

*The use of Second Life in the teaching of religion: a case study in the monotheist religions teaching*

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**Abstract**

In this time of technology along with all the social changes brought by, also in the teaching/learning processes we can see nowadays how useful it is to break with the old school model and to adapt the traditional curricula to a brand new generation of students, who are perfectly aware of this digital world.

According to this idea, some research that is being made in the educational field using didactic games, 3D platforms and settings can predict a powerful tool, since these virtual immersive 3D settings will become the most common way to meet one another, both in distance learning and business.

Therefore, we used one of the most common 3D platforms, the Second Life (SL), to study its use for religious teaching. The following goals were defined: verify if the SL can be used in the educational context; identify the advantages and disadvantages in using the SL for teaching purposes; analyze how useful it is for a brief overview in the monotheist religions teaching.

For this purpose we carried out a case study, during 3 different lessons and involving 4 different grade classes. At the end students were asked to answer a questioning. The results obtained are quite positive showing a wide range of opportunities for future usage and implementation of this kind of 3D and virtual world material, such as Second Life.

After analyzing this study and observing the results we can assume how promising these results are, as it seems to enable a wide use of SL in the teaching of religion. It is clearly an open field for the development of any other kind of activities using it. Finally, our study is quite short and unpretentious comparing to what we believe the full potential of this virtual world platform can do.

**Keywords:** Second Life, Virtual Worlds, Religion, Education, 3D Platforms, Teaching, research, learning.

## Introduction

In the so-called revolution in information technology emerged in the late twentieth century, we now live in "a period characterized by the transformation of our cultural material, created by a new paradigm organized around information technology." (Castells, 2005, p. 33) As Negroponte wrote (1995), we live in a world that became digital. Therefore, the "information technologies are not simply tools to be applied, but processes to be developed" (Castells, 2005, p. 37). So, it is natural that in the teaching and learning process it will be necessary to move on from the traditional model of education, and consequently the adaptation of curricula and practices to a new generation of students who are perfectly aware of this digital world.

Traditionally we can say that the internet is a way of communication and socialization, gaining every day a greater number of supporters (Santos, 2010, p. 44). The multiplicity of tools and contents in the virtual space offer a wide range of possibilities and a feed the needs of the vast majority of its customers, as they have at their own disposal the potential of web 2.0 tools and, among other things, virtual worlds. In this sense, the use of virtual platforms starts to be seen by several authors as the future of human interaction in the network globalized world (Zhu, Wang, & Jia, 2007).

The use and implementation of virtual worlds in educational context dates back to 1970 (Livingstone, Kempb, & Edgar, 2008), but the researches and studies on the use of 3D virtual platforms in education have been developed over the past two decades (Lucia, Francese, Passero, & Tortora, 2008). Many educators are using virtual worlds for various reasons (Inman, Wright, & Hartman, 2010). There are already numerous experiments that have been developed using virtual worlds in education, from architecture, biology, medicine, geography, history, arts, learning languages, astronomy, science, computers, etc. (Valente & Mattar, 2008, pp. 194-210) In fact, the main Universities all over the world have a virtual and active presence in Second Life ® (SL). This does anticipate the enormous educational potential.

These environments allow a huge amount of experiences that are often difficult to find them in the real world (inside or outside the classroom). Whether due to economic conditions or restrictions of time and space, these platforms become a great resource for teachers. Specifically and particularly for this study, these virtual worlds allow you to explore and move to various places that would otherwise be almost inaccessible, or at least would be very difficult to move a group of people in a short space of time for these destinations.

This article presents a case study using a 3D platform most used and studied in an educational context, the SL, in order to understand its use in the teaching of religion.

Later there will be a theoretical approach to the use of virtual worlds in education. The following section will present the case study developed with students from the 2nd, 3rd and 4th grade in a Portuguese public school. This study is divided into four areas that will work on the different moments of application of this study of the field. Finally, conclusions and some clues for future studies are presented.

