Language Learning in Multi-User Virtual Environments

Using the Enter-the-Story Teaching Method

Yin-Mei Wong
Seng-Chee Tan

The authors propose using the Enter-the-Story teaching method for language learning in Multi-User Virtual Environments (MUVEs). A MUVE’s immersive story-world imbued with rich cultural artifacts provides an appealing environment for young learners to learn a language by taking on roles in a story and describing their imaginative experience in the story.

Introduction

A recent scoping study conducted by the Joint Information Systems Committee (JISC) revealed that the application of virtual worlds has accelerated exponentially over the last several years (de Freitas, 2008). Multi-User Virtual Environments (MUVEs), for example, have been gaining popularity among youths despite their short history of development. Building on earlier text-based environments, MUVEs have evolved rapidly to include 3D graphics, text descriptions, and informal communication tools like chats. MUVEs appeal to youths because of the realistic 3D immersive environment and the opportunities to interact with others in virtual communities for social purposes. MUVEs create the sense of being there, in the company.

Yin-Mei Wong served as an education officer with the Ministry of Education in Singapore. She is currently completing her Ph.D. thesis at the National Institute of Education, Nanyang Technological University, Singapore (e-mail: thesisen@yahoo.com.sg). Seng-Chee Tan is Associate Professor at the National Institute of Education, Nanyang Technological University, Singapore, heading the Learning Sciences and Technologies Academic Group. He has been a head of department (IT) at a Singaporean school, an assistant director in the Educational Technology Division in the Ministry of Education, and an associate dean at the National Institute of Education (e-mail: sengchee.tan@nie.edu.sg).
of other people (Bartle, 2004). There are potential educational applications of MUVEs when used with appropriate curriculum content and sound pedagogical principles. However, exploitation of virtual environments in helping people to learn languages is still at the nascent stage (Schwienhorst, 2002), and there are not many pedagogical models available for learning in MUVEs. In this article, we propose the use of the Enter-the-Story method (Wenger, 2004), as a pedagogy to be used in MUVEs for language learning.

**MUVEs as Learning Environments**

MUVEs could facilitate learning via: (a) providing an immersive environment, (b) facilitating management of group works, (c) motivating and engaging learners, and (d) creating a simulated environment for embedding cultural artifacts.

Despite the interactivity many programs offer, users could detect the program as an external construction that they do not identify with (e.g., a tutorial program). Beyond interactivity, MUVEs afford an immersive environment by allowing a person to assume an avatar’s identity to create a sense of being in a virtual world. This environment could help to engage youths and motivate them to stay on task.

When conducting group work in a classroom, even with the most experienced teacher, assistance and guidance can only be provided to one group at a time. In addition, due to the ephemeral nature of face-to-face talks, without any recording device, the students’ discussions will be lost after the class. Through features like chat-logs and display boards, MUVEs provide a historical record of the students’ interactions, which allows the teacher to revisit students’ talk even after the classroom activities have ended. This enables the teacher to provide guidance to more students.

In addition, the historical record means a MUVE could offer perpetuity of activities, unlike other online collaborative platforms, such as video conferencing or net-meetings (Bartle, 2004). In online video conferences, the completion of an assignment normally marks the end of the work. People communicate through such platforms only to complete a job or to fulfill the requirements of a course or profession. In contrast, a MUVE is an imaginative world shared by many users. The motivation for people to participate in a MUVE is usually not to complete a job but to explore the environment and to meet others. Meeting and collaborating with other users to complete tasks is part of the game. When one task is completed, the users may remain to explore further opportunities.

A MUVE could provide an environment with embedded cultural artifacts like building architecture, clothing, furniture, tools, and equipment. It helps to provide a rich social-cultural environment that is conducive for language learning. Imagine yourself learning Chinese in a Tang Dynasty environment interacting with non-playing characters who speak fluent Mandarin and browsing documents written in Chinese.

The above educational potentials of MUVEs can only be realized with appropriate pedagogy. In the next section, we introduce the Enter-the-Story method as a matching pedagogy for language learning in MUVEs.

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**Enter-the-Story Method**

The Enter-the-Story pedagogy, developed by Wenger (2004), aims to help children contextualize and internalize new vocabularies. It requires a child to assume a role in a story and to describe, in rich details, what the role character might think, feel, or act. Typically, in a classroom, a teacher begins a lesson by providing a passage for the pupils to read. After the pupils are introduced to the new words in the passage, the teacher will then ask the pupils to go into groups and take turns to construct different stories by applying the newly introduced words. Some key features of the Enter-the-Story method are as follows:

1. It can be used for verbal and/or written expressions.
2. It emphasizes building language fluency with high tolerance for incorrect usage at the initial phase.
3. Visual and verbal thinking skills are both used in Enter-the-Story method. While using words to construct a story, the learner engages in the full process of internalizing new words and concepts in an interesting way to express his or her imagination.
4. Pupils’ are empowered to take responsibility for their learning; the teachers do not set rules like the number of stories to be created, length of each story, or content of each story.
5. It requires the presence of a live audience. Thus, it needs to be conducted in a group or class setting.

