norms.

Intercultural Competence and the Affordances of Second Life

In view of the characteristics of intercultural competence and the recommended pedagogical approach, Second Life offers a rich authentic experiential and explorative environment for developing intercultural competence. There is a wide range of cultural environments for social interaction, language practice, cultural exploration and exposure to diverse cultural perspectives (Corder and U 2010; Corder and U-Mackey 2015; Diehl and Prins 2008; Warburton 2009; Ward 2010). Research shows that the creation and use of an avatar can be a powerful catalyst for self-awareness and self-assessment by highlighting the role of verbal and non-verbal communication, cultural variations in proxemics, and raising awareness of self and identity through exploration and evaluation of presentation of self (Corder and U-Mackey 2015; Diehl and Prins 2008; Twining 2009; Yee and Bailenson 2007).

According to Warburton (2009), the nature of the Second Life environment with its own codes, norms, language and social etiquette when establishing relationships, and the fluidity of identities and relatively no boundaries on behaviour, simulates the dynamic nature of cross-cultural encounters and can create symptoms of culture shock. Ward (2010, p. 4) found that as "newbies", students can have positive experiences of integration and assimilation, and negative ones of segregation and marginalisation. Learning to manage what can be intense emotions, and even psychological stress associated with culture shock, is invaluable intercultural competence preparation for encountering different cultures in both virtual worlds and the real world. However, for some students, it can prove too destabilising and

lead to resistance and even non-participation. This could explain various negative student reactions, ranging from disapproval and suspicion to even fear that Childs and Peachey (2013) describe from various studies. If, as research indicates, intercultural competence does not develop automatically when encountering difference, knowing how students can be supported to engage with Second Life for learning to take place is a critical factor for educators.

The Intercultural Competence Module

The intercultural competence module on which this research is based was developed because of the increasing recognition of the need for intercultural competence to be a graduate attribute. The module ran for three hours a week over 12 weeks. Two hours were in class for experiential activities and theory and one in the computer room for online activities such as guided blog reflections and then for group work when it was introduced. It was offered in the BA International Studies major as a compulsory module for International Studies major students and as an elective for other majors across the university. The pedagogical approach in the module combined Kolb's (1984) experiential learning model and a hybrid of intercultural competence models largely influenced by the Byram (1997; 2008) and Deardorff (2011) models that were developed for teaching intercultural competence. Concepts from other models, such as Bennett's (1993) Developmental Model of Intercultural Sensitivity (DMIS), were used. The DMIS has a useful concept of stages of managing difference, ranging from ethnocentrism through to ethnorelativism.

In the first six weeks of the semester, students were introduced to intercultural competence theory and tools for intercultural competence development through experiential learning activities. Sociocultural and sociolinguistic theoretical concepts were introduced following the experiential activities. Reflection skills, situated in guided weekly blogs with lecturer and peer feedback, were developed using the Describe, Interpret and Evaluate (DIE) framework (Kohls 1996). Second Life was introduced to all the students as an example of a different culture, to illustrate concepts such as stereotyping and ethnocentrism. Students were also shown examples of Second Life as a medium for discovery learning in a number of disciplines ranging from sciences to language and culture learning. Some affordances for developing intercultural competence were explained.

In the last six weeks of the semester, group work was introduced as an experiential learning and assessment tool, supported by the usual learning and teaching classroom activities. Reflection on the group work process as well as evidence of research and interaction were recorded weekly in guided wikis, again with feedback from lecturers and peers. Students explored and reflected on their own and their group members' worldviews in the context of themes or sociocultural issues structured around four questions that they were helped to develop. They also evaluated their ability to establish and maintain relationships with their groups. Each group could choose a medium, such as film, print or Second Life, to explore

their themes. Second Life was typically chosen for its affordances to explore and research concepts such as identity and presentation of self in real life compared to Second Life, or meeting people and making friends. Suggested readings on Second Life were provided. Because of the nature of Second Life, it involved more experiential engagement than with mediums such as film or print used by other groups. However, the technological demands were kept to a minimum, and the students only had to master the basic skills of walking, flying, teleporting, friendship offers, searching and communicating through voice, local text chat and instant messages. They could access Second Life in the time-tabled computer hour and also had an extra two-hour tutorial with a teaching assistant as required. Usually, only one group per semester has chosen to use Second Life.