### **Some theoretical ideas about the use of the virtual worlds at school**

#### *Second Life® in education*

Second Life ®, along with many other "virtual worlds, are not themselves games" (Austin & Boulder, 2007). It is a tridimensional, free and multi-user platform (3D). It is only necessary to have a personal computer with the application installed and a broadband connection to the Internet. As mentioned earlier about virtual worlds, SL is an immersive environment and fully envisioned, designed, built and maintained by its own users (residents - avatars). We can also mention that can be a real life simulator, allowing all kind of experiences and studies in a heavily regulated and secure environment, only limited by ones' imagination. (Mattar, 2008)

The verbal and nonverbal communication promoted by SL in real time (chat, voice, private messages, gestures, expressions, etc.) allows to teaching a class, since collaboration and instant sharing of content, coupled with the communication factor, enhance interactivity. (Loureiro & Bettencourt, 2010)

In addition to the potential of this tool, there are also some technical and even structural constraints. The first is directly related to the PC characteristics, since it demands for a computer with graphics card and processing capacity, as well as internet broadband, which can discourage and restrict general access to all people. In addition to these constraints there is a condition which, according to David Kirkpatrick (2007), only one person out of six keeps on going to the virtual world after the first month.

### *The case of the use of virtual worlds in teaching religion*

After several months of research and investigation in a variety of platforms and scientific databases, we may indicate a scientific study that was developed within the same theme (Farley, 2010). At the same time it is possible to indicate some academic work that is being implemented on the ground, but that deals with the issue of virtual worlds and religion, apart from the educational issue. So, we can conclude that this area has been poorly investigated and this may be so because these are two issues that generally can be considered antagonistic. However, if you look at the issue of religious education as part of history and world culture, it is easy to see that the SL can and should be used in this context, as it is perfectly adaptable.

The work done by Helen Farley (2010) is the only one that comes closer to this paper. This project was originally conceived in 2007 and developed through 2008. It consists of a Second Life island situated in the New Media Consortium educational precinct and boasts a number of religious builds including a church, a mosque, a synagogue, an ancient Greek temple, a Freemasonic lodge, a Zen Buddhist temple and a Hindu temple to Ganesha. The island was used in two large first year classes and for supervising distance postgraduate students.

After finishing that investigation project, they conclude that, “the UQ Religion Bazaar island in Second Life provided the venue for group role-play activities designed around constructivist principles for first-year studies in religion students at the University of Queensland. Even though a formal evaluation of learning outcomes and perceptions was not undertaken, informal evaluation consisted of classroom observations and informal discussions throughout the courses under consideration. Though students were frequently frustrated by the technical aspects that interfered with

the execution of the assigned tasks in the supervised Second Life sessions, some reported feeling a sense of identity with their avatar and an increased understanding of how it feels to belong to another religion (or to a religion). These students also reported that they believed that these activities would increase their understanding and tolerance of those of another religion". There are other interesting things, but we specially identify two cases:

- 1- The first conclusion is that the students did not have enough lab time to adequately prepare for the role play on Second Life. So, on the next classes they will add one more week.
- 2- One other conclusion is that they were planning to continue with this project, for example in the course "Introduction to World Religions", but improving some variants of the role-play model used. It's a very interesting conclusion, because that was the main theme about our project, to make the students to comprehend and understand some basic things about the great world religions.

As we have just examined, the study gains encouraging results, showing that there is a large amount of thematic material to be explored. Based on this we then decided to conduct the present case study. We also cannot ignore the reduced investigation on this topic, both nationally and internationally, addressing even a higher relevance to these studies.

### **The case study - practical application**

After examining the use of virtual worlds in education and an explanation of the various capabilities of Second Life for teaching, it was decided to conduct a research project. So we defined the following goals:

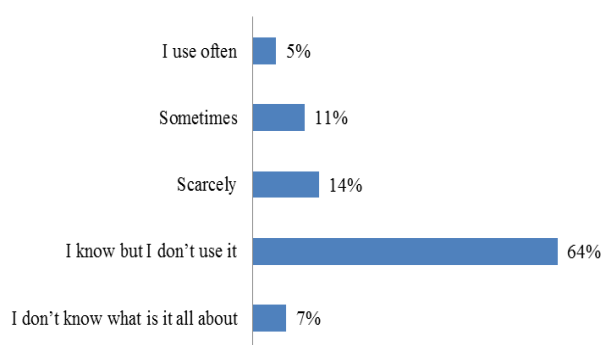
1. Check if the SL can be used in an educational context, teaching the monotheistic religions;
2. Identify advantages and disadvantages of using SL in teaching the monotheistic religions;

