



# Integrating Second Life into an EFL Program in China: Research Collaboration across the Continents

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*“Little is known about how MUVES, Second Life in particular, impact the ways in which language learners improve their language proficiency.”*

Educational researchers and practitioners have paid considerable attention to the use of multiuser virtual environments (MUVES) in recent years in order to support learning across curricula. According to Nelson and Ketelhut: “Educational MUVES have emerged in recent years as a form of socio-constructivist and situated cognition-based educational software” (2007, p. 269). Among MUVES, Second Life (SL) is one of the most popular environments, with over 18 million account-registered users as of May 2008 (Second Life Economic Statistics, May 2008).

This paper reports a recent endeavor of research collaboration between Georgia State University in the United States and Yantai University in China to explore various facets of EFL (English as a Foreign Language) learning within SL. The ultimate purpose of this research collaboration is to find appropriate ways to integrate SL into an EFL program in China.

The exploration and research in this project were informed by social constructivist principles as applied to EFL learning. A design-based research approach was used to investigate related issues and problems in order to determine practical solutions (Wang & Hannafin, 2005). In spring 2008 and spring 2009, two pilot programs of the EFL Program in SL were completed online with participants from both Georgia State University and Yantai University. Our efforts to this point have been to explore 1) how the affordances of SL might be a useful tool that can mediate EFL learning, 2) the effects of the EFL Program in SL on Chinese students’ oral proficiency, 3) the Chinese students’ technology readiness for using SL, and (4) the Chinese students’ perceptions of SL and the EFL program implemented in SL. The paper reports the research collaboration background of the EFL Program in SL, including its implementation and evaluation, and suggestions for implementing similar programs for international collaboration.

## The Start of the Research Collaboration and Rationale

The research collaboration was initiated when two faculty members from Georgia State University and Yantai University met through the Summer Fellowship Program of the Society of International Chinese in Educational Technology (SICET). SICET is a nonpolitical, non-profit academic organization affiliated with the Association for Educational Communications and Technology (AECT). The SICET mission is to establish and strengthen academic international connections, exchanges, research, and studies in educational technology for teaching and learning, as well as to promote the application of educational technology in Chinese education (SICET, 2009). The SICET Summer Fellowship Program offers opportunities for SICET members to visit Chinese universities and to share their research findings with their Chinese counterparts through

conference presentations, guest lectures, and seminars at the host institutes in China. Nearly ten universities and institutes in China have hosted SICET Summer Fellowship Program events as of May 2009.

In addition to common research interests between researchers of both universities, two major reasons facilitated this research collaboration. First, there was the need for EFL programs in China to find appropriate ways to integrate new technologies into their programs. Second, there has been an emerging discussion about the use of MUVes as tools for second and foreign language instruction (Cooke-Plagwitz, 2008). This phenomenon may have evolved from two language research areas: Computer Assisted Language Learning (CALL) and Computer Mediated Communication (CMC) (Lam, 2000; Shei, 2005). Yet, little is known about how MUVes, Second Life (SL) in particular, impact the ways in which language learners improve their language proficiency. In addition, despite its great potential to augment language instruction, very little research has been conducted on the use of SL in the context of learning English as a Foreign Language (EFL)—specifically in contexts where English is not spoken in everyday life but is often taught in the classroom (e.g., learning English in China).

An additional motivation for this research collaboration was a desire to explore a new approach to educational technology research. Educational technology research has been concerned about poor quality of publication and insufficient guidance on educational practice (Reeves, 2000; Reeves, Herrington, & Oliver, 2005) and a new research methodology for educational inquiry is called for.

The Design-Based Research Collective (DBRC, 2003) believes that design-based research is an emerging methodology “for the study of learning in context through the systematic design and study of instructional strategies and tools” (p. 5). Wang and Hannafin (2005) define design-based research “as a systematic but flexible methodology aimed to improve educational practices through iterative

analysis, design, development, and implementation, based on collaboration among researchers and practitioners in real-world settings, and leading to contextually-sensitive design principles and theories” (p. 6). Through this research collaboration, we wanted to use design-based research to explore practical solutions to related issues in designing the EFL Program in SL for Chinese students.