Students' intercultural competence learning and development from the module were assessed through a mid-semester reflective essay based on their blogs and a reflective essay and group presentation at the end of the semester. In both the reflective essay and group presentation, students had to evaluate their own intercultural competence learning and development from their research, and how they managed the challenges and opportunities of group interaction. This evaluation had to be supported by evidence of learning recorded in their weekly wiki reflections on their group work. The Second Life groups were assessed in the same way; they were not assessed on their technological skills in Second Life.

Case Studies

Intercultural competence development is very individual and involves content and processual competencies (Stier 2006). The rationale for using a case study approach to evaluate intercultural competence development is that it provides "richness of description and detailed contextualisation" (Duff 2008, p. 59). This, as Merriam (2009, p. 46) notes, can give insights into information "to which we would not otherwise have access". The case studies in this chapter are based on two groups of students who chose to use Second Life for their group work. Data for the case studies are both qualitative, including student introspection and evidence of achieving the learning outcomes, (blogs and wikis) and quantitative (frequency of posts in blogs and wikis).

The students in the case studies (Table 3.1) were culturally diverse and represented a range of ethnicities, gender, majors and experiences in virtual worlds. As can be seen, Group 1 included two international students. It is unusual to have international students using Second Life; international students tend to prefer interacting in the physical or real world with New Zealand people and culture rather than spend time in a virtual world. No student had prior experience of Second Life. The names of the students are pseudonyms.

Both groups of students chose the theme "Identity and presentation of self in Second Life". The students explored how they portrayed themselves in Second Life through their choices and adaptations of their avatars, their behaviour in interactions

Table 3.1 Student profiles

	Ethnicity	Domestic/International	Experience of virtual worlds	Major
Group 1				
Charles	Fijian/New Zealander	Domestic	World of Warcraft and others	Languages
Yvonne	Japanese	International	None	English
Zoe	Chinese	International	None	English
Group 2				
Rachel	Maori & Pasifika	Domestic	None	Social Sciences
Felix	Eastern European	Domestic	Experienced	Social Sciences
Stacey	New Zealander	Domestic	None	Business
Kevin	New Zealander	Domestic	Limited	Languages

with others and their response to the Second Life environment itself. They met other avatars by visiting various cultural sites that had been suggested to them and a range of sites that they had searched for themselves, including bars and shops.

Each student case study described below starts with some background intercultural competence information on the student, from two blog reflections in the first half of the semester. Each student's reaction to a class culture shock experience (week 1) is briefly described, as well as their understanding of their values and cultural identity as a result of a number of experiential class activities (week 4). The class culture shock experience involved a ten-minute lecture in a language other than English. One group experienced Burmese and the other Dutch. The lecturers both looked Asian and used a PowerPoint presentation with illustrations and captions. The intention was for students to experience the unexpected and manage their reactions. They were not given any warning or explanation of what they were about to experience. After the ten-minute lecture, they were given guide questions and time to discuss the experience and their reactions. The experiential class activities in week 4 included ranking a selection of values and explaining the ranking to their classmates. The blog reflections showed that each student was at a different stage of intercultural competence development. This information provided useful insights for both the student and the lecturer, into subsequent reflections by each student on their Second Life experiences.

Group 1

Charles

It seemed that not understanding language and feeling out of place was the most significant emotion for Charles in the class culture shock situation. Family, friends

and relationships were important to him, as was respect for authority, and his values were self-direction, achievement and security. His cultural identity was a mix of Fijian and European New Zealander. He came to New Zealand during his high school years, and he missed Fiji more than he had realised before using Second Life. His connections with Fiji together with his extensive experience in gaming strongly affected his perceptions of Second Life and consequent reactions.