### 3. Planning for future investigations using SL in teaching the monotheistic religions.

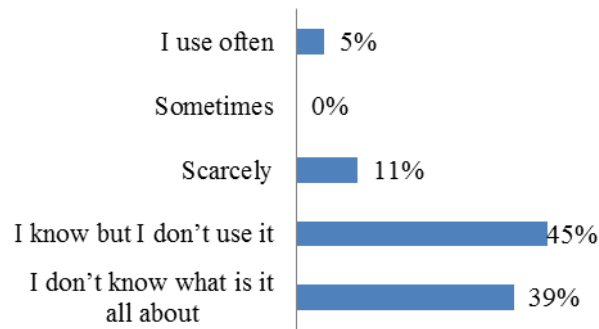
Therefore, as a way to achieve our goals, we performed a case study on four groups of different years (2 groups in the 9th grade (15 years old), a group in the 10th grade (16 years old), a group belonging to the 11<sup>th</sup> grade (17 years old), who were enrolled in the course of Moral Education and Catholic Religious (EMRC) in the Portuguese public school. The range of students consisted of 44 individuals, divided on 32 female and 12 male elements, coordinated by two teachers.

#### *Introduction to the Second Life*

On the first lesson, as a starting point, we considered important to know better the students that would collaborate with us in this study. So it was decided to carry out a first investigation on some issues related to the discipline of EMRC, Computers, ICT and SL / Virtual Worlds. Since it was not possible to go further on all the answers, we will only show those that are considered most relevant for the present work. The same methodology will be followed for the presentation of the results on other questionnaires.



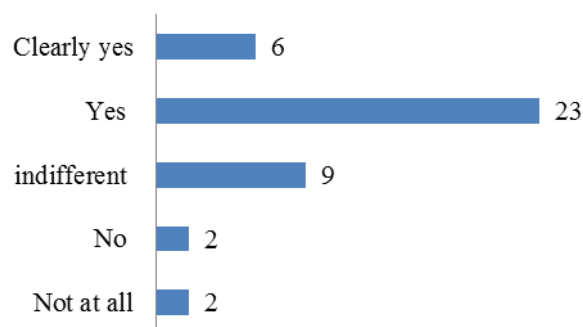
Graph 1 - Have you heard about virtual worlds?



Graph 2 - Do you use Virtual Worlds (SecondLife, OpenSim, ReactionGrid, Heritage, BlueMars, Habbo, etc.)

Analyzing the results about virtual worlds, although only 7% of the interviewees said they did not know that name at all, 64% of them knew but never used it (Graph 1), which does makes us believe that we were before an audience that would deal with a completely new content. Finally it can be stated that only 5% of students are using virtual worlds (Graph 2). Again we verified the scenario of complete unawareness of the concepts underlying platform and virtual worlds was present in the audience. So, after the original investigation, a presentation on the virtual platform SL was held. The goal was to explain what the SL was in general, using some clear examples of practical application on the use of the SL in a variety of settings.

At the end of the session, there was a final evaluation to see what the level of receptivity to the SL language was and the methodologies used, as well as the sensitiveness to understand what the SL is.



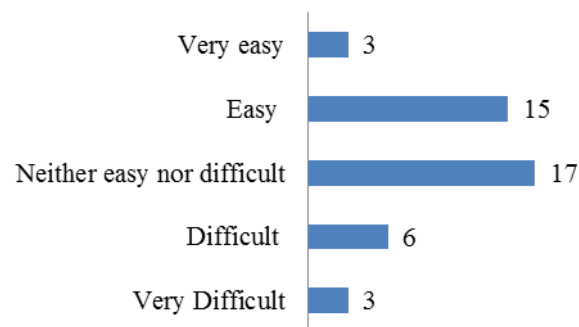
Graph 3 - After the lesson were you willing to use Second Life?

In this picture above we can see that 72% of students accepted the use of SL, because it was considered very positive, and it also shows that the presentation on the SL was almost clear to everyone and very motivating.

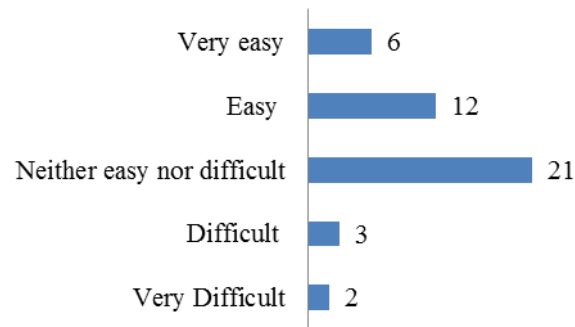
### *First steps on Second Life*

On the second lesson due to the limitations imposed by the network technology in this school, students could not create their own accounts in SL. So we previously created group accounts for all students. Therefore, the next step was to explain the basic movements of navigation in SL, using a video made in SL and a presentation. There was still time for the students to experience and try some of these exercises. We created small groups (3 / 4 according to the class groups), which was given a text file (note card) with the exercise they would have to perform. In this exercise students should use one of the avatars of one of the group members, and had to travel through the places previously written in the note card, which took them to five different religious spaces. So, each group had to identify each space with each of the five faiths and also to indicate the correct symbol associated with the correct religion.

