

ORIGINAL RESEARCH ARTICLE

Master of Ibero American virtual environment education

José Bernardo Peña Arcila

Universidad Politécnica Territorial de Aragua, Estado Aragua 2101, Venezuela. E-mail: jbp19@yahoo.com

ABSTRACT

Metaverse is an immersive, three-dimensional, virtual and online multi-user environment that allows people to communicate with each other socially and economically, regardless of location, using computing tools as personalized agents and simulations. In order to build the system, we define the guide as a free distributed application integration product, Spanish, IP voice system in metaverse, and integrated LMS (learning management system). The main tools to support this work are: 3D metaverse second life simulator, Moodle LMS, object-oriented dynamic link interface simulation, sloodle. Although the best example of metacosmic second life is an integrated world that can be accessed online. Academic experience is a master's degree in Ibero American virtual environment management education from the University of Granada. It ended in the first quarter of 2010. It was developed in the temporary place of second life and carried out some tests and data collection. The Ibero American network ecaeva (digital visual communication strategy driven by virtual flow in the Latin American Caribbean European Union academic free trade area) promotes video conference experiments and meta poetry teaching. Epistemological strategies are case studies.

Keywords: metaverse; video game; virtual learning; simulation; 3D environment

1. Introduction

Whenever we try to interact with technology in the context of education, we will introspectively monitor the work performance of others on the network. We will observe how we establish a common and determined way of technology operation, as well as a specific way of existence and action, in order to achieve a certain stability of network use and social significance. If students' learning intonation ability is improving, there is a situation that students can control their own work rhythm, and video game courses seem to promote learning. It can help understand the content based on activities and experience, and adjust it according

to the specific situation. As a digital visual communication strategy to promote the virtual flow of alcue academic space, Latin America Caribbean European Union virtualcue we have Web 3.0. Your application realizes services by integrating software into a constantly updated service. As more and more people use it, by consuming and mixing data from multiple sources, including a single user, At the same time, it also provides its own data to create network effects through 3D animation environment. This website goes hand in hand with the so-called artificial intelligence technology.

ARTICLE INFO

Received: January 15, 2020 | Accepted: February 14, 2020 | Available online: March 2, 2020

CITATION

Peña Arcila JB. Master of Ibero American virtual environment education. Metaverse 2020; 1(1): 11 pages.

COPYRIGHT

Copyright © 2020 by author(s). Metaverse is published by Asia Pacific Academy of Science Pte. Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), permitting distribution and reproduction in any medium, provided the original work is cited.

2. Situation to be improved

This study will focus on the perception of meta poetry as another element in the teacher's tool portfolio, and take the Ibero American virtual environment distance education postgraduate participants as an example to determine their acceptance of this teaching element, and evaluate their attention and motivation.

In the field of education, various studies have shown that the development mode of technology depends on the use, practice and performance of technology, as well as the performance of subjects who use technology in different backgrounds. In other words, their use and development do not depend on the technical characteristics that define them, but on how people use them individually and collectively; The utility that those who use them as tools can give you.

In this sense, its purpose is to reflect on the technology education practice of the virtual world or the meta universe through the cooperation and communication tools such as IP phone, instant messaging and Internet access from the perspective of social interaction and meaningful learning, About access to information and interaction with other members of the event.

A powerful tool is immersive education, which provides a way not limited by geographical space or time to obtain the latest information and creatively reposition students' learning. In this sense, it is necessary to use this tool in teaching and propose the basis for large-scale teaching in academic institutions, while maintaining low implementation rate and easy maintenance.

In addition, it allows you to develop skills and abilities through interaction, which helps creative thinking, which is possible because search is carried out in different ways, which can develop self-learning, control yourself and determine the way you like to explore and organize knowledge by opening up new possibilities^[1].

The qualitative and quantitative aspects of this study are intended to reveal the following purposes.

3. Research objective

Generate motion based Digital Meta universe simulation for the educational situation in the Ibero American master of distance education virtual environment.

4. Specific purpose

- Reveal participants' acceptance of other types of three-dimensional environments.
- Understand the concerns of participants in metaverse in developing teaching suggestions.
- The meta universe teaching simulation prototype of Ibero American Distance Education Master students in virtual environment is applied to teaching.
- Show students' satisfaction with the practice of online tutors and their performance in metaverse.
- Create a meta universe teaching simulation prototype based on three-dimensional environment.

