

Virtual Reality in a Foreign Language Teaching

Renata Martini Kristo
University of Tirana, Faculty of Foreign Languages
renatamartini2001@gmail.com

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Abstract

This article describes and elaborates on the educational potential of virtual reality, focusing on the use of three-dimensional environments in foreign languages teaching process. The study is concentrated on the analysis of one of the most used products recently, the virtual platform SECOND LIFE, by pointing out at potential possibilities that this platform offers to the didactic of foreign languages, but without leaving behind problems with which many users have to face during its implementation and use.

In the introduction, the article focuses on the technology role in teaching in general and especially on foreign languages teaching. It continues on elaborating shortly on virtual reality, what it is, how it started, where it is used, and putting more emphasis on the use and possibilities it offers for the educational process and especially for foreign languages teaching.

Keywords: *Didactics, second life, virtual reality, virtual 3D environment, avatar, platform, CALL.*

1.Introduction

The use of technology in teaching and learning of a language is no longer a novelty. In the 60s, the USA CALL came into being (computer assisted language learning) defined by Levy in 1997 as "research and study of computer applications in teaching and learning of a foreign language." In this period the computer was seen more as a tutor, distributor of practice, capable of offering new exercises and to correct the student immediately in order to ensure the acquisition of language structures, modeled on the teaching force.

In the '80s, in Europe, it was affirmed the so-called Communicative CALL, a further development of CALL, which proposes the use of computer and new technologies, in order to develop communicative language competence: not only "complete exercise groups" but programs with stationery and text processing, didactic games to develop oral and written understanding / creating. According to this method, since the language is primarily communication, a student must be an active part; not only to manipulate and remember the language, but also to produce it by developing various tenses. Students and machines should interact flexibly. Computer turns simultaneously into a tutor and tool, thus an instrument and guide that offers control and choice, with the ultimate goal of linguistic-communicative mastery. For the first time, they used stationery and word processor programs, dictionaries, language games for didactic purposes.

In the 90s, we witness the emergence of two technological innovations: multimedia computer and Internet, that make the computer an ally for teaching foreign languages, especially English, the global language of on-line communication.

In the field of language learning, Internet owns a number of sources: blog, where it is possible to read and comment posts in different languages, English, Italian, etc.; chat, where, while participating in a dialogue, notions about different cultures can be exchanged. Network access and use in the didactic context, without doubt, has favored the development of training programs in distance (e-learning) providing such platformsⁱ that offer virtual teaching environments equipped with multiple sources. Among instruments and applications available in the network, enabling the opening and recognition of new areas of research methodology, video games and virtual world broaden horizons in the field of teaching language supported by computers, synthesizing in an environment, multimedia didactics with a number of procedures and methods.

Three-dimensional virtual reality is increasingly used in teaching and learning foreign languages. Thanks to simulations of real situations and environments, students manage to find creative ways to improve their linguistic knowledge. Although foreign language teaching in 3D virtual reality is still at an early stage, it is attracting more and more interest of students, teachers and training experts.

2. Virtual Reality

Virtual Reality as a term was first created in 1988, in an interview with Jaron Lainerⁱⁱ "A Portrait of the Young Visionary" according to whom "Virtual reality is a technology that is used to synthesize a separate reality. It recreates a new plan of our relationship with the physical world. It does not affect the subjective world and has nothing to do directly with what is in our brains. It has to do only with what our sensory organs perceive".

There are three main characteristics of this virtual environment:

- Presence – Mental sensation of being in a virtual environment. It ensures a level of user's inclusion.
- • Moving inside - full immersion in the virtual world, in the sensory level, through virtual interlocutors. It provides a measure of the perception of the existing virtual world.
- • Interoperability - The ability of users to modify the environment and on the environment, the ability to respond to user actions. It provides a measure of reality simulation.

Through this new tool, the subject experiences the sensitivity of inclusion by showing an effective participation, despite the fact that objects and spaces that appear and interact, exist only in computer memory and in one's own mind. In this way, the subject is not merely a spectator of what happens on the screen (like the design on the screen during a movie), but it is also an active participant.

The process of interaction with virtual objects really happens though of course it can not be compared with what happens in the real world. To achieve the right results, it is necessary the presence of a graphic interlocutor (representing the virtual world) and in particular the processing of three key variables: space, time and interaction.

But virtual reality is not reality. In fact it is a simulated "connection" which is proposed instead of a real "connection" between users and the actual real events. But it is also true that the reality that we experiment, typically, is always mediated by the brain and our sensory system.

Also, virtual reality does not intend the reconstruction of reality, but intends more to convince the user to being a reality, so that the latter can develop with simplicity the assigned task. The user should consider the virtual world in which he came in, absorbed; it has the same aspects of the real world. Reality returns to the property of the virtual world, and the human factor, in a judgment indispensable tool.

3. Where to use VR

The effective use of virtual reality and its technologies is very wide: from market games / video, film and cinema, up for medical-therapeutic purposes.

Some applications of virtual reality are found in: army, health, education, fashion, business, sport, media, construction, etc.

