USING SECOND LIFE (SL) 'GAME' TO MOTIVATE STUDENTS IN THE DEPARTMENT OF EUROPEAN LANGUAGES AT KAU TO UNDERSTAND MAJOR LINGUISTIC CONCEPTS

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ABSTRACT: *The aim of this study is to explore the potintiality of utilizing Secondlife 'game' SL in education which is an area that has not been explored especially in the Arab World with the purpose of teaching linguistic concepts. The researcher used a mixed research approach. Students input on the effectiveness of the immersive, highly gamified Quest Simulation, conducted during this study, is sought through both qualitative and quantitative measures. The study demonstrated a great agreement with a theoretical predictions and significant improvements over previous efforts by the researcher. Results show the potential effictivrness of Second Life activities in an educational setting. Based on our observations and students' feedback, it appears that SL activities do have a positive impact on the students' learning experience.*

KEYWORDS: second life SL; virtual environment; education; learning

INTRODUCTION

Over the last decade, technology has played a critical role in developing effective methods of teaching and learning English. It has made it easier for students to learn through using games, and virtual environments. In general, many studies have proved that virtual worlds have an important role in education. There are so many universities and colleges such as, Columbia, Harvard, etc. which use technology in their teaching in order to deliver their courses. Specifically, major universities have developed interactive state of the art programs to help students learn in a virtual environment without the limitations of space and time. Second Life is one of these environments. In fact according to Baker et al (2009), "More than 100 universities in the United States and other countries rent or own virtual land in SL" (60). Developed by the Linden Labs in 2003, Second life is a multiuser virtual environment (MUVE) or a three-dimensional online virtual world. It is occupied by avatars representing real human beings who communicate with each other through voice and text chat. Furthermore, those avatars can behave as if they are in real life. For example, they can create their own property and do many other activities. The researcher has found it interesting to conduct a research paper about *Using SL 'game' to motivate students in the*

department of European languages at KAU to Understand major linguistic concepts. The main motivation for the researcher is that she has already taken a course two years ago using a Second Life program. Moreover, she participated in this virtual world as an observer and researcher. She also used to attend virtual classrooms three hours per week. Currently, the researcher aims to add more in this area to contribute to the improvement of methodologies of teaching. This research consists of five sections. The first section includes an introduction which introduces the objectives, significance, questions, and hypotheses of the study. The second section presents a brief review of literature related to the study. The third section is the methodology which is employed by researcher in order to find out about the topic which is followed by the approach, procedure, and data collection. Section four includes data analysis which deals with discussion and findings. Section five presents the conclusion followed by results of the study, suggestions, and recommendations.

Significance of the study
The main concern of this study is to explore virtual environment in education which is an area that has not been explored especially in the Arab World. Although many studies have been done on the area of ICTs in education, not many studies in the Arab World have been conducted the learning-based systems through virtual environments such as Second Life. Thus, this study attempts to introduce up to date methods which help students and instructors in the department of European Languages to achieve better results in learning major linguistics concepts.

Hypotheses of the stud
1. Virtual Worlds' games (like Second Life) designed in quest formats can help English language students visualize and comprehend major linguistics concepts through performing kinesthetic, spatial-visual, and interpersonal related tasks.
2. Learning in a Second Life environment is more efficient than traditional methods in terms of realizing learning outcomes and achieving students'satisfaction.

Objectives of the study
To develop methods (games) which help in understanding major linguistic   concepts.

To explore the effectiveness of virtual programs (SL) in teaching linguistic   concepts.

Questions of the study
1. How does SL affect educational life?
2. How can students learn by using simulation and virtual environments?
3. What are the advantages and disadvantages of this game?
4. How can virtual life help students to understand major linguistic concepts?