5. Master's degree description

Ibero American virtual environment distance education: the master's degree in design, development, management and evaluation is managed and managed by the University of Granada for 350 hours. The first batch of students will cooperate with the expert "planning, development and evaluation of distance and open education in new technologies".

6. Methodology

The study will use a comprehensive approach, sometimes quantitative methods for questionnaire analysis, sometimes qualitative methods, informant interviews, classification and triangulation. The

questionnaire is verified by expert judgment, which establishes the effectiveness of the questionnaire content. After collecting all the objections raised by the judge, the errors and omissions in the fields of each record are generally cleaned up until the final version. The reliability of the questionnaire determines the internal consistency of the results obtained by the same person when completing the survey at different times. Therefore, reliability is a measure of consistency or degree of consistency, which can be expressed by some correlation coefficients.

The questionnaire prepared for research purposes and the different models and outlines used in the master's program were deeply analyzed and evaluated using Cronbach's alpha method:

- 0.88 (acceptable reliability) (questionnaire part I items 1–14)
- 0.95 (high reliability) (questionnaire Part II items 15–48)
- 0.87 (acceptable reliability) (questionnaire Part III items 49–73)

7. Metapsalms and social media

At present, there are many metaverse in different professional fields, from allowing access to games to learning oriented metaverse, some are usually simulators of experimental environment, and some are just chatting. It is worth mentioning that the metaverse is full of avatars. Behind each avatar, there is a person responsible for the behavior of the avatar. In this avatar, the avatar is an expression of us in the virtual world. It can have any required aspects in terms of gender and physical quality.

Its purpose is to integrate and configure services to facilitate the use of the second life platform, which is only composed of an open space or an island. Users can access the platform through the registry, where they can create their own avatar from metaverse without using other applications to create it, that is, they can create it directly in

metaverse, and, create 3D objects and then integrate them into the objects of interest to the avatar, including digital whiteboards. These whiteboards will support the academic part because they can watch lectures, videos, forums, presentations, etc. And work with sloodle. Sloodle is one of the services we will integrate. This is the alliance of Moodle + second life platform, which is responsible for managing courses, Provide students with support other than synchronous meetings or deal with large amounts of text.

Virtual communities and groups enable their users to carry out social activities in cyberspace; It is designed as a stable flow network^[2]. In other words, there is a basic condition for existence or connection on the network; the connection with all social network members is characterized by the horizontal and free communication value of users, which makes them active. In short, social networks allow users to interact intensively, no matter how far away or how late. This is a collective magical act, which integrates social energy unprecedentedly^[3], and can be regarded as the beginning of a new civilization, a new human, social life and world, which will respond to the complexity brought by the village in this era.

8. Education is a game

Although the benefits of using computer games and general games are described in the literature, many professionals oppose the use of computer games in the classroom. Technically speaking, computer games are related to electronic devices for entertainment, one of their applications. The computer game industry has developed a set of strategies. In order to use it for business rather than teaching purposes, one strategy is to separate computer games from games, which has led to game consoles. For decades, game consoles have invaded many families around the world, resulting in the popularity of game consoles.

In some learning and training, the use of virtual worlds and video games is very positive, which is reflected in dealing with learning problems,

helping solve problems, and answering questions related to school, drugs, family and morality^[4]. Video games can improve motivation to study various subjects such as mathematics and science. In education, we can distinguish the effects of video games. Some features are negative^[5], and some can even detect positive effects or constructive and beneficial uses. After a lot of writing and Research on video games, we can conclude that video games are an increasingly important research object, mainly educators, psychologists, sociologists and doctors.

9. Role simulation

One disadvantage of video games is that players' personality can lead to violence and gender discrimination^[6]. Most video games encourage violent and aggressive attitudes, which are often repeated in the behavior of children and adolescents, as has been proved.