Charles did not know what to expect from Second Life, but was curious as he was experienced in online games, and initially spent hours exploring it. However, he became very negative because he considered the graphics outdated and lacked visual appeal to him, and he was thrown because Second Life was completely different from what he was used to in virtual worlds. He realised that he needed to reserve judgement until he had learned more about Second Life, but his negativity was reinforced when he received a hostile reception when visiting a site that had been created to represent aspects of culture and society that someone had associated with "Fiji". Charles had searched for something that was familiar and which he could connect with his identity in real life, but what he found in the Second Life "Fiji" was the antithesis of the friendly, welcoming family orientation that he had associated and identified with Fijian culture.

Charles stalled in his intercultural competence development because he could not manage the challenges of the technological and cultural differences both in Second Life and in the real-life group dynamics. He could see that he stuck firmly to his values and beliefs and that his expectations could be "unrealistic and out of sync with that of my surroundings. Even in an artificial world created by humans for humans I cling to these wrongly and expect them to hold up". Additionally, he did not like group work and found establishing relationships problematic; he even named his avatar "Troublesome". He also found communicating with his group members, who were second language speakers of English, difficult and stressful. He perceived his experience in Second Life and with his real-life group as a threat to achieving academically. He acknowledged that he hated making mistakes, which would result in not making decisions or taking action. This might explain why he stalled in his intercultural competence development and never attempted to develop or apply any strategies to manage his negative emotions. Instead, he withdrew from Second Life, stopped regular self-reflection, stayed in his comfort zone and focused on working with the other two group members in real life.

Yvonne

Yvonne was confused and concerned during the class culture shock situation. Usually, she tried to fit in with new cultures and learn some of the languages, even if only greetings. Because the class culture shock situation had been totally unexpected, she had not been able to use her usual strategies. She was very aware of the effect of her body language in communication, and this, together with her values of tradition and security, were reflected in her choice of avatar, her respectful behaviour in Second Life and her choice of sites to visit. She chose to keep a default

female avatar with black hair and wearing a simple dress, and made very few subsequent changes to clothing and appearance. An early foray in Second Life to a site representing "Tokyo" felt so familiar and safe that she just wanted to stay there. At the same time, she valued self-direction and, realising that she was being ethnocentric, pushed herself to explore because she was curious to see more and engage with difference.

She had initially thought that people in Second Life were dissatisfied with real life, but then believed there were similarities with the reason for the popularity of manga (Japanese cartoon books) and anime (Japanese movie or TV animations for both adults and children) in Japanese society. She continued to visit other sites that had been created to represent Japanese culture and society, and even though she thought some were not authentic enough and lacked reality, she enjoyed chatting to people there. This shift to more assertive behaviour in Second Life translated to uncharacteristic low context, direct behaviour in real life. For example, she summoned up the courage to ask Zoe what she thought of the Japanese in view of the tense relationships between China and Japan over World War II.

Zoe

Zoe attached great importance to being able to make cultural connections when faced with difference. Initially, she was comfortable in the class culture shock situation when the lecturer walked in, because she thought the lecturer looked Chinese. However, Zoe then felt confused and frightened when the language (Burmese) was incomprehensible, and she tried to make sense of the situation by looking at the lecturer's body language and visuals. Being from the Han province in China, to which Confucius belonged, Zoe's personal values of respect and conformity were influenced by Confucian values of morality, justice, harmony and sincerity. The simplified characters used in the writing system in mainland China were very meaningful for her cultural identity, conveying not just language but the values and beliefs of Chinese culture and tradition. Her need to be able to communicate effectively in interactions with others and her cultural identity strongly influenced her responses in Second Life.