## Research Background

During spring 2008 and spring 2009, two pilot EFL programs were

### *“Pilot EFL programs were implemented in SL with participants from both Georgia State University and Yantai University.”*

implemented in SL with participants from Georgia State University (GSU) and Yantai University. Georgia State University, founded in 1913, and located in the heart of downtown Atlanta, Georgia, is the southeast United States’ leading urban research institution. It offers 52 degree programs with 250 fields of study through six colleges to nearly 30,000 undergraduate and graduate students.

Yantai University is a major provincial university founded in 1984 in the Shandong Province located in eastern China. It is a comprehensive university with 21 academic colleges and schools and 31 research institutes and centers. It offers 49 degree programs and has an enrollment of nearly 29,000 undergraduate and graduate students.

## The First EFL Program in SL (Spring 2008)

Five GSU graduate students participated in the first pilot EFL program in SL (spring 2008). Three participants were doctoral students in the Instructional Design and Technology pro-

gram and the other two were graduate students of the Applied Linguistics program. The GSU participants were all proficient in SL and were prepared to interact with their Chinese counterparts in a short SL workshop.

The participants at Yantai University were 31 English-major sophomores from the English Department at Schools of Foreign Languages. The program in SL was implemented as part of a two-hour weekly speaking class in the English Department. The instructor of the course designed reading and discussion activities centered on topics dealing with globalization as a context for improving students’ English speaking skills. A set of SL learning activities were designed by researchers as guided practice as well as a means for the students to interact with native speakers of English.

The Chinese participants first completed a survey designed to gauge their technology readiness for using SL for EFL learning. Immediately after the survey, they participated in a one-hour workshop designed to familiarize them with basic SL navigational and communication functions. After the workshop, participants interacted with their Chinese peers in SL to both familiarize themselves with the environment and to prepare a list of questions about globalization they wanted to ask the American participants.

Next, the Chinese participants were divided into two groups. Sixteen participants in the first group interacted one-on-one with an American participant to complete the given tasks in SL. Fifteen Chinese participants in the second group formed three sub-groups of five to interact with other American participants. All of the participants (both American and Chinese) logged into SL using preconfigured avatars. Their avatars had been placed in preset locations within SL. Chinese participants and their American counterparts were given two language tasks. The first task for Chinese participants was to interview an American student about his/her perspectives on globalization in order to write an article for their university newsletter. The second task was for the American participants to



One-on-one Interview



Group Discussion



Virtual Tour



Presentation

interview the Chinese participants about university student life in China. The first task was designed to help Chinese students practice oral skills such as questioning and clarification (or information seeking). The second task was designed to help Chinese participants practice listening to and answering questions in English. The participants' language performances were recorded at the language labs both at GSU and at Yantai University. They also completed a post-program survey followed by focus group interviews.

## The Second EFL Program in SL (Spring 2009)

The second EFL program in SL was implemented in spring 2009. The participants from GSU were 20 undergraduate students who were taking the course *IT 2010: Computer Skills for Information Age*. Their participation

in the study was part of their course work requirement. The GSU students had a two-hour workshop on SL before they engaged in learning activities with their Chinese counterparts in SL.

Sixty-one full-time sophomore English majors at Yantai University completed a technology readiness survey for using SL for EFL learning. From the 61 students, 20 were selected to participate in the EFL Program in SL including seven female students (35%) and 13 male students (65%). Their ages ranged from 19 to 23 with an average of 21. The participants were selected on a voluntary basis and according to their comprehensive evaluation scores of the previous academic semester (fall 2008). The comprehensive evaluation consisted of the evaluation on students' listening comprehension, speaking proficiency, and reading and writing abilities. The evaluation was done by professors at the

university on a semester basis to assess students' academic performance.

The second EFL program in SL lasted five weeks, from March 24 to April 26, 2009. The program provided the participants with opportunities to interact with American students synchronously online in SL. The learning tasks for each week consisted of 1) one hour of learning activities in SL, 2) blog writing on the learning experiences in SL, and 3) language preparation for learning activities in SL for the next week. The learning activities in SL included a SL workshop in a lecture format, virtual tours in groups and one-on-one with SL partners, small group discussions, one-on-one interviews with the American partners, and individual presentations. A website was created to give detailed instructions on how to complete the tasks for each week. Following instructions given on the web site, the participants completed their tasks at an Internet Center on