The results of this exercise revealed that most groups (80%) could identify the religions present in each island in the SL and that those who do not hit any location, was mainly because the lack of time to better explore that specific religious island. At the end of the lesson, students completed a survey, resulting in the following results:



Graph 4 - It was easy to identify the locations (islands) with the respective religion.



Graph 5 - Can you better understand the symbols of the following religions, through visiting their islands?

Through the analysis of the graph 4, where it was possible to obtain information on the identity of the island, it revealed that 42% considered it easy to identify the sites with the respective religion, 38% didn't find it neither easy nor difficult and 20% found it difficult. These data may indicate that students, upon the contents presented on each island, had some difficulty to identify, however it drew our attention the fact that most of the islands represent actual physical locations. Finally, it was stated that 13% had difficulty in understanding better the religious symbols through the SL; and finally we can also assume that 46% think the use of the SL for this purposes is indifferent (Graph 5). It is interesting to note that with these data, we can already set on what features the islands of religions should have. Clearly the contents presented in these days are not enough for the vast majority of visitors, which reveals that the spirit of acceptance is still very low. Eventually means of identification and interactive training must be used that lead the avatar to easily understand the places, history and the respective religious and theological foundations of each place. However, after all, as we indicated earlier this time, the vast majority of them could identify the island and was also able to identify groups with the respective religion.

### *Discovering the Second Life*

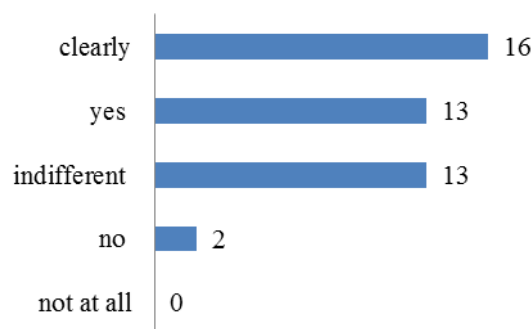
On the third and last lesson a final formative work was held, which for the 9th grade groups consisted to answer to a set of questions on each one of the religions. And for the older classes, instead of answering these same questions they were asked to give a presentation where the answers to these questions were presented. Please note that

these methods have been previously agreed with the teachers of the discipline, which served as a final evaluation of programmatic data to the module at these sessions.

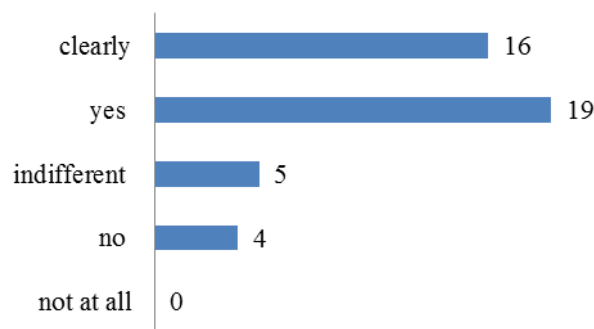
For those students in the 9th grade, was distributed to each small group a note card with a certain religious place, as well as the questions that students would have to answer moving around the island and interact with everything they considered relevant. For the older students, the task was a group work, answering to a set of questions using the SL and also they should take some virtual graphics (photographs, data, etc..) to start a presentation at the end of the class to comment on the results to the other colleagues.

At the end of this lesson, we found that students performed the tasks with great accuracy and above all with high motivation, commitment and spirit of research. It was unanimously certified by the teachers that all students revealed to be able to complete the module on the 5 major monotheistic religions successfully in terms of knowledge.

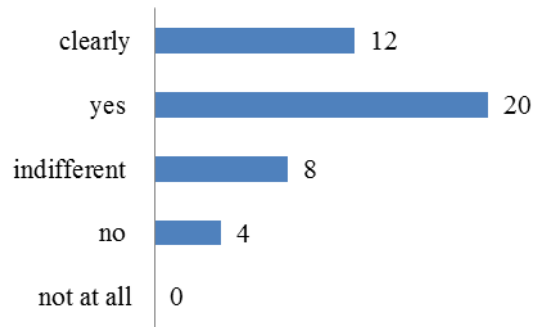
At the end of the group work, all students were asked to complete a final survey, from which we extracted the following results:



Graph 6 - Was I more aware of the issues studied because it was used the Second Life?