Zoe thought Second Life was a time-wasting game, did not trust it and was impatient with the whole experience because it did not match her beliefs about academic study. She tried to hide her uncomfortable feelings about Second Life and was hurt when ignored by other avatars because she did not know how to initiate a conversation. At the same time, she had communication issues during discussions with her real-life group members. An early experience when she visited Second Life "China" was negative: she was shocked by what she thought was an inadequate portrayal of her country and felt that her culture was being marginalised because it was not possible to use simplified Chinese characters when chatting. This made her defensive and prevented her from identifying with anything in Second Life, and her visits to Second Life became infrequent.

However, through a process of honest reflection, she developed critical cultural awareness of her attitude and behaviour, emotions and values and beliefs. She realised that back in China, she had been uncertainty averse and would not do anything unless guaranteed success. Her choice of avatar could have reflected her fear of not achieving and in turn further prevented her from being able to engage with Second Life. Her avatar had not represented her own cultural identity, but what she believed represented western beauty. She was able to identify the influence of her values of harmony and respect. She could see that she had been trying very hard to manage her negative emotions for the good of the group and had not been wanting to burden the group members by discussing her experiences with them. As a result, she had not been going into Second Life enough. Following her increased awareness, she developed strategies to be more open and curious to face difference. She became more prepared to take risks and started to go into Second Life more frequently. Zoe came to realise that this new behaviour in fact reflected common characteristics in modern China because of recent social and cultural changes. This is something she had not realised yet by being in New Zealand and might not ever have realised had she not experienced Second Life. She resumed visits to Second Life and contributed more actively in real-life discussions.

Group 2

Rachel

Rachel's reaction to the class culture shock situation was annoyance and impatience, and a similar reaction was seen in her Second Life behaviour. Establishing relationships was very important to her. Not understanding Burmese prevented her from establishing a relationship with the lecturer, and the unexpected experience was a threat to her success in the module. She believed that her values were influenced by what she identified as her subcultures of being a parent, sister and Christian. However, unrestrained by her normal socially appropriate behaviour and appearance that she believed were necessary in order to be respected in real life, her persona and behaviour in Second Life were initially the complete opposite of her real-life self.

Rachel initially perceived Second Life as a community of "losers" who could not face reality and she thought it was acceptable to behave badly towards everyone. When she experienced repeated rejection, she changed her avatar from male to a robot and then a female. However, the female was overly provocative and resulted in amorous responses from other avatars that she had not intended to encourage. She took longer to change her provocative behaviour and offensive communication style, despite going from being irritated by being ignored, to feeling sorry for her avatar as it was always alone. Finally, overcome by feelings of rejection by the very community she had pre-judged so negatively, she realised she needed to change her

behaviour if she was to interact and have fun like her group members: "I wanted to feel included. I changed my behaviour and the way I approached residents".

   She learned the need to assess her behaviour to suit the context and be more accepting of difference as can be seen from her comment that "people won't necessarily behave or react in the way I assume". She also learnt that she had to adapt her behaviour and communication style from being "rude, conceited and condescending, to what would be acceptable to Second Life culture" in order to form relationships in Second Life. It took several weeks for this learning to take place. This delay might be attributed to her infrequent reflection on her Second Life experiences, which prevented her from processing them effectively, as well as not wanting to ask group members for help in both real life and Second Life. By the end of the group work, however, it could be seen that through her Second Life experience, she was able to see the implications, in both real life and Second Life, of not adapting behaviour to the context.

Felix

From the class culture shock situation, Felix noticed that he did not cope well in an environment in which he did not understand what was going on. He felt uncomfortable and confused and began to lose interest. As an immigrant to New Zealand, he was aware of the need to adapt behaviour according to the various subcultures he belonged to and had known that there was more than one way of doing things and not just the way he had been used to. He identified with the culture of his birth, which he still referred to as "back home". His values were influenced by his Christian faith and family came first. All these factors could be seen to influence his eventual adaptation to Second Life.