REVIEW OF LITERATURE

Though SL is well-known in the field of gaming, it is a relatively new approach as a teaching strategy. Thus, very little published research is currently available in this field. Although there has

not been a considerable amount of research conducted regarding SL as an educational tool, Al-Malki et al (2015), report that there is an evidence of the acceptance SL as a suitable environment in education. Furthermore, they state that based on Linden Labs' own data and research, the number of universities with islands on their networks has exceeded 600(2).

According to Herold (2012), the new forms of ICTs such as SL provide an alternative to the traditional class room environment maximizing on effective educational designs and user creativity. Based on his research of studies conducted by educators as well as program designers and users, due to the popularity of SL during the past decade, much has been written about the extensive use of SL (Salmon, 2009; Twining, 2009; Childress& Braswell, 2006 in Herold 2012). Although these educators have high praises for the virtues of SL, there are still many opponents to its usefulness and efficacy citing that "many academics regard Second Life as a game and therefore" "not suitable for educational use" (Liu, in Herold 2006: 7). The author was unable to reach a clear cut conclusion as to whether SL will be useful tool for education. He raises many questions which further support the ongoing debate in academic circles. The researcher does not agree in considering SL as only a game. It is a vital tool for making students and instructors work better. They can collaborate to share their knowledge online in fun ways.

Baker et al (2009), recommend that classroom teachers devise effective objectives through simple activities, engaging their students in the creation and assessment of learning activities in the virtual environment (59). Furthermore, educators can employ virtual worlds in several ways. "Princeton University's SL campus hosts music performances in their virtual Alexander Hall. Vassar College's SL site has a live video feed from the college's real-life quad." Instructors also have the ability to conduct their lectures, meetings with students, or holding their office hours in these virtual environments (60).

The authors pointed out that virtual environments might play an essential role in online teaching. Multiuser virtual environments (MUVEs) provide students with the opportunity to interact with each other and instructors within their environments which encourage them to establish social relationships as they learn (59). As they have pointed out and is widely known, virtual worlds such as Second Life should not be confused with MMPORGs (massively multiplayer online role-playing games). Though there are resemblances between MUVEs and MMPORGs, SL is not a game but rather a platform used for social interaction which includes possibilities for learning environments, social clubs, and artistic performances by users internationally (59, 60).

Although the authors have stated the positive aspects of SL in education, they do warn of some weaknesses and shortcomings which the users might face. The initial phases of implementation require a considerable amount of time and cost to create and set up the learning environment. This also necessitates the investment in training and the use of state-of-the-art technologies. Specialized equipment is essential and there is always the potential for malfunctions in these technologies. Apart from the aforementioned drawbacks, the authors identify challenges that the students and instructors might encounter. They refer to the variations in the level of enthusiasm between

students and instructors of learning new technologies as well as the application of new classroom management techniques (61- 62).

Moreover, Al Ghoraibi(2013), is one of the researchers encouraging the utilization of SL in teaching and learning English language at KAU. The researcher reported that her research in SL demonstrated significant benefits in student understanding and motivation through interaction and engagement both with the program and other students. The experience afforded the opportunity for students to learn more about the technological aspects of SL while engaging in the online learning environment.

The researcher tends to agree with the proponents of using SL as an educational tool based on the fact that nowadays the current technological trends show comprehensive global acceptance for MUVEs. There are some valid concerns regarding the effectiveness of MUVEs such as SL. However, it is the researcher's opinion that the advantages far outweigh the disadvantages. The initial implementation does pose challenges which can be effectively overcome through training and ongoing enhancements with the collaboration of program designers, instructors, and students. Moreover, this collaborative effort provides an opportunity to engage students in the process as well as motivate them towards online learning in virtual environments. As a result, there is a greater possibility for students to discover the beneficial aspects of SL.

METHODOLOGY

For the sake of validating the results of the study and exploring its relation to real-life learning experiences, a mixed research approach is adopted. Students input on the effectiveness of the immersive, highly gamified Quest Simulation, conducted during this study, is sought through both qualitative and quantitative measures.

