L2 immersion in 3D Virtual Worlds: The next thing to being there?

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Abstract. Second Life is one of the many three-dimensional virtual environments accessible through a computer and a fast broadband connection. Thousands of participants connect to this platform to interact virtually with the world, join international communities of practice and, for some, role play groups. Unlike online role play games however, Second Life is a user-generated social platform where users have the freedom to chat and learn, build, exhibit and sell their creations, and participate in immersive Role Play. This paper reports on findings and personal reflections on a project run over two and half years with students of three language programs at Victoria University of Wellington's School of Language and Cultures. The purpose of the project was to measure language students' willingness to use the L2 naturally and holistically when performing semi-authentic tasks while immersed in culturally themed 3d virtual environments.

Keywords: virtual environments, language learning, immersive education, situated learning, higher education.

1. Introduction

Following Lave and Wenger's (1991) beliefs in the value of situated learning and with the wealth of visual and interactive resources 3D Multi-User Virtual Environments afford, our university's School of Languages and Cultures initiated a pilot project in 2012 to explore the viability of Second Life for immersive language practice with selected students of French, Spanish and Italian.

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The project intent was to find ways of bridging the language learnt in the classroom and authentic language used in real-life situations, thus contextualise and consolidate newly acquired knowledge (Brown, Collins, & Duguid, 1989; Lave & Wenger, 1991). The affordances of 3D Virtual environments can be such that they can provide opportunities for students to interact with a rich environment and native speakers, and therefore enhance their cultural and linguistic awareness. Following the research by Wehner, Gump, and Downey (2011), the second purpose of the project was to gauge students' level of engagement and motivation when interacting with a 3D synthetic environment through an avatar.

This paper reports on findings and observations collated over two and half years with varied groups and contexts of participation, and explores the logistics and design of sessions in light of the nine principles of situated learning compiled by Herrington (2006).

2. Method

2.1. Participants

The project started in 2012 with three volunteer students of French B1 who were able to connect from home with their personal laptops. In June 2012, a teaching grant allowed to extend the project to Spanish and Italian. Graphic cards were installed on five dedicated lab PCs. Groups' levels differed from A1 to B1 and each tutor prepared weekly hour and a half sessions with the author following their respective course outline. Both the French and Spanish groups were invited to present their Second Life experience in the final oral exam. Though not compulsory, 80% of the overall 25 participants did, with a dropout of 30% mid-trimester.

In 2014, supplementary funding allowed the purchase of 15 graphic cards for the lab to host a class of 14 students of Italian. The class level ranged from A2 to B1 and the sessions were held once a week for 50 minutes.

2.2. Data collection

2.2.1. Questionnaire

An online questionnaire was given at the end of the trimester to collect students' impressions. 15 out of 18 volunteer students responded. Seven students in the Italian class responded mid-trimester and 12 to the end of trimester (19 responses overall).

The generic questionnaire was set up to investigate:

- their personal use of social media and online games and L2 practice;
- their level of comfort with the software;
- their impressions of the environment and guest participation;
- their impression on tasks carried out versus language practice.

2.2.2. Author's observations

Personal observations were also collected throughout the whole project. They encompass the implementation phase, the preparation of the sessions, tutor and student training, student responses to the type of activities, and students' general impressions conveyed in their final oral exam. Language learning outcomes were not studied as part of this project but should be researched to extend the viability of such a project.

3. Design: building the bridge

3.1. Volunteers

We endeavoured to align our sessions with the course outline. With the Spanish A2 and the French B1, most sessions revolved around virtual tourism, often with (a) native speaker(s). We visited real-life replicas (Paris, Mexico, Venice) and other places focussing on arts, cultural events and shopping areas. Interviews were conducted with native in-world "professionals" following the topic of the lesson. We attempted to maximise students' participation during the sessions by letting them read signs aloud, describe what they saw and communicate with guests. Objectives were loose as the point was to allow for unpredicted events to occur, and thus engage students emotionally.