4. Virtual Reality in Education

Teachers think that tools virtual reality enables, the possibilities of voice and video, presentation programs and other collaboration technologies, private and group conversations, can simplify the process of reading and presentation, to enable students to ask questions / answer (without interrupting the reading), collaborate and learn in a more effective way.

The advantage of using virtual reality in education lies in the opportunity that was given to groups of students to interact with each other as well as with three dimensional environments. This technology enables complex data to be accessed by students in a simple way, while also being fun and easy to learn. Furthermore, students may be able to communicate with the environment in three dimensional objects, in order to discover more and more about them.

The large number of simulations, virtual reality features, providing disciplinary and interdisciplinary teaching strategies, motivating and stimulating for students orienting them more and more towards an active approach, constructive and contextual learning.

The movement in a simulated environment, in which the inside of the complex programming of colloquial and reflexive didactic experiences includes participants themselves, makes them the protagonists of their process of learning.

Virtual reality, thanks to the introduction of its characteristics inside, simulation and design, is regarded as one of the most appropriate strategies in the context of didactics that uses technologies such as knowledge and learning support.

For example, astronomy students can study the solar system virtually by physically interacting with content objects. They can manage to move the planets, observe the stars and follow the trail of a comet development.

Virtual reality is an ideal environment for learning in the field of medicine, virtual reality can be used to develop surgical simulations or create opportunities for students to explore the human body through three dimensional images.

5. The use of 3D Virtual Environments in Foreign Language Learning

In virtual environments, education becomes truly interactive. Foreign language learning in general requires a complete immersion in the relevant environment. Virtual worlds make it possible for students who are studying a particular language, to enter entirely in environments where this language is spoken. For example, students of a French class, sent to "virtual excursions", virtual tours in Paris accompanied by guides with French mother tongue, as if they are actually there.

Virtual reality offers environments in which the user can create contacts with other users, the space in which he can create his own reality and countries in which he simply can not exist. Language researchers can use these social experiences, inclusive and creative practice and improve language skills.

The use of virtual environments ensures:

Social learning: students can meet in these environments other students of the same educational institution, or partner institutions or simply born speakers of the language which they want to study. In environments called "relaxed environment" general conversations are provided, as well as specific tasks.

Inclusive learning: virtual 3D environments enable the student to actually be located somewhere. They easily (virtually) can visit real places or explore other imaginary ones.

Creativity: several virtual environments (especially Second Life) give users the ability to build objects (real or imaginary) in a simple and cheap way. Students can create and decorate their own virtual homes, customize the appearance of their avatarsⁱⁱⁱ and create virtual vehicles.

Link: For many students, being in a virtual world is something normal. Virtual meetings or presentations are different from their equivalents in real life and in this way they can benefit from the practice of these forms in 3D virtual environments.

6. How to use virtual reality in learning a foreign language?

Virtual worlds are rich in interactive learning opportunities. This way of learning is provided through several activities:

Virtual field trips: students can visit different places. Through various exploratory activities, students can create their trips themselves by selecting the sites they want to visit. They can also make various comments on what they see and visit.

Virtual walks in various cities: students can seek and choose a location to walk, play the role of guides to others who are new to this field.

Questionnaires: in the virtual environment students can discuss with each other by practicing language skills in this way. They can perform various interviews about issues that concern them. Virtual environments provide students with the most favorable and less stressful ways than in real life, to meet with each other.

Presentations and meetings (meetings): Virtual environments are increasingly used for business meetings, lectures and conferences. Inside 3D environments students can prepare for such situations.

Roles (role-plays): avatars can be modified and changed easily by placing the student in a specific role. In this way the student fails to fully experience a new culture, historical period or a social role. Using objects and physical movement or gestures can be implemented in specific tasks, such as shopping, going to a restaurant, etc.

Creative Structures: students can create their structures, for example a house, clothing or landscapes. Creative work, being a task that requires cooperation, linguistically, is very intensive and provides many opportunities to negotiate with one another.

One of the most popular virtual environments used for learning languages is definitely Second Life, but we can also mention others, such as There.com, Twinity and Exit Reality.

Conclusions

Today, in a global world, knowledge of foreign languages, in addition to knowledge and competencies of each professional sector, is becoming increasingly important.

To follow lectures of the Italian language in Rome, learn English in London or Russian into a square in Moscow, is no longer an option only to a small number of students who possess both time and financial resources, but with the use of SL it becomes an open opportunity for all.

Learning languages in 3D virtual worlds, one of which is the SL, gives students the opportunity to learn collectively interactive; learning becomes practical and attractive. Through it, a platform is created for student-teacher interaction; cooperation is enabled between those who study a foreign language and those who have this native language. SL enhances the cultural identity of students and their awareness towards intercultural communication competence.

But we have to mention here the serious problems associated with the use of SL, as for example:

- technical and financial problems, such as slow connection, delay time, demand of constant updating, the high cost.
- difficulty in familiarizing students with the virtual environment; difficulties for teachers in connection with the investment of time and energy, as they play no role in the creation of learning environments.
- using SL in learning a foreign language is not possible for students under 16 years old.

I recommend that teachers should show more interest in the use of SL in the context of foreign language teaching. Moreover, they should focus on the development of methods, techniques, strategies and tactics to help their students when using the SL, in order to improve the learning of a foreign language.

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