Chapter 15
Brazilian Experiences in Metaverse

ABSTRACT

This chapter presents and discusses some experiences linked to the research in the context of the Digital Education Research Group UNISINOS/CNPq, which was developed in Brazil from the use of different technologies in metaverses. The following subtopics are approached: “AWSINOS: A World of Learning” (performed in metaverses Eduverse), “UNISINOS Island,” and “RICESU Island” (Second Life and Open Wonderland). As the main conclusion of chapter, learning in metaverse is understood as human beings’ effective action within metaverses, present in the history of the structural coupling emerging in an inseparable world, in its way of life, showing there is also a cultural issue. In this process, the authors try to build elements to allow the development of innovative pedagogical practices, proper for this historic time and social space.

INTRODUCTION

The research developed with Metaverse technologies, in both educational and organizational contexts is a recent. Some of the surveys are the isolated actions of researchers, working directly in the field of Education, while others are already institutionalized, covering universities as a whole. Thus, some educational institutions and organizations in different continents have ventured into these “new worlds”.

The areas of expertise are diverse. Many have used this technology to develop social simulation, to investigate social relationships, or explore different areas of knowledge such as history, architecture, pedagogy, regarding those theories, practices of representation issues related to learning in general, also including people with disabilities, among others.

In the Brazilian context, the first research experiments in Education developed with Metaverse technology\(^1\) were carried out in 1999 at the Federal University of Rio Grande Sul, coordinated by Dr. Liane Margarida Rockenbach Tarouco\(^2\) and, in the same year, at the Universidade do Vale do Rio dos Sinos, coordinated by Dr Eliane Schlem-
Many other higher education institutions have developed and are still developing research involving Metaverses in the Brazilian context.

Other initiatives emerge and research in Metaverse has been gaining ground. In this chapter we present some of these experiments, performed in Metaverses Eduverse, Second Life and Open Wonderland, in the context of the Digital Education Research Group UNISINOS/CNPq.

AWSINOS: A WORLD OF LEARNING

In 2000, the Universidade do Vale do Rio dos Sinos, through a research project entitled “The construction of virtual worlds for distance education”, coordinated by Dr. Eliane Schlemmer and sent to the company ActiveWorlds, Inc, got a “Galaxy” in Metaverse Eduverse (educational version of Active Worlds software), and so began the development of digital virtual world in 3D AWSINOS.

Upon entering AWSINOS, the subject is shown the Teleporters Center that gives access to both the Central Square as well as the different “villages” created at AWSINOS (Figure 1), including village GPe-dU (Grupo de Pesquisa em Educação Digital GPe-dU UNISINOS/CNPq) - a graphical representation of the Research Group (Figure 2). In practice, the operation is as follows: to find the Teleporters Center (Figure 1) the user clicks the plate corresponding to the “place”, like ‘GPe-dU boroughs’, for example, where he or she wants to be, to be instantly teleported, as shown in Figure 2.

After this initial organization of the AWSINOS World, the research Project has developed, from a general objective, which resulted in the creation of 3D digital virtual worlds and in the study of socio-cognitive mechanisms, expressed in the trainee teachers’ behavior towards de use of technology. The exploratory research aims to carry out a case study in which subjects construct a 3D virtual world.

Amongst the research’s main findings is the creation of the 3D digital virtual world called AWSINOS – in which the teachers being trained in the use of technologies have constructed a World of Tales (Mundo de Contos). During the creation process of the World of Tales it was possible to understand how socio-cognitive mechanisms

Figure 1. Central Square: Teleport center to AWSINOS for different “villages”
Source: Authors
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