   Felix was an experienced user of virtual worlds, but his experiences in Second Life were not what he had expected them to be. These experiences were both positive and negative, and some surprised him. His experiences with Second Life residents were mostly positive: he found them friendlier than he had found people in real life and was impressed that they were non-judgemental towards his rabbit and then unicorn avatar. To his great surprise, he felt a strong connection with the culture of his birth when he visited his "home country" and wanted to see if there were more sites representing his cultural values and norms. Nevertheless, he still thought Second Life was silly compared to virtual worlds he was used to, so pushed the boundaries with unacceptable behaviour to see what reactions he would get. When asked to behave in a more acceptable way by Second Life residents, he realised that even though it was a virtual world, there were still norms and social expectations, many of which were similar to those in the real world, as well as the potential to be affected by others' attitude and behaviour. He was unexpectedly very hurt when laughed at for mixing up Italian words when trying to communicate with French speaking avatars, and consequently judged all French people as being rude in both real life and Second Life. He grew increasingly negative because he had thought he would have no difficulties in Second Life but actually, he could not

apply all his understanding and beliefs from his gaming experience. This negativity affected his further forays into Second Life and his participation in the real-life group work.

Following discussion with his lecturer on his reflections in his wiki on his experiences, Felix began to question his attitude and behaviour. He realised he needed to overcome his interpretation of Second Life to truly understand what it was all about. In fact, he recognised that Second Life "was a truly unique learning curve not just about the people playing it but about myself as well". He saw himself as avoiding the unfamiliar if it compromised his achievements and not being open to new things. He realised that he could be very prejudiced and quick to make value judgements. He finally changed his avatar to a "proper person" and adapted his behaviour so he could develop relationships with the Second Life community and also began to collaborate more in his real-life group work.

Stacey

Stacey joined the course late and missed the class culture shock situation. She was an example of a student who did not appear to have experienced huge challenges from the Second Life environment. She expected Second Life would be different but had an open mind because she had had prior experience in an underdeveloped country and had encountered extreme cultural difference. She did not fully identify with her New Zealand national culture but more with her religion, which represented strength, perseverance and a higher power. This influenced her values and beliefs. She valued family very strongly, along with achievement because of family expectations.

However, achievement was not positively valenced as she hated studying and valued personal growth and development more. She could see the value of engaging in Second Life for intercultural competence development even though she found it cliquey. She felt shyer approaching people in Second Life than in real life and had been ignored. However, she persisted and finally *"cracked the norms"* of communication: "usually it would start with making a comment on something that was happening in your surroundings", which she realised was actually similar to what she would do in real life. She had assumed it would be different. Her avatar represented her ideal body, and changing her appearance in Second Life seemed no different from what she did in real life by adding hair extensions, wearing makeup and different clothes. She said she had learnt a lot about herself from exploring Second Life that she intended to transfer to interaction in real life, particularly managing her responses to variations in behaviour. However, changes in her behaviour were not as evident as they were with the other students in real-life group interactions.

Kevin

Kevin, a mature student with a degree and in a mixed-race relationship, was comfortable interacting with people from other cultures, so did not feel too uncomfortable when faced with the culture shock situation. In his personal life, he had been facing internal conflict in terms of his values and norms, which had been influenced by his following of heavy metal and the culture of nonconformity in the past. Now, he was in a relationship that required new values of conformity and family responsibilities. He had been having difficulty identifying with a national New Zealand culture, and once in Second Life, he realised that he had multiple cultural identities and was switching between them. This could explain why he moved relatively easily to a Second Life identity.

Kevin provided an excellent example of cultural adaptation and integration. He was able to effectively draw on his prior experiences of different cultures and applied the intercultural theory and tools from the module to further his intercultural competence. He tried to understand the Second Life culture and adapt by making friends, realising that body language in Second Life, like folding arms, was not necessarily intended standoffishness as it is seen to be in real life, but possibly technology-related. He observed his surroundings closely and gradually changed his avatar to be more acceptable: "As I learn more about the cultural norms of Second Life, my avatar will undoubtably (sic) change allowing me to express my own self within the culture". He developed a greater understanding of the connection between cultural assumption and language in communication, even through the choice of a name for his avatar. A number of Second Life users he met had rejected him because of his avatar's name, which was a mixture of numbers and letters in the name. Kevin had chosen the name because, for him, it was a reference to a Japanese art house film that he had liked. When he had been a member of a cyberpunk forum, names like this were normal, but in Second Life, it had the meaning of "griefer" or someone who harasses other avatars.