Despite criticism, video games are not seen as a trigger for the deterioration of players' social relationships. On the contrary, this hobby is related to a positive social attitude. On the other hand, there seems to be no damage to intelligence due to the use of video games. On the contrary, video game activities contribute to the development of some aspects of intelligence, especially space. In addition, there is evidence that video games provide special help in the treatment and improvement of educational and therapeutic problems, including physical and psychological problems, as well as multiple uses in the development of various skills.

As for the deductive process required to master video games^[6], it is significantly different from traditional board games. Usually, a board game shows all its rules before the game starts, while in most video games, players only know some rules, which are obvious in the first game. With the accumulation of experience, he gradually found the strategies needed to improve his skills, which is unimaginable in board games, even in chess. Another important component is determined by the interaction between different variables existing in

many video games. These variables involve the coordination of two different visual perspectives, or in other cases, three-dimensional representation must be established according to different two-dimensional information.

The main feature of video games is that there are many media available. For example, they can run on general electronic devices such as computers or mobile phones, special devices such as video game consoles, or on devices not designed or designed to play games but with displays and control devices to interact with video games (such as digital cameras). Consoles can be divided into two categories: desktop, desktop, home or laptop. The interaction between players and video games can be single, multi person or multi person^[7].

These video games allow thousands of players to enter the virtual world at the same time through the Internet and interact with each other. MMORPG follows the client server computing model^[8]. Players who use the client program are represented in the game world by the graphics of the characters they play. The creators of the game preserve the lasting world in which these players live. This interaction between virtual worlds can always be played, and a changing global player flow are the characteristics of large-scale online multiplayer role-playing games.

Once a player enters the virtual world^[7], he can participate in a variety of activities with other players around the world. Mmorpgs developers are responsible for monitoring the virtual world and providing users with a set of constantly updated activities and improvements to ensure the interest of participants. We can draw analogies between educators and developers or moderators, as well as between students and players.

10. Students as virtual protagonists

Immersive education is a learning platform that integrates interactive 3D graphics, video games, simulation, virtual reality, IP/VOIP voice, webcam, digital media and online classroom. Immersive

education provides students with a feeling of standing on the stage. Even in the classroom, it also provides opportunities for distant students to contact and communicate in a way that improves the learning experience. Unlike traditional distance learning and computer learning, the purpose of immersive education is to immerse students, involve them, like the best video games today, and ensure players' attention.

Immersive education supports autonomous learning and group based collaborative learning environments that can be formed on the Internet. The first generation of immersive teaching is based on Virtual Reality Modeling Language (VRML) and three-dimensional extensible standard (X3D), and the second generation of immersive teaching platform is based on virtual engine. The third generation consists of the immersive education platform defined by the Immersive Education Technology Group (IETG).

Virtual space is a place where individuals negotiate through debate, criticism and refutation. Role playing, leadership, shared practice and dynamic group cohesion show the unique characteristics of virtual environment, which is helpful for individuals living in virtual environment to create basic cultural conditions in interaction.

Virtual reality has general educational elements, because there are signs that the learning process generated by computer systems can be encouraged. Cyberspace or knowledge network endows virtual reality with life. This concept covers the virtual world and network, and constitutes a space where users can exchange information. In cyberspace, users act as active participants^[9]. The advantages of collaborative work as a basic tool for virtual team educational immersion include: communication allows virtual team members to contact anyone who needs it. For those who cannot access the computer, you can make a phone call or conference call by using voip. It also allows people to log in at any time, including when she leaves your computer, the conversation is natural, you can hear someone's voice, and a person's voice will weaken

with the distance between you and that person. In other cases, due to geographical or natural constraints, many people are physically unable to participate in a website. These people have the ability and intelligence to make significant contributions in science, technology or any other field. Because physical disability is the obstacle or barrier of these people, they have potential, especially eager to provide input and obtain necessary learning. Therefore, new computing strategies and ideologies need to be used to make the network become a common application integration area and implemented on the network, to improve the utilization and delivery speed of services.

11. Description of survey results

This section introduces the analysis results of each dimension in the questionnaire, reflecting the course participants' views on their situation before using meta poetry. Then, when meta poetry causes different feelings, and the impact of this teaching strategy on their learning process. Below are tables and charts for each dimension.

The survey was applied to 15 participants who completed the master's program and combined their end of course program with educational immersion tools. Using sloodle and Moodle, they performed metaverse and educational immersion courses.