Graph 7 - Do you think it is possible to use the Second Life in the discipline of EMRC?



Graph 8 – Will you recommend the use of Second Life as a learning tool in the classroom?

Analyzing the data in Graph 6, 68% of students indicate that they were more focused because the subject was given in SL, yet 12% indicates that they were not focused at all. This data is also very positive for using SL in the formation context, for instance when most teachers complain the lack of motivation and attention from their students, this platform along with rich contents, fades completely the theory out that present students are shortly interested, unmotivated and inattentive.

In the Graph 7, 79% of students would give a five stars evaluation to the use of SL in the discipline of EMRC, which will reinforce the idea presented in the previous two graphs. On the other hand, 72% would strongly recommend the use of SL as a learning tool in the classroom.

The questionnaire had some issues that have to do with the difficulties found along the three classes; facts that can be seen in Table 1.

What were your greatest difficulties in using Second Life in the classroom?	
a. We were constantly without internet connection	18%
b. Problems logging in Second Life (login and password)	14%
c. Difficulty in moving the avatar	9%
d. Problems in finding interesting content on the islands visited	16%
e. Second Life was too slow to load graphics	7%
f. I had no trouble, or if I did it was easily overcome	34%
Other	2%

Table 1 - Difficulties in the use of SL in the classroom

As shown by analyzing Table 1, only 34% of students do not feel any difficulties or if they felt these were quickly overcome. This will lead us to the conclusion that 66%

of the students, the vast majority, felt some constraints on the use of SL. Searching deeper for the results, it was also found that 39% of students had eminent technical difficulties (network failure, slow machines, login error, etc.). The remaining 27% have felt problems in the interaction with the platform. However, it is not possible to assess which of those who had technical problems, there were also dealing with the SL. It is clearly a gap that has not been investigated accurately and we are left without any answers to these students.

### *The opinion of teachers of the EMRC subject*

After the 3 lessons, teachers were asked to answer a questionnaire about the three sessions attended. Because these were wide theme questions, we only transcribe those that are considered to be the most relevant for this study.

- Strengths and limitations of using SL in their discipline? "As a global education, the SL can be a way to explore that becomes in a planned manner but only momentarily, that is, one should not use it in a systematic and intensive way, nor exclusive; As a great potential, I see the possibility of students to do research on various subjects, with the possibility of contacting the realities (religions) next to its origin or from whom promote and publicize them. The limitations are due to the fact that students still have short familiarity and the bad quality of the Internet offered in the school. "
- What were the most interesting activities throughout the sessions? "The first time contact with the various virtual/real spaces that illustrate the contents. The possibility to talk live between all the elements inside or outside the classroom and other people that was also visiting the same island at the same time."
- Main shortcomings to this type of training activity: "Little pedagogical dissemination" of the spaces already created, and eventually an under-usage of these resources for teachers, non-availability of a specific classroom (ICT) with all the important material and necessary resources; it should be an occasional activity and not a dynamic and every day system."

## **Conclusions**

With the present work we can prove the usefulness and use of virtual worlds as a potential pedagogical teaching tool. Although, since after many different studies have presented this digital platform as having a high potential in the educational context, there are still some prejudices and even structural barriers to its use in the classroom. But as explored in the theoretical component of this work, there are indeed reasons for more than evident that virtual worlds will become a reality in education, despite some technical constraints that can be observed both in theory and in practice, but are easily surmountable with advancing technologies.

In the case study we brought here, we can easily see that the SL potential overcome any technical difficulties that may arise. Both in terms of motivation, commitment, the seriousness with which students approached this project and to the level of acquisition and understanding of content, using the SL in the context of formation, as can be demonstrated, it is clearly a great choice.

One identified gap was the need for more time for users in order to explore the islands visited, and the contents learned. On the other hand, as the survey presented, it was necessary to have more attention to the problems exposed by the users.

It was also possible to see that, although there are a lot of content available on the virtual platform used, the level of religious education, much is yet to be done and created. Existing resources are scarce and make the users of these worlds have enormous difficulties in deepening their knowledge of the religions studied. This is definitely a point that should be taken into account in future works. It also required the implementation of new islands, or any substantial improvement of existing ones as a way of answering to the rise of the avatars that navigate in these worlds.

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