Participants
The participants are 14 students from the Department of European Languages at KAU. These students come from different levels. Some of them come with previous knowledge of linguistic topics, while others do not. Their ICT level ranges from basic to advanced, with minimum knowledge of virtual worlds.

Quest Simulation
Benefiting from the visualized, highly gamified environment of Second Life, the researcher creates a learning module about dyslexia as related to language development. A six-stage Quest Simulation is created in Second Life to present this concept to students in the context of linguistic studies. The gamified, quest simulation paradigm is chosen because it is 1) highly motivating for learners, 2) immersive, in the sense that by asking students to "move around" in Second Life, they will lose themselves to the experience as if it is a real one. The Quest Simulation is multi-modal (enhanced with videos, audios, and text content).

Procedure

The participants consisted of 21 students, three of them having had prior experience with SL whereas the others were novices. In order to facilitate the set up of the experiment, it was necessary to create the participants user profiles. Therefore, email accounts were created by the researcher for each informant. There were four subjects who withdrew due to other commitments. Thus, they were replaced by four alternate participants. Furthermore, arrangements were made with Doctor Nora who was responsible for the technical side of this experiment to provide assistance as needed. Finally the researcher decided to choose a Saturday afternoon to conduct the experiment which the researcher believe was a suitable time for students because of the exam period. The subjects were informed to confirm their availability.

Data collection

The data collected for this research comes from the following resources:

1. Students' responses to formative assessments: They will have to perfor six tasks during a six-stage Quest Simulation inside the virtual world of Second Life. Their transition from one stage to another will be decided by their results in each of these tasks.

2. Video recordings of students' performance: These will be used to analyze students' interaction with and level of immersion in the experiment.

3. End-of-Quest Survey: Students will be requested to fill in a short survey about their overall reaction to the Quest Simulation.

DATA ANAYSIS AND DISCUSSION OF FINDINGS

Findings Related to the In-World Quest Simulation

To test the validity of the research hypotheses and to answer its questions, a pilot simulation was conducted in Second Life. Fourteen students from the Department of European Languages at King Abdulaziz University were asked to enroll in the drive-test of a Dyslexia Quest Simulation where they were asked to perform a number of tasks related to the concept under study. "Dyslexia" was chosen as a representative concept usually discussed under Language Disorders, a topic which a linguistic study of language would not gloss over. Students usually fail to visualize these language disorders especially that a linguistic approach to it will focus on its abstract nature and its relation to language acquisition, which even complicates matters for learners. The aim was to create a 3D visual representation that will support a learning unit on Language disorders. Given the limitations of resources, this study focused only on Dyslexia and the researcher created a learning object that visualizes the disorder.

Upon enrolment in the simulation, each student received an In-World Folder of Notecards which includes a description of the Quest and its various stages and tasks. A "Welcome Notecard" was sent to them as well which covers general information about the quest.

Table (1) below presents a hierarchy of Stages and Tasks as they were indicated in the previously described folder:

Stage	Learning Content	Task
Stage One Start Quest	Video about Dyslexia streamed into Second Life	Click on object 3D polling What do you think Dyslexia affect the most? Language, intelligence, or creativity
Stage Two Experience Dyslexia	A gallery of images in 3D presenting how Dyslexic people read and write (no explanations attached to these images)	Click on object Use Chat Box What types of problems do Dyslexic people face while reading or writing? (use your own words to describe these issues as you seem them)
Stage Three Decoding Exercise (I)	PowerPoint Presentation streamed in Second Life about three types of Dyslexia	Click on object Create and send Notecard with your answer This passage presents a type of Dyslexia which you have read about in the presentation. Try to identify it and name some of the distortions?
Stage Four Decoding Exercise (II)		Click on object Create and send Notecard with your answer This passage presents a type of Dyslexia which you have read about in the presentation. Try to identify it.
Stage Five Decoding Exercise (III)		Click on object Create and send Notecard with your answer This passage presents a type of Dyslexia which you have read about in the presentation. Try to identify it.
Stage Six Terminate Quest	An animated video streamed in second life	Fill a final summative test and a survey

Table 1: Stages and Tasks as they were described in Students' folder in SL
Appendix (A) presents a visual rendering of the learning environment and its various components.