Respondents by age and sex:

- Women 68.75%
- Male 31.25%
- 25–30 years old 18.75%
- 30–40 years old 50%
- 40–50 years old 25%
- Over 50 6.25%

Data and results for each analysis dimension should then be provided. From the beginning of the

dimension, we analyze the digital citizenship habits implemented last year.

Dimension 2, the experience of entering a second life, assessing difficulties, frequency of use

and/or visits, and what you experienced when you visited metaverse in the first 15 days. The third dimension is the educational experience in the second life metaverse.

Table 1. Dimension I

#		Almost never	Sometimes	Frederick	Almost always	NS/NC
1	Play online role-playing games	80.00	0.00	0.00	6.67	13.33
2	Interact in a virtual world, such as second life.	46.67	26.67	6.67	13.33	6.67
3	Interact in a virtual world outside second life.	73.33	6.67	0.00	6.67	13.33
4	Using social networks	33.33	6.67	20.00	26.67	13.33
5	Voice over IP (Skype, boipbuster, Messenger, etc.)	6.67	20.00	46.67	20.00	6.67
6	Video conferencing (Skype, Messenger, etc.)	26	27	20	20	7
7	Class through virtual teaching.	0	53.33	20	20	6.67
8	Network collaborative work (wiki, glossary, etc.)	40	26.67	13.33	6.67	13.33

Table 2. Dimensions II-I

		Very difficult	Difficult	Easy	Very easy	NS/NC
9	Entering second life for the first time	13.33	33.33	26.67	20	6.67
10	Management of second life mobile tools	6.67	13.33	60	13.33	6.67
11	Send you to different places	6.67	53.33	13.33	20	6.67
12	When you fall back to your original position...	13.33	33.33	26.67	20	6.67
13	Modify the appearance of virtual human (avatar)	13.33	53.33	6.67	20	6.67
14	Change one's clothes	6.67	46.67	20	20	6.67
15	Localized plug-ins for clothing and footwear	20	40	6.67	20	13.33
16	Use objects in inventory	13.33	33.33	26.67	13.33	13.33
17	Open your inventory box in the sandbox position	33.33	13.33	26.67	6.67	20
18	Access chat text		6.67	60	26.67	6.67
19	Communicate with friends through private chat text			53.33	26.67	20
20	Communicate via voice chat		13.33	60	13.33	13.33
21	Access voice text chat via instant messaging.	0	6.67	46.67	20	26.67
22	Merge new gestures	13.33	20	40	6.67	20

Table 3. Dimensions II-II

		Very difficult	Difficult	Easy	Very easy	NS/NC
23	Access or exit group	6.67	20	46.67	6.67	20
24	Make photos and save them			60	33.33	6.67
25	By vehicle or vehicle	13.33	33.33	6.67	13.33	33.33
26	Find out what you're wearing	6.67	26.67	33.33	13.33	20
27	Using the second life search engine	6.67	20	20	20	33.33
28	You like to interact with colleagues from virtual people	0	13.33	26.67	53.33	6.67
29	You like walking with your colleagues	0	13.33	20	46.67	20
30	You go out alone to see the other metaverse	13.33	33.33	13.33	26.67	13.33
31	Besides SL, you also like to visit other metaverse yourself	6.67	13.33	20	26.67	33.33
32	You interact in metaverse every day	13.33	33.33	26.67	20	6.67
33	At the weekend, you interacted 2–3 times in our metaverse	26.67	33.33	20	13.33	6.67

Table 4. Dimensions II-III

		Very difficult	Difficult	Easy	Very easy	NS/NC
34	Thanks to your mentor, you have overcome the difficulties of entering and using second life	26.67	46.67	13.33	0	13.33
35	With the help of your colleagues, you have overcome the difficulties of accessing and using second life	0	6.67	20	60	13.33
36	With the help of the tutorial, you have overcome the difficulties of accessing and using second life	13.33	53.33	20	0	13.33
37	Second, overcome the difficulties of personal research and use	0	13.33	46.67	33.33	6.67
38	Interaction in second life changes the habit of organizing spare time	46.67	40	0	6.67	6.67
39	Second life interactions change your sleep habits	73.33	13.33	0	6.67	6.67
40	The interactions you experience in your second life will motivate your students to engage in academic activities	13.33	6.67	26.67	40	13.33
41	Other	13.33	0	13.33	6.67	66.67

