

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This section provides the conclusions of the investigation in the form of statements which address the four research questions posed in Chapter 1. These conclusions are briefly explained using the quantitative and qualitative results of the study. Finally, recommendations are provided for the continuing and future investigation of the study topics.

#### 5.2 Conclusions

*1. Building and using virtual worlds can increase university students' motivation toward learning English.*

Posttest computer motivation survey results showed positive responses in 12 out of 14 statements. Posttest English motivation survey results showed positive responses in 21 out of 22 statements.

Student interviews revealed that they found using the computer software had motivated them to stay focused on class activities or motivated them to continue their discussions of world building activities outside of class. In addition, for some of them, just using the software in itself was a motivating experience.

*2. Virtual worlds can provide an effective and appropriate environment to encourage EFL students to communicate in English.*

Constructivist multimedia learning environment survey results showed positive responses in 12 out of 14 statements.

Student interviews indicated that that they used the virtual system for chatting about conversation topics and they could have meaningful discussions about their classmates' virtual story worlds. In addition, virtual chat afforded them the opportunity to focus on using English which they usually didn't do.

*3. Students reported positive attitudes and beneficial results regarding the technical and social aspects of using virtual worlds.*

In addition to the positive attitudes regarding computers and English motivation, and the favorable constructivist learning environment survey statements already stated in the aforementioned conclusions, quantitative information from the student building reports indicated the increasing amount of time that students were willing to put into their final projects over the time span of the course

Student interviews revealed that thinking about and using the software motivated them not only think carefully about it and discuss building concepts with their friends, but also allowed them to learn English from it. Their responses to interview questions demonstrated that using the software had contributed to their English language vocabulary and knowledge of computer concepts. These students also noticed and commented on the total English language environment of the course.

*4. Teacher perspectives indicated the challenging experiences and beneficial results regarding using virtual worlds and building tools toward motivating student interest in English.*

The qualitative measure of teacher observation journal entries showed the challenging, difficult and exciting nature of the course for both teacher and students. It also showed the

teacher's personal evaluation that students were more actively involved in the virtual building class activities and put in more effort than students engaged in more traditional types of conversation course topics. These observations also indicated that the successful completion of course activities required a teacher who was not only interested in and dedicated to the topic of virtual world usage for learning purposes, but also one who was willing to take chances to experiment with novel and unorthodox teaching strategies.

### 5.3 Recommendations

The findings and implications of the current study lead to several recommendations and directions that investigations in student motivation and virtual world building might take in the future.

#### *1. Direct course towards students interested in technology.*

While the current study indicated that the course activities encouraged students to think deeply about their specific virtual building projects, and led to feelings of accomplishment, at times it also produced feelings of frustration for both students and their teacher. Focusing on different groups of second language learners, perhaps targeting students who are interested in trying new technologies might yield even more positive results than those obtained in the present study.

#### *2. Promote experience and training for teachers interested in using virtual world building for motivating language learners.*

Teacher journal entries indicated the extra amount of work needed to guide students in their building activities and to help them solve the many problems that they encountered. Therefore, teachers interested in using virtual world building as a basis for conversation classes

need to prepare themselves by using and making virtual worlds. First, teachers need to spend time participating in virtual worlds themselves in order to understand the types of learning and communication that they can provide. Secondly, they need to practice and learn how to use the various types of software products and technologies that using a virtual conversation system entails.

*3. Expand the area of study to English departments in non-technically oriented Universities.*

While the current study focused on a conversation class from an Applied English department in a University of Technology, these same techniques might be able to be applied to other conversation classes in different settings. The current study used conversation activities based on student selected stories, and all of the students in this study selected stories from movies. There is no reason that the selection of a story could not be expanded to stories considered and covered in more literary courses of non-technical English language departments.

*4. Expand communication activities to between schools or between countries.*

The current course focused on the communication activities of students within one class, but if students in other schools were involved they might be even more encouraged to use the virtual system because there would be no opportunities for direct face-to-face communication. Likewise, expanding the use to students in other countries would allow them to receive an even wider perspective of viewpoints and opinions, and give them even more collaborative opportunities.

*5. Allow greater flexibility in course activity timeframe.*

Teacher observations indicted the challenging and sometimes frustrating aspects of the current study. While strict weekly time and content objectives were set for the investigation, the teacher felt these constraints to be limiting in terms of course environment and student learning.

Allowing the teacher to adjust the amount of time spent on a building task or conversation topic would better ensure that most students would understand and master the concepts of the current lesson before moving on to the next one. Doing so might be able to decrease student and teacher feelings of frustration and enhance the already positive learning environment found in the current study.

*6. Make computer chat log activity more transparent.*

Making computer chat record use more transparent to the students by generating weekly records about which students had used the system might encourage more students to place a greater value on outside of class conversation using the virtual system. This information could be announced in class or posted on the class web page, and this usage might also be calculated into students' final project grades.

*Future Investigations*

Besides implementing the aforementioned recommendations there are specific research and curricular design directions that I would like to develop and pursue in the future.

*1. Investigate using other theories of motivation.*

The theories used in the current study attempted to stay as faithful as possible to the population and circumstances regarding the current case. This meant looking at motivation from the perspective of second language learning. Although this intentionally focused view was used for the current study, future investigations might examine motivation and motivation theories from outside the realm of second language learning. Changing the underlying motivational theory of the investigation would not only encourage different ways of thinking about the problem, but would allow different types of measurement and alternative methods of data collection.

*2. Collaborate with software designers and companies to make an installation package CD.*

While most students did eventually download and install the software products used in the study, it would be more convenient and more efficient to have all the needed software grouped together on one distributable CD. This might involve other licensing considerations that would have to be evaluated and might involve seeking sources for alternative funding. In addition, I would also like to cooperate with the various designers and companies in order to determine the feasibility of creating a self-contained virtual system operating system using an open-source Linux operating system. Using this method, students could operate their software tools and access the virtual conversation system all from a live-OS CD without having to go through the operating system which has been installed on the host computer. Software tool performance might be increased and students would be able to take their virtual system CD with them wherever they go, and be able to use the platform on any nearby computer that is able to boot using a CD.

*3. Continue investigating virtually based building and conversation class*

Using the aforementioned recommendations as a basis for modifications to the course, I would like to continue the investigation of using student-built virtual worlds to motivate students and to promote constructivist learning environments towards the goal of using and learning English. I feel the proposed recommendations would make the learning experience more enjoyable and effective, and I would be interested in researching whether the adjustments to the curriculum would result in even better quantitative and qualitative findings than those found in the current study.