Because his new values of conformity and responsibility emphasised academic success, he was very motivated and quickly became the group leader. He led by being a role model, engaging in Second Life and posting frequent wiki reflections. He overcame prejudice to establish relationships with Second Life residents because it enabled him to meet the aims of the group work. Critically reflecting on this process of needing to understand and respect different perspectives in Second Life more also benefited his relationship with real-life group members. He came to understand that his frustration with his group members was the result of his own expectations of what was required for group work. He had considered that they were not contributing sufficiently and needed to engage more.

Summary of Student Intercultural Competence Development

Each student experienced respective shifts in their intercultural competence. They all developed a deeper understanding of their own identities and underlying values and beliefs that influenced their behaviour. However, they varied in the extent to which they applied their understanding to develop strategies and adapt their behaviour, both in Second Life and in real life. It would seem that there is a complex interplay between the extent of engagement in the group work process: forays into Second Life, frequent reflections and willingness to develop strategies to apply learning in Second Life and in real life. Although it is beyond the scope of this chapter to compare results with non-Second Life users, it is worth noting that the depth of critical awareness achieved by these Second Life users was more significant and dramatic than that achieved by non-Second Life users.

Bennett's (1993) DMIS concept provides a useful tool to plot the students' intercultural competence development. The initial stages in the DMIS are ethnocentric stages of denial, defence and minimisation of difference. In these stages, an individual's own worldview determines interpretation of reality, and behaviour can include stereotyping and denigration. The final stages are ethnorelative stages of acceptance, adaptation and integration. The acceptance to adaptation stages are achieved when one is able to add different worldviews to one's own, and adaptation

Table 3.2 DMIS stages and student intercultural competence development

	Denial	Defense	Minimisation	Acceptance	Adaptation	Integration
Group1						
Charles						
Yvonne						
Zoe						
Group2						
Rachel						
Felix						
Stacey						
Kevin						

to integration occurs when one is able to move comfortably between different worldviews. In these stages, there is recognition of other interpretations of reality and understanding of one's own values and beliefs. These stages are used in Table 3.2 to provide a visual summary of the students' intercultural competence development. Light grey indicates threshold achievement and dark grey, achievement.

Charles started with defence, progressed to minimisation but stalled at the threshold of acceptance. He identified his intercultural competence weaknesses but was not willing yet to develop strategies to change, and remained in his comfort zone in both Second Life and real life. Yvonne and Zoe, both international students, could be perceived as having a high level of intercultural competence because they chose to come to New Zealand to study in a different cultural and linguistic environment. However, both reacted and managed differences differently. Yvonne started with minimisation of differences in Second Life and demonstrated adaptation and threshold integration. She used skills learnt in Second Life to interact more effectively in real life. This could be seen in her using a more confident low context, communication style usual in New Zealand, with group members. Zoe started with denial and progressed through acceptance to adaptation. Adaptation was more evident in her real-life interaction with group members than in Second Life.

Rachel started with denial and achieved adaptation, while Felix went from the defence stage to threshold integration. It took them longer to reach the ethnorelative stages in Second Life and also in real-life group interaction than the other group members. Stacey and Kevin both entered at the acceptance stage and moved quickly to adaptation. However, Kevin engaged much more in Second Life and critical reflection and demonstrated more depth in his intercultural competence learning and development in Second Life and real-life interaction than Stacey.