The focus of our research being the performance of a gamified quest in Second Life, we had to adopt certain game mechanics to fit with the overall game-concept we adopted for this study. Three game mechanics were used:

1-   Leveling-up, which means that we had to create a Quest Simulation that require students to move from one stage to another,

2-   Puzzle-guessing which means that students have to guess or solve certain puzzles (in our case, answer quizzes) to be able to proceed in the quest.

3-   Awards, which means that students win an award for passing the quest stages (in our case, we used the Second Life Linden Dollars).

The researcher noted down a very important factor that might influence the results of the experiment: time, which each student spent during each stage of the quest. Generally speaking, in gamified quests, time denotes progress which might have a direct effect on the progress and results of the game. In our case, the time which students spent executing the tasks also should point out whether or not the gamified quest was a suitable format of presentation in Second Life.

The researcher analyzed the videos, using Camtesia Studio, which records the time each student has spent during each stage, then the researcher created an average time-spanper stage, which resulted in the Table (2) below:

Stages	Students who spent an average of 1-4mints.	Students who spent an average of 5-7 mints.	Students who spent more than 7 mints. On a task	Students who did not complete one or more of the tasks
Stage One	63%	37%	0%	0%
Stage Two	50%	43%	7%	0%
Stage Three	74%	20%	6%	0%
Stage Four	70%	15%	14%	1%
Stage Five	84%	5%	10%	1%
Stage Six	100%	0%	0%	0%

Table 2: The general effect of time on results

Another important factor is students' performance in the various Quest Tasks which were embedded in the in-world simulation. As the researcher believes, students' performance is not just measured by how quick they proceed from one stage to another, but equally importantly by how successful their endeavors were.

Table (3) below summarizes students' results which indicate whether or not they were able to achieve success indicators of each stage:

Stage	Success Indicator	Percentage of Students who achieved Success Indicator	Percentage of Students who achieved Failure Indicator
1	Polling	100%	0%
2	Use Chat Box to talk about their experience in Image Gallery	100%	0%
3	De-coding (1): They should name the type	100%	0%
4	De-coding (2): They should name the type	99%	1% (task abandoned)
5	De-coding (3): They should name the type	99%	1% (task abandoned)
6	Summative Exercise: Answer 6 questions correctly	66.1%	34%

Table 3: students' response indicator

Table (4) below demonstrates students' performance in the summative test about Dyslexia.

Item	Agree	Disagree
Dyslexia is a psychological problem.	50.00% 7	50.00% 7
Dyslexia can be cured by medical intervention.	42.86% 6	57.14% 8
The clearest aspects of Dyslexia are linguistic in nature.	84.62% 11	15.38% 2
In the case of Semantic Dyslexia, a person might read a word as its opposite.	85.71% 12	14.29% 2
Dyslexia always affects intelligence and creativity of the person.	42.86% 6	57.14% 8
Dyslexic people are excellent in math and using numbers.	35.71% 5	64.29% 9

Table 4: students' performance in the summative test about Dyslexia

Findings Related to Students' Input on the Experiment (Survey Results)

The survey used in this study was designed in a way to help elicit sufficient data on a) students' general preferences and learning styles, b) their satisfaction with the components of the learning module, and c) their interaction with the learning environment (SL).

a)   Students' input on their preferences and learning styles

This simple (check all that apply) question yielded valuable data which demonstrated how students valued "learning by doing", gamified learning, visual learning styles, social learning, and sequenced (quest-like) learning activities. Table (5) below demonstrates these results:

Answer Choices	Responses
you play online games	64.29%
you like learning about things by doing	100.00%
You like 3D worlds	28.57%
You are a visual learner	64.29%
You like to learn with friends	57.14%
You've already known Second Life	21.43%
You like to learn about a concept step-by-step	85.71%

Table 5: students' general prefernces and learning styles

b)   Students' input on their satisfaction with the learning components

To investigate student's evaluation of the various learning components used in the Quest, a 9-item, Likert-Scale question was created. Students were asked to rate their satisfaction with the components on a 4-scale of (satisfactory, sometimes satisfactory, neutral, and not satisfactory.