The process involves not only knowing the meaning of new words, but also knowing when and how they can be used. The pupils are faced with the challenges of negotiating and identifying where, when, and how a new word could fit in a story; very often, the pupils would start by first drafting a storyline before refining the sentences. Compared to rote learning, it is a good way to acquire new vocabulary for the pupils as they actively construct stories around the newly acquired vocabulary in a way that is meaningful and acceptable within the culture of the target language.

The Enter-the-Story method is an appropriate pedagogy in MUVEs because it encourages the pupils to build on existing stories; its effectiveness could be enhanced by the MUVE’s immersive story-world imbued with rich cultural artifacts. In addition, the role-playing requirement of Enter-the-Story is well complemented by taking on an avatar’s identity in a MUVE. Conversely, as MUVEs are virtual environments with no fixed paths to follow, young users could be easily distracted in the
environment. Enter-the-Story provides a concrete purpose for the users to interact with the environment so as to describe their experience.

Learning Chinese in a MUVE:
A Vignette of a Case Study

We conducted a case study involving three 6th grade pupils who are learning the Chinese language. The MUVE used was Century of Three Kingdoms, a commercially available MUVE that was inspired by a famous Chinese epic entitled Romance of the Three Kingdoms. The story was said to hold a place among the Chinese people comparable to the tales of King Arthur to the British (de Crespigny, 1990). The Three Kingdoms referred to in the epic are the Wei in northern China, the Shu in the west, and the Wu in the east, which existed from 220–265 AD.

The story begins after the quelling of the Yellow Turbans Uprising of the Eastern Han Dynasty, when local warlords and tyrants sprung up everywhere in struggle for control over the country. Many battles were fought during this turbulent period.

In Century of Three Kingdoms, the pupils begin by assuming the role of a peasant living in the kingdom. Represented by their avatars, they interact with the objects in the virtual environment and create their stories through actions of their avatars within the MUVE. When they first enter the MUVE, they explore the environment and look around for ways to progress to the next stage. They begin by doing tasks to earn virtual gold (money) so that they can buy items, establish power (e.g., recruit armies and pay their salaries), and build reputations (e.g., by doing good deeds). They can progress to the rank of army officers and build their powers by fighting in the wars.

During the study, the pupils and the first author would log on to the MUVE environment concurrently to carry out Enter-the-Story activities. For instance, in the beginning of the story, when we were all traveling to the different provinces, the pupils and the first author took turns to describe their experiences while adopting the roles they played. The conversations were captured in the chat-log provided by the MUVE.

At the beginning of the study, the pupils showed some reluctance in participating in the Century of Three Kingdoms, as they were familiar with many other computer games which were said to be more exciting. One pupil lamented that it was not likely to be enjoyable because they could not kill "bad guys or dragons." As the weeks went by, they began to spend more time in the MUVE. Within three months, the amount of time spent by the pupils in the MUVE increased from an average of one hour per week, as originally agreed, to about three hours per week. They were so engrossed that the researchers had to urge them to log out of the MUVE after the specified hours.

The pupils’ behavior differed from that of their usual nonchalant attitudes in face-to-face lessons—they were highly motivated and engaged in searching for and utilizing words, phrases, and other resources that can be found in the MUVE to construct sentences. The Century of Three Kingdoms provides a list of phrases for the users to chat in good classical Chinese. After the pupils became more familiar with the MUVE, they developed a habit of using the set phrases in the MUVE.

After about a month, the pupils began to use metaphors and analogy that they learned in the MUVE as part of their language repertoire, a phenomenon that we had not observed in our face-to-face lessons prior to the study.

Conclusion

MUVEs present great potential to engage the tech-savvy young generation for learning, due to their immersive environments, fun, and rich cultural artifacts. To harness the affordances of MUVEs for language learning, we propose the Enter-the-Story method as a complementary pedagogy.

On one hand, MUVEs provide a story-world embedded with rich cultural artifacts for story telling used in the Enter-the-Story method, and the avatars allow for more realistic role-playing. Conversely, instead of wandering aimlessly in the virtual world, the Enter-the-Story teaching method provides a clear purpose for the pupils as they explore the MUVEs. Our case study shows promising evidence that after a few months of interacting in a MUVE, the pupils were highly motivated and began to apply traditional Chinese idioms and metaphorical phrases, a behavior that we did not observe in face-to-face lessons.

While more extensive study is needed to establish conclusive evidence for the effectiveness of MUVEs in language learning, we hope our idea will trigger more effort to explore the untapped potentials of MUVEs.

References