Dates	Task Contents	Notes
Week 1: March 24-29, 2009	<ol style="list-style-type: none"> <li>1. Second Life Workshop.</li> <li>2. Take a virtual tour (visiting Capitol Hill and Princeton University Campus in SL).</li> <li>3. Write a report about your virtual tour and post it on the blog.</li> <li>4. Prepare for the next week.</li> </ol>	SL activities were in groups with researchers.
Week 2: March 30- April 5	<ol style="list-style-type: none"> <li>1. Meet and talk with American students about university student life.</li> <li>2. Write a report about your talking with American student and post it on the blog.</li> <li>3. Prepare for the next week.</li> </ol>	One-on-one with American students.
Week 3: April 6-12	<ol style="list-style-type: none"> <li>1. Meet and discuss with American students about ideal jobs and how you would prepare for ideal jobs.</li> <li>2. Write a report about your discussion and post it on the blog</li> <li>3. Prepare for the next week.</li> </ol>	Group activity with American students.
Week 4: April 13-19	<ol style="list-style-type: none"> <li>1. Interview an American student on technology uses for learning and for fun</li> <li>2. Write a report about your interview and post it on the blog.</li> <li>3. Prepare for the next week.</li> </ol>	One-on-one with American students.
Week 5: April 20-26	<ol style="list-style-type: none"> <li>1. Presentations in SL on one of the three topics: <ul style="list-style-type: none"> <li>• American students' perspective on ideal job and how he/she prepares for it.</li> <li>• Using technologies for learning and for fun: An American student's perspective.</li> <li>• My experience of communicating with American students in Second Life.</li> </ul> </li> <li>2. Write a report about your interview and post it on the blog.</li> </ol>	SL activities were in groups with American students.

Table 1: Dates and Task Contents of the Research Program in SL

the Chinese university campus. Two Chinese research assistants present at the site provided necessary technical support. Figure 1 is a screenshot of the participants completing different learning tasks in SL and Table 1 summarizes the tasks for the EFL program participants at the Chinese university.

## Program Evaluation

For both the formative and summative evaluation of the 2008 and 2009 pilot EFL programs, qualitative and quantitative analysis (Creswell, 2008) were used in order to improve the EFL Program in SL. Our evaluation framework is detailed in Table 2 below.

The second EFL program collected a vast amount of data that are currently under analysis and will be summarized in a written report. These data include 94 recorded oral tests, 99

video clips of students' language performance in SL, 18 recorded interviews, 77 blog postings, and over 77 pre- and post-program surveys.

## Recommendations

Evaluation is a systemic approach to program improvement, and program improvement should lead to improved student learning. Evaluation should lead to recommendations intended to optimize the program in relation to its intended purposes (Fitzpatrick, Sanders, & Worthen, 2004). According to the program evaluation results, we recommend the following for the design and implementation of similar future research programs.

1. Create multiple channels for online communications among research team members. Due to the nature of the research collaboration, the exchange of ideas and documents

are frequent and common. The research team should establish and use a file sharing system (e.g., Google.doc), and an online chat medium (e.g., QQ, Skype) that includes both audio and video chat capability for international communications.

2. Test the technology at the site. From the pilot EFL programs, we saw both successes and failures that technology may bring to the EFL programs in SL. We recommend that researchers test the technology prior to the start of each EFL program activity at each of the sites.
3. Involve graduate students on both sides of the international border in the collaboration. Research collaboration on such a large scale requires a lot of detail-oriented work. Involving graduate students makes it possible to collect and analyze