Table (6) below demonstrates the results:

	Satisfactory	Sometimes Satisfactory	Neutral	Not Satisfactory	Total	Weighted Average
Videos	57.14% 8	35.71% 5	7.14% 1	0.00% 0	14	3.50
Images	71.43% 10	21.43% 3	7.14% 1	0.00% 0	14	3.64
Sequenced Stages	64.29% 9	35.71% 5	0.00% 0	0.00% 0	14	3.64
Tasks	85.71% 12	14.29% 2	0.00% 0	0.00% 0	14	3.86
Prizes	71.43% 10	21.43% 3	7.14% 1	0.00% 0	14	3.64
Evaluation	64.29% 9	21.43% 3	14.29% 2	0.00% 0	14	3.50
Learning by Games	78.57% 11	21.43% 3	0.00% 0	0.00% 0	14	3.79
Social Learning (learning with others)	78.57% 11	21.43% 3	0.00% 0	0.00% 0	14	3.79
Learning by Doing (Task-based Learning)	85.71% 12	14.29% 2	0.00% 0	0.00% 0	14	3.86

Table 6: Students' satisfaction with the learning components

c)   Students' input on their interaction with the learning environment

To inquire about how students perceived the difficulty, or otherwise, of the quest, a 13-item, Likert-Scale question was created. Students were asked to rate the levels of easiness or difficulty on a 4-scale of (easy, somewhat easy, neutral, and difficult). This helps in gauging students' reaction to the 3D environment and might shed light later on certain technical issues. Table (7) below demonstrates the results:

	Easy	Somewhat Easy	Neutral	Difficult	Total	Weighted Average
Downloading & Installing Second Life	78.57% 11	21.43% 3	0.00% 0	0.00% 0	14	3.79
Accessing Second Life World	85.71% 12	0.00% 0	7.14% 1	7.14% 1	14	3.64
Accessing Noora EFL LAB	71.43% 10	14.29% 2	14.29% 2	0.00% 0	14	3.57
Moving	42.86% 6	14.29% 2	21.43% 3	21.43% 3	14	2.79
Using Voice	50.00% 7	28.57% 4	21.43% 3	0.00% 0	14	3.29
Using Chat	64.29% 9	28.57% 4	7.14% 1	0.00% 0	14	3.57
Teleporting	35.71% 5	21.43% 3	28.57% 4	14.29% 2	14	2.79
Creating Notecard	50.00% 7	21.43% 3	14.29% 2	14.29% 2	14	3.07
Writing Notecard	50.00% 7	21.43% 3	14.29% 2	14.29% 2	14	3.07
Sharing Notecard	50.00% 7	21.43% 3	7.14% 1	21.43% 3	14	3.00
Using IM	71.43% 10	7.14% 1	21.43% 3	0.00% 0	14	3.50
zooming on objects or video	50.00% 7	28.57% 4	0.00% 0	21.43% 3	14	3.07
Staying Connected to the internet	64.29% 9	21.43% 3	7.14% 1	7.14% 1	14	3.43

Table 7: students' interaction with the learning environment

DISCUSSION

The previous results can be read to support the researcher's hypotheses:

Virtual Worlds' games (like Second Life) designed in quest formats can help English language students visualize and comprehned major linguistic concepts through perfroming kinesthetic, spatial-visual, and intepersonal related tasks.