Table 5. Dimensions III-I

		Nothing	Small	Quite a few	Quite a lot	NS/NC
42	Through your virtual human (avatar) interaction, you can easily interact with colleagues in your second life	13.33	20	26.67	33.33	6.67
43	Interact through your virtual human, making you easier to get along with than people in real life.	53.33	26.67	6.67	6.67	6.67
44	Compared with real life, virtual human interaction allows you to express your ideas more freely	53.33	33.33	6.67	0	6.67
45	Interaction from your virtual human stimulates your motivation to learn meta poetry	13.33	26.67	40	13.33	6.67
46	Take a metaverse course in our virtual space and you will find that you are very interested	0	20	40	20	20
47	You are interested in visualizing multimedia presentations (powerpoint) in our virtual space	6.67	13.33	26.67	6.67	46.67
48	Formal training discussions in the virtual space of second life are of interest to you...	0	13.33	46.67	13.33	26.67
49	You are interested in participating in customized virtual tutorials in the virtual space of second life	0	13.33	13.33	20	53.33
50	You are interested in attending the collective question clarification meeting in the second life virtual space	13.33	13.33	53.33	6.67	13.33
51	In our virtual space, you are interested in friendly encounters in your second life	6.67	6.67	60	20	6.67
52	Cooperate to solve the problems you are interested in in the virtual space of second life	6.67	20	33.33	26.67	13.33
53	Exchanging ideas with colleagues in second life can help enhance technical skills	13.33	20	40	20	6.67
54	It's fun to put your concerns about second life together	13.33	13.33	46.67	20	6.67
55	Interaction in metaverse improves your digital communication ability	20	33.33	26.67	13.33	6.67

Table 6. dimensions III-II

	Educational experience of second life metaverse	Nothing	Small	Quite	Quite a lot	NS/NC
56	You are very interested in our metaverse	6.67	6.67	40	33.33	13.33
57	You are interested in communicating through chat in metaverse	0	20	40	26.67	13.33
58	The correct use of multimedia communication tools plays an important role in the process of meta poetry teaching	0	6.67	26.67	60	6.67
59	The three-dimensional visual effects of environment and characters in metaverse help to stimulate your interactive motivation	13.33	20	26.67	33.33	6.67
60	The visual communication used in the second life course is an incentive	0	20	33.33	26.67	20
61	It's interesting to consider connecting the virtual space in the second life sloodle to Moodle	0	13.33	33.33	33.33	20
62	If you choose to do this, how difficult is it to synchronize the sloodle to Moodle	0	13.33	20	33.33	33.33
63	Interaction in our meta poetry increases your sense of belonging to the master's training community	6.67	6.67	53.33	20	13.33
64	Personal writings help dispel doubts	26.67	6.67	20	0	46.67
65	Group discussions help dispel doubts	20	20	26.67	6.67	26.67
66	The tutors used appropriate methods to encourage the creative activities of metaverse	13.33	40	20	6.67	20

12. Conclusions

According to the research reflection process and considering the research purpose, I put forward the following thoughts. They are based on observation and experience, virtual socialization and social networks, which attract their users and their attention. In addition, we also consider one of the most used services on the Internet, namely the web, which has developed from information search to semantic web, social network and 3D environment Web3.0, as a social method, takes 3D environment as its most exciting and exciting communication and interaction element. It is in this development field that the design of teaching tools using 3D environment to interact with anthropomorphic agents or avatars is proposed. These agents or avatars interact in different meta versions, second life and the prototype created by opensimulator of University of Granada in Spain.

As an experimental field, the University of Granada decided to pursue a master's degree in Distance Education in Ibero American virtual environment. This master's degree brings together different professionals from different parts of the

Iberian Peninsula, whose motivation is to train young people before and during university.