Discussion

The case studies indicate a complex interplay between intercultural competence attributes and the context of the intercultural encounters. Despite prior knowledge and preparation, intercultural competence did not always manifest itself nor develop automatically when students were faced with cultural difference. Some students had positive experiences, but there were many negative ones. Their reactions echo many of those in studies described by Childs and Peachey (2013) and Ward (2010) and are symptomatic of culture shock. These reactions and management of emotions and behaviour were very individual and influenced by complex factors involving their values, beliefs, expectations, prior intercultural competence experience including socialisation, and the preparation and support from their lecturers and peers. Their experiences and responses are analysed below, based on the situational and personal factors identified by Paige and Goode (2009) that can cause intense emotion and psychological stress when faced with cultural differences.

Cultural Difference and Ethnocentrism

The more negatively one evaluates cultural differences, the greater the stress (Paige and Goode 2009). All the students had preconceptions based on value judgements, some more negative than others. Experienced gamers, Felix and Charles, felt very negative towards the Second Life environment because of what they were used to in other virtual worlds, and this made it more difficult for them to adapt to Second Life. They felt disdain for what they judged to be outdated graphics compared to what they were used to in other virtual worlds, and were disconcerted by the absence of clear rules. Yvonne and Zoe searched for sites that represented their culture during their initial experiences of Second Life. Yvonne found it very comforting when she found cultural similarities with her own culture. When she later found some sites that she judged to be non-authentic, she did not seem to suffer any negative emotions. This was possible because her initial experiences in Second Life had been very positive, so she had become sufficiently relaxed in the environment and was able to engage. In contrast, Zoe judged the portrayal of her culture very negatively and she experienced strong negative emotions towards the environment. This seemed to reinforce her initial perceptions of Second Life, which had been negative, and she then found trying to interact in Second Life extremely stressful.

Being able to identify and reflect critically on both positive and negative value judgements is a key intercultural competence tool to manage responses to cultural difference (Byram 1997, 2008).

Reflecting in their wikis helped students to process their behaviour and attitudes and to identify ethnocentric value judgements that had caused denial and defensiveness and had made the experiences threatening. Each student sooner or later worked on strategies to shift to being more open and accepting of different perspectives and behaviour in Second Life, and significantly, also used them to make their interactions in real life more effective. The exception was Charles who stalled at the point of realising the implications of his value judgements of Second Life. He needed more time to overcome his natural averseness to making mistakes and get to the stage where he was able or willing to work on strategies to deal with his emotions.

Cultural Immersion, Isolation and Language

All interaction involves interpretation and negotiation of meaning, verbally and non-verbally. In the Second Life environment, many of the usual body language cues are not possible, so the implications of how much body language is relied on in real life for communication of meaning seem to be intensified. Interaction required persistence and resilience, and students found it demanding and often confusing. Drawing on their knowledge of linguistic principles of interaction, Kevin and Stacey persisted in engaging with Second Life right from the start and kept trying to establish relationships to be accepted as in-group members. Others like Rachel ignored linguistic cues and experienced isolation until almost the end of the group work.

Visibility and Invisibility, and Status

Finding something or somewhere that they could identify with and connect to their real-life identity, values and beliefs seemed an important catalyst for the students to engage constructively in Second Life. There was a need to feel part of an in-group and have shared experiences. When there was mismatch or clashes with their expectations, some were deeply affected emotionally. Managing identity issues they had not experienced in real life was challenging. Zoe could not believe that aspects of Chinese culture that she strongly identified with had been ignored. She felt discriminated against and became very emotional. Rachel, who did not think there was anything she could identify with in Second Life, created identities that did not represent her real-life identity. Consequently, she was faced with responses that she was inexperienced to manage, and ran away in fright when her excessively provocative female avatar was attacked.

Expectations, Power and Control

A different culture can cause feelings of loss of personal efficacy and can be problematic for those who value academic achievement or fear making mistakes. Charles and Felix did not seem to have very much advantage in Second Life from their extensive experience of gaming and like Zoe, had to manage their fear of making mistakes as they were faced with an unfamiliar culture. Anxiety over not being able to achieve well academically using Second Life motivated Kevin right from the start to find strategies to manage his anxiety and engage. It took longer for others to find strategies to manage their anxiety, and Charles disengaged from Second Life completely after a few weeks.

