The impact of using virtual environments on English pre-service teachers at a distance program

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ABSTRACT: The present study has the purpose of researching on the impact of Imprudence as a virtual environment on English pre-service teachers at a distance program. It took place at an Ecuadorian private university and the sample was comprised of 62 students of the English major. The results were analyzed quantitatively and qualitatively, which allowed us to conclude that Imprudence has a positive incidence on students' participation; likewise, they perceived it as a useful tool for their learning.

KEYWORDS: Distance Education; Educational Technology; Higher Education; Learners.

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Throughout the last years and due to globalization, the use of technology to enhance the learning of English as a foreign language (EFL) has increased tremendously. In fact, nowadays there is a variety of tools that can be used by students, especially those ones who study the English major at a distance program which are characterized for not having enough means for an effective interaction.

Virtual learning environments or virtual worlds are one of those technological resources whose features allow distance learning students to learn the contents of subjects through simulated classes in real time. With this respect, several studies have been conducted, Zhang as cited in Shafieiyoun and Safaei (2013) mention that virtual environments are combined systems of networked online devices and sources, which make that learning at a distance or on-campus to be similar to a real environment through the use of avatars. Additionally, Chen (2016) states that the impact of virtual environments on language learning is notable because of its advantages. This author also claims that they provide students opportunities to work collaboratively and allow them to socially interact in the target language increasing their participation through virtual field trips, virtual city tours, role playing, and creative construction work via collaboration with others.

According to Martínez 2009 the main characteristics of virtual environments are: persistence, through the simulation of a 3D space; interactivity, possibility to interact among participants; physical presence, where the user is represented by an avatar. Additionally, this author mentions that virtual environments allow learners to communicate through the use of chat, gestures, and voice



Virtual environments can be created by using the OpenSimulator platform, which is an open source multiplatform and a multi-user 3D application server. According to (OpenSimulator 2008), this platform can be accessed by a variety of users who are involved in the educational field, especially at a university level. In this regard, (EcuRed 2010) highlights that the implementation of Open Simulator in higher education has many advantages since it allows universities to be able to create contents, and adapt them to university needs and its methodology.

One type of Open Simulators using by university students at distance program is Imprudence, that is an "open source metaverse viewer project based on the Second Life Viewer source" (Imprudence 2008). According to this author, Imprudence has as aim to improve at a large scale the usability of the students through community involvement and thoughtful design. Thus, it gives the opportunity to higher education students to design their own avatars and to work collaboratively and dynamically during the simulated classes, which has a positive influence on learners' distance education at university level

The aforementioned characteristics of Imprudence and the fact that the university, where the present research was carried out, has established its use for improving their distance students' learning, were the main reasons to conduct this study and to set the following research questions:

What are English pre-service teachers' perceptions on the use of Imprudence as a resource for learning?

What is the incidence of Imprudence as a resource on English pre-service teachers' participation in virtual environment classes?

The sample of this research was taken in a private university in a southern city in Ecuador, and was comprised of 62 pre service teachers, who were enrolled in the English major of the distance program. The design was exploratory and the techniques used to gather data were a survey, a checklist, and an interview. The first one allowed us to know the participants' perceptions on the use of IMPRUDENCE as a tool for their learning, and the others helped us to determine the incidence of this resource to promote students' participation in virtual environment classes. Those results from the survey and the checklist were analyzed quantitatively by using the SPSS software; meanwhile, the data from the interview was analyzed qualitatively.

The tool was used as a resource to work on the six planned synchronic activities (two hours each one) for five months. At the beginning, the students were trained on the use of the Imprudence tool. Then, some activities about different topics were done by using this resource, which allow the researchers to register and score the quantity and quality of the English pre-service teachers' participations. At the end of the academic period, an interview and a survey was applied to them in order to determine their perceptions regarding the Imprudence use. It is also important to mention that the researchers offered continuous academic guidance and technical support in order to solve the pre service teachers' questions and doubts.

Based on the gathered data, the results show that 84% of participants totally agrees that Imprudence influences on their motivation to study the contents of the subject. 52% of students thinks that this tool makes the classes more dynamic and interesting. 60% of them totally agrees on the fact that this resource is an innovative way of learning.

With respect to the incidence of Impudence on English pre-service teachers' participation in virtual environment classes it was determined that quantity and quality of their participation was progressive and improved with time. At the end of the research, it was evidenced that 100% of the pre-service teachers actively participated at least three or four times per session. Additionally, their effective participation allowed them to register the maximum score established for the synchronic activities.

It is also important to mention that one important factor that influenced on these positive results were the fact that researchers offered continuous academic guidance and technical support in order to solve the pre service teachers' questions and doubts.

At the end of the present study it is concluded that the English pre-service teachers' have positive perceptions regarding the use of Imprudence as a resource for learning since they think that the use of the tool allowed them to increase their motivation to study the contents given, and to perceive classes as more dynamic, interesting and innovative.

Besides, the use of this tool increased students' participation during the virtual classes since it was efficient and effective; as a result, scores were also improved. It means that Imprudence had a great impact on students.

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