As a freely chosen course unit, a virtual augmented reality scene is established by introducing metavers and its relationship with LMS Moodle through sloodle. In this scene, anthropomorphic agents representing each student in the course can interact and share experience and socialization in a new way. Their experiences were recorded in the life stories of participants and facilitators, and the participants were evaluated in three dimensions. The results are as follows. The activities discussed in the first aspect related to the use of ICT as a daily tool reveal some of the elements proposed by the surveyed participants.

Most participants in the master's program said they rarely played online role-playing games, and only a few had played them. About using metaverse on the Internet, almost half of the respondents do not use metaverse services, most of which are used by a few people, and rarely use second life. This reflects that the participants in the advanced research course of virtual education do not pay much attention to the use of meta poetry, especially the use of teaching part. More than half of the

respondents took classes through the virtual teaching system.

Nearly half of the participants pointed out that they had almost never cooperated on the Internet, such as wiki, glossary, etc. It can be seen that generally speaking, participants rarely use virtual environment tools in teaching activities. Only one in five respondents are interested in social networks, voip and video conferencing.

In order to achieve the proposed goal, we found the participants' acceptance of metaverse relative to other types of computer environment, and noted that the interaction between avatars is possible. These avatars are ultimately a person's simulation and anthropomorphic performance, with additional mobility and social convenience. In this regard, we studied the interpretation and investigation of key informants. In dimension II, we reviewed the experience of entering the second life and assessed the difficulties, frequency of use and/or visits, as well as the experience of visiting metaverse in the first 15 days.

About entering second life for the first time, one third of people think it is difficult, but more than half think it is easy to use second life mobile tools, which is beneficial. More than half found it difficult to deliver a tool that interacts with the environment.

On the question of being able to modify the appearance of virtual human (avatar) and change clothes, more than half said it was difficult. It is worth noting that most answers were found in difficult choices. This is obvious when more than one third pointed out that it is difficult to use their inventory items. The same proportion replied that it is difficult to open your inventory box in the sandbox. This is the way to integrate with the Moodle and Moodle installation tools.

A considerable number of people, more than half of them replied that text chat is easy to access. The same situation also occurs in communicating with friends through private text chat and private

chat, which shows that it is easy to socialize. About approaching or leaving a group, about half said it was easy for them to take and save photos, but a third said it was difficult to take vehicles or transportation. The same percentage means it's easy to find out what you're wearing.

It's easy to enjoy walking hand in hand with other people on the virtual Island, while it's also easy to enjoy walking hand in hand with other people. The answer is very different, however, it shows that most assertions lie in simple alternatives to interaction in the second life virtual world. Half said it was difficult to overcome the difficulties of acquiring and using second life through your mentor, and the other half said it was easy to overcome the difficulties of acquiring and using second life through the help of colleagues, which shows that they have cooperated.

Slightly more than half of the respondents said that with the help of their tutors, it is difficult to overcome the difficulties of acquiring and using second life, but they said that through personal research, it is easy to overcome the difficulties of acquiring and using second life, which shows that there is a special job and everyone is responsible for their own learning. You can also see that nearly three-quarters of people find it difficult for interactions in their second life to change their sleep habits. In addition, nearly half said that second life interactions can easily inspire their students to engage in academic activities.

In order to reveal the degree of attention paid by the participants of metaverse in formulating teaching suggestions, we chose the project of the third dimension, which highlighted a question, that is, whether the interaction of virtual personification inspired you to learn in metaverse. More than half of the respondents answered many and quite a few questions. In addition, it is also interesting to have formal training discussions in our virtual space, which reflects that more than two-thirds of the people answered many questions. More than half of the participants also largely helped them

exchange ideas among colleagues to strengthen their technical capabilities.

Another goal of this study is to understand students' satisfaction with the online learning process of meta poetry collection creation. According to the respondents, good use of multimedia communication tools plays an important role in the teaching process of metaverse collection, and more than three quarters think this is very important or quite important.

The results of the third dimension do not show that participants have conducted many fair interactions from their perspective. These results can be seen in Annex A of this paper. The indicators listed include: Interaction from your virtual human stimulates your learning motivation. Take classes in our metaverse virtual space, visualize multimedia presentations (power points) in our metaverse, conduct formal training discussions in our virtual space, participate in customized virtual tutorials in our space, and participate in collective question clarification meetings in our space.