Prior Intercultural Experience

Prior intercultural experience can help reduce the stress when having to manage cultural difference. All the students had varying prior intercultural experiences and had been provided with intercultural theory and tools from the module. However, some students who appeared to effectively manage intercultural experiences in the classroom were challenged by those in Second Life. Their responses varied because each student was at a different stage of intercultural competence development, and because intercultural competence, being a contextual life-long learning process, is variable. International student Zoe had been demonstrating intercultural competence attributes of curiosity, openness, flexibility and resilience in real life. She was shocked by her emotional stress in Second Life and initially withdrew. However, through critical reflection, she developed greater awareness of her values and beliefs, and their impact on her attitude, emotions and behaviour not just in Second Life but also in real life.

Conclusion

The case studies show that the affordances of Second Life were very effective for the students to explore their group work theme of identity and presentation of self, and also provided valuable authentic formative intercultural competence experiences. The students demonstrated very individual intercultural competence development, and the shift in their perspectives was reflected in both Second Life and real-life interactions. In fact, the shift in critical cultural awareness was much more apparent and dramatic in these students than for the non-Second Life users.

Interacting in Second Life provided the challenge to the students' values and beliefs that research indicates is necessary for intercultural development to occur, and even those with prior experience as gamers had to manage emotional and often uncharacteristic behavioural responses as a consequence. The impact of the need to adapt to the different culture in Second Life was reflected in the varied nature and extent of each student's engagement in Second Life and with group members in real life, frequency of critical reflection and willingness to develop strategies for interaction in Second Life and in real life. Even with prior intercultural experiences and equipped with intercultural theoretical knowledge and tools from the intercultural competence module, they all showed symptoms of culture shock to varying degrees, and their negative reactions echoed those of other studies such as reported by Childs and Peachey (2013), and Ward (2010). This would indicate that interacting in Second Life involves a process of cross-cultural adaptation.

Cross-cultural adaptation is an emotional process, requiring intercultural attributes such as flexibility, resilience and respect for difference in perspectives and communication styles. However, intercultural competence is contextual, and individuals, whatever their level of intercultural competence, can be affected unexpectedly by culture shock. Recent study abroad research into effective student engagement in a different cultural environment, and for transformative learning to occur, indicates the importance of having theoretical intercultural knowledge, including an understanding of culture shock, regular critical reflection on experiences and the interventions of a mentor to guide the process (Hemming Lou et al. 2012). Transformative learning is considered to have taken place when a student is able to identify what triggers emotional responses, and the psychological adjustments made as a consequence of shifts in perspectives. Similarly, a combination of prior intercultural experiences, theoretical knowledge and tools, and lecturer interventions proved essential for the Second Life students to persevere and engage in the virtual environment, and allow critical cultural awareness to develop and for their formative learning experiences to be optimised so effectively.

The findings from the case studies indicate that there are symbiotic synergies between the affordances of virtual worlds such as Second Life, for intercultural competence development, and the need to already be interculturally competent to some extent, for effective engagement and learning to take place. However, they also echo findings of intercultural research such as by Deardorff (2011), Hemming Lou et al. (2012) and Stier (2006) that effective engagement and learning is not guaranteed by students going into a culturally different environment, and that

ongoing intercultural support in the environment is an important factor. In other words, students should be prepared and supported not only for the technological challenges, but also for the emotional and behavioural challenges of virtual cross-cultural interaction. This has implications for the role of education and educators when considering graduate attributes. Childs and Peachey (2013) maintain that digital literacies will include being able to interact in virtual worlds in the future. If this is the case, then it would seem that intercultural competence is an essential graduate attribute for successful interaction in virtual worlds as well as in the real world.

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