<b>Major Evaluation Question:</b>	
What should we do to improve the EFL Program in SL?	
<b>Evaluation Contents and Questions</b>	<b>Methods &amp; Data Sources</b>
<b>Technology readiness:</b> <ul style="list-style-type: none"> <li>Are computers in the language lab ready to use SL for language learning? <ul style="list-style-type: none"> <li>SL use with American students</li> <li>Video recording and data saving</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Site testing at Yantai University and GSU in the USA</li> </ul>
<b>Instruments:</b> <ul style="list-style-type: none"> <li>Are the surveys clear to the Chinese students?</li> <li>Are the instructions on learning activities appropriate for the Chinese students in terms of language level and activity contents?</li> </ul>	<ul style="list-style-type: none"> <li>Subject Matter Expert reviews</li> <li>Target student tests and comments</li> </ul>
<b>The Chinese students' technology readiness for using SL for learning:</b> <ul style="list-style-type: none"> <li>Are the Chinese students technologically ready to use SL for EFL learning?</li> <li>What are the self-perceived readiness of the Chinese students for perform language tasks in SL?</li> </ul>	<ul style="list-style-type: none"> <li>Pre-program and post program surveys</li> <li>Interviews</li> <li>Blog posting</li> <li>Site observation</li> </ul>
<b>The Chinese students' attitudes:</b> <ul style="list-style-type: none"> <li>What are the Chinese students' attitudes toward using SL for EFL learning?</li> </ul>	<ul style="list-style-type: none"> <li>Post program Survey</li> <li>Interviews</li> <li>Blog posting</li> </ul>
<b>Effects on learning:</b> <ul style="list-style-type: none"> <li>What are the Chinese EFL students' language performances in SL?</li> <li>What are major benefits of SL perceived by the Chinese students for language learning?</li> <li>What are major barriers in using SL for language learning perceived by the Chinese students?</li> <li>What are the suggestions from the Chinese students for program improvement</li> </ul>	<ul style="list-style-type: none"> <li>Pre and post oral tests</li> <li>Assessment rubrics for oral tests <ul style="list-style-type: none"> <li>Accuracy</li> <li>Fluency</li> <li>Language complexity</li> <li>Language appropriateness</li> </ul> </li> <li>Recorded language performances in SL</li> <li>Interviews</li> <li>Blog posting</li> </ul>
<b>The American students comments:</b> <ul style="list-style-type: none"> <li>What comments do American students made on the Chinese students' language performances in SL?</li> </ul>	<ul style="list-style-type: none"> <li>Post program written report</li> </ul>

Table 2: Evaluation Framework for the Pilot EFL Program in SL

the data effectively and efficiently but also help the graduate students learn and grow as educational researchers.

4. Use a wide array of learning tasks. We suggest that the future EFL programs use a wide array of tasks that can elicit structured interactions (e.g., interviewing native speakers) as well as semi-structured or improvised interactions (e.g., virtual field trips to historically significant places, visits to virtual museums, organizing and participating in virtual conferences, designing and constructing cultural centers, and creating

virtual art shows, etc.). Meaningful interactions in SL would not only equip the EFL students with knowledge about English-speaking cultures but also provide them with appropriate ways of expressing themselves under certain social circumstances.

5. Be careful in the site selection. The selection of virtual environments needs to be carefully considered. There are many objects in SL that could interfere and disrupt students when attempting to complete given tasks. For example, it may not be appropriate to select a seashore site in SL where, among other things, sev-

eral dolphins regularly jump out of the sea when the students need to concentrate on a discussion that is not related to dolphins.

6. Integrate multiple learning formats into the EFL Program in SL. The ultimate purpose of the research collaboration is to help Chinese students with EFL learning with a focus on speaking. However, EFL learning should not be limited to speaking in SL. Creating other channels of communication (such as email, blog writing, Facebook, etc.) with American students and engaging students in writing are also beneficial to EFL learning.

The rapid evolution of digital media has afforded us the opportunity to assimilate new technologies while exploring new pedagogies in EFL language learning. We believe that our work described herein has barely touched upon this potential and we are excited about what the future may bring. Synchronous and asynchronous information and communications technology (ICT) provides opportunities for research collaboration across international borders. The ability to communicate at large distances provides both the opportunity for the sharing of culture and language, and increased opportunity for collaborative research projects. While there are many challenges associated with collaborative projects across international borders, there are tremendous opportunities for both the participants and the researchers. The potential for ICT and MUVE to improve communication among students from different languages and cultures is an area in which further research is needed.

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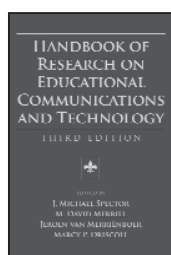
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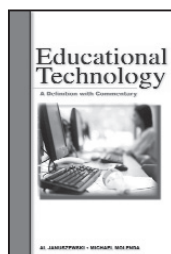


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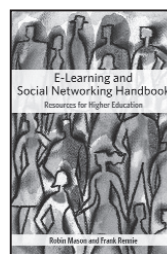


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