Similarly, make friendly contact in our virtual space, cooperate to solve problems in our virtual space, exchange ideas with colleagues in the second life, share problems you are interested in in the second life, and interact in metaverse to improve your communication ability. You are interested in communicating with sound in our meta poetry. All these results show that the experience of second life is satisfactory and beneficial to participants, because once they overcome the difficulties of interaction in the virtual world, they can maximize their technical ability, promote new learning and strengthen their socialization ability.

The teaching strategy encourages participants to obtain meaningful learning, is conducive to the dominant position of participants in the technical environment, and avoids members being only users of the system. In addition, our teaching strategy is conducive to collaborative learning among participants.

Some types of learning developed in metaverse, such as learning in case studies: social transformation and reform learning, directed learning, cooperative learning, action learning, project learning, research-based learning, game learning and leaderless group discussion.

For each type of learning, a situation is presented in a virtual scene, for example, a scene that encourages students to examine structures and beliefs, in which teams guide learning activities and team defined learning related to tasks. In another case, students learn through discussion and reflection, and create an action-oriented reflection and discussion group, focusing on the team.

We can also recognize that students decide their own problems and put forward their own goals, that is, when and what they want to learn. Quick questions, games, role play and simulation are other teaching tools that may appear in metaverse.

The teaching tools used have produced cognitive autonomy among members, enabling them to and encouraging them to explore the situations raised by individuals, thus eliminating some dependence between participants and other experts or mentors. More importantly, the management of meta poetry allows them to avoid the daily efforts to develop mechanical operation. Therefore, we have developed a meta version teaching simulation prototype based on 3D environment, including software freedom and investment reduction specifications, to provide more space for potential organizations who want to use it.

However, not everything is satisfactory, especially when we evaluate the clear expectation of the course unit content, which aims to connect the LMS platform with the metaverse structure through sloodle, which is very complex for participants, as described in the following question: what are the difficulties in synchronizing the snoodle Moodle?

Another weakness is participants' perception of mentoring strategies, in which more than one-third of participants interpret freedom of action and autonomy as giving up. It is noted in the question about individual mentors that this helps to dispel doubts, group counseling is helpful to solve problems. The tutor uses appropriate methods to encourage the creative activities of metaverse.

Finally, we refer to the findings revealed by the information provided by the informant. It is worth noting that the experience developed is meaningful to the professional. In her words, you can see how her interest in experience has increased and the various roles and abilities she has developed, so that she has become a co-author of other participants.

Collaborative learning is one of the key pillars of socialization developed in the virtual world, which is one of the prerequisites for using these technologies in the field of education. Therefore, it can produce situational suggestions and respond to the social technology and educational needs in a specific social context.

Conflict of interest

The author declares no conflict of interest.

References

1. De Oliveira S. Analysis of second life interaction in the context of education. Aviro University; 2008.
2. Ortega JA. Critical analysis of video game values: Discover its potential subconscious temptation [Internet]. 2003. Available from: <http://www.ugr.es/si/txt/es/servinfo.htm>.
3. Galindo L. Network and virtual community. World, cyberspace and social construction of super world [Internet]. 2002. Available from: <http://geocities.com/arewara/galindo103.html>.
4. Castronova E. Virtual world: First hand account of network frontier market and society. Bloomington: Bloomington University; 2001. p. 618.
5. Turker S. Sex, lies and avatars Shirley turker knows what it really means to play a role in cyberspace [Internet]. 2005. Available from: <http://www.wired.com/wired/archive/4.04/turkle.html>.
6. Roig AE, Hurtado MJR. La brecha digital: Género y juegos de ordenador (Spanish) [The digital divide: Gender and computer games]. REICE. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación 2007; 5(1): 63–77.
7. Yee N. Demographics, motivation and derived experience of users in a large number of multiuser online graphics environments. Stanford University; 2006.
8. Ducheneaut N, Yee N. Alone explore the social dynamics of massively multiplayer online games. Stanford Virtual Human Interaction Laboratory; 2005.
9. Peña J, Fernandez Quintero EA, Aguilar SK, et al. Simulating and on-line gaming as tools for education immersion. Etic@ net: Revista científica electrónica de Educación y Comunicación en la Sociedad del Conocimiento 2011; (10).