For the Italian A1-A2 program, we kept to a more rigid structure to limit cognitive overload. Native language teachers offered assistance and we strictly focussed on situations and simulations based on the course book (e.g. describing, buying, likes and dislikes). Seven participants out 25 dropped out early in the programme, mainly from the Italian group.

3.2. Phase 2: the Italian class

Students were grouped for better management and collaborative work. They were instructed to take photos in-world to complement a short written account of each

session on their learning management system (LMS) wiki. This task was to assist them in preparing for their final oral exam: a group presentation. They interviewed native speakers about their Second Life occupations, explored three Italian islands and wrote a tale. They also changed their avatars to impersonate their tale's characters and complemented their writing with pictures illustrating the plot.

4. Selected findings

4.1. The actors and implementation

Tutors responded differently to the platform. Surprisingly, it did not correlate with their computer proficiency. Their respective mind-set and the systematic use of L2 during class had a strong impact on the students' linguistic performance and engagement with the environment, (instructions, technical assistance and software interface).

It took two training sessions before students started to feel comfortable in-world and an average of five sessions for them to apprehend the world and other avatars unless they had experience with 3D games. Most students tended to participate with text chat rather than using voice with guest speakers. The most confident B1, however, often took the opportunity to speak up for the group when questions arose in the lab.

4.2. The real-life location and level of immersion for L2 practice

The level of linguistic immersion was blatant with the group who connected from home. They relied on what they saw on their screen. Their only means of contact for assistance and meaning was in-world so production in L2 was maximum.

While in the lab, volunteer students were keen to maximise their practice but were at time distracted by communication in Real-Life so the level of immersion was limited. They nevertheless responded very positively to meta-linguistic challenges (instructions, software interface and assistance given in L2). The "class", however, tended to speak L1 while in-world and mostly focussed on L2 for their wiki task. The latter commented that they would have liked more opportunities to speak L2. We also noticed that the class dynamics were very similar to traditional class participation after the session. A mixture of peer-pressure, lack of preparation to express spontaneous emotional engagement in L2, and lack of confidence probably influenced their level of participation during round-table discussions.

4.3. Technical considerations

Bandwidth and firewall settings on campus at times limited the level of interaction to text chat only. While all students enjoyed meeting native speakers, voice was prime to their experience.

Students connecting from home had difficulties with their hardware which also hindered maximum exposure and immersion.

Training on the interface and functionalities demanded at least two sessions to be included in the programme. Video tutorials in L2 were uploaded on the LMS for consultation. Students reported feeling fairly comfortable after five sessions.

5. Conclusions

New Zealand students of European languages have very few opportunities to experience authentic synchronous communication with native speakers. Therefore, it is imperative to find ways to simulate authenticity in student learning experience. It is often challenging for both learners and teachers to bridge learned content to semi-authentic communication skills if the learning environment is not modelling realistic situations. 3D virtual worlds may not model reality per se but an environment such as Second Life with its many international communities and landscapes comes close to what we can afford to broaden students' cognitive engagement in the practice of the L2. This said, it is important to ensure that students understand why they are involved in such an environment and what is expected of them so that they can commit to the environment and its parameters. Herrington (2006) argues that

> "[d]esigning a learning environment to exhibit cognitive realism is one step towards creating an immersive and engaging online learning environment. However, the fact that a learning context has been well-designed is of insufficient. Students must commit to the environment and its parameters [… and if they don't, they] need to be *persuaded* that they are participating in an authentic learning environment" (section "suspension of disbelief").

Overall, participants enjoyed the experience but did not always comprehend the use of a 3D environment as opposed to other learning material. The "class" expected more structured sessions with the controlled tasks that they were accustomed to. Some also tended to dissociate having fun with actual learning, hence the use of L1. However, the students who were mentally ready to take the plunge and maximise

their learning opportunities during the sessions showed constant progress and a gain in confidence to participate in class. The triangulation between language input/output, immersive environments and student motivation is a valuable research to validate the critical importance of situated cognition and authenticity in second language acquisition.

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