The researcher starts here with considering the results listed in Tab. (5) which represent students' prefernces and learning styles elicited through a yes-no questions. In particualr, she will consider the hilghy postive evalaution of "learning by doing" and "step-by-step" learning. As well, one can note that almost 64% of them play games online and prefer visual learning resources. However, they lack knowledge about Virtual Worlds and Second Life, which emerged as an opportunity of exploration. If students prefer learning by doing and sequecned learning tasks (such as found in games, which they play) then their introduction to learning in a virtual world like SL would not come as a shock, actually will elicit more postive reposnces.

Therefore, the design of the module for this quest simulation in Second Life preoactively considered these prefernces through asking students to excute certain tasks that requires them to interact with visual content (images and videoes), move from one stage to another to learn more about Dyslexia (thus supporting their sequecned learning prefernces), and communicate with thier peers in an environment that supported collaboartion at least cooperation to move from one stage to another.

Learning in a Second Life enviroment is more efficient than traditional methods in terms of realizing learning outcomes and achieving students' satisfaction.

The results in Tabs. 3 and 4 demonstrate that the level of realizing the learning outcomes of the module and students' retention rates are sataisfactory –considering time limations as well as that the module was test-driven for one session only. Students were able to share their knowledge about Dyslexia as they progressed via the module using the chat fucntion in SL, which was so smooth comapred to a traditional setting were students feel shy and do not particapte, or sometimes do not have the time to do so.

From a teacher's perrspective, being able to follow each student indivually throughout the various stages is an a plus which students appreciated. Through a fast telporting system, the teacher can present support to each students even if they are scattered in the learning enviroment and this provides students with directions as well as recreate the safty of a teacher-precnce that emulates what goes in a real classroom.

Students' input on the learning compnents as indicated by the wighted averges in tab. (6) points to students' stasifaction with the use of games, learning by doing, sequenced tasks, social learning, etc. in Second Life which supports our hypothesis that learning in quest-like, gamified simluations

is more productive in terms of engaging and motivating students to pursue the learning task, which the researcher noticed during this experminet. Students remained till the end of the quest and moved from one stage to another to get points and prizes.

The same thing can be said about their satisfcation with the learning enviroment itself and their evalaution of the techincal issues they encountered. In spite of the fact that they have encountered problems in moving and teleporting in Second Life (issues well-known with first users) as the wighted averages in Tab. (7) show, they were able to excute all tasks assinged to them. So, this technical issue can be overcomes with training and support. As for utlizing the tools of SL in the learning process, we note –as demonstrated in Tab. (7) – that students prefered chat to voice utlltiy and sharing content via Instant messaging instead of sharing notecards. This again points to the need of training those students in using the educational tools of SL before embarking on a learning joruny in that world.

CONCLUSION

The results outlined in this paper present the tip of the iceberg of an untapped educational potential, Virtual Worlds. The gamified, quest-like learning experiences designed for this module were built with a pedagogical aim in mind: "to achieve total and motivating engagement through being exposed to hands-on experiences and challenges". Second Life, a robust virtual world environment, was chosen as a learning space where such challenges can be designed in an authentic way. For the English Language students, who enrolled in this Training Program, the concepts they learn about Dyslexia were supposed to become 3D and visually appealing, and Second Life provided that. The researcher assumed that with 1) a clear-cut pedagogical objective in place, 2) a well-designed learning object, and 3) a 3D virtualization of the learning environment, students can perform better in terms of acquiring the skills and the knowledge related to the linguistic concept. She assumed as well that they express their satisfaction with the components of the learning experiences.

The results of this experiment indicated a moderately high evaluation of the learning module, its tasks, and SL as a learning environment. It is true that students appreciated the gamified learning context. They rated the tasks, learning by doing, and sequenced learning highly as well, which points to students' interest in this environment as a learning environment. The performance rates of the students in the summative test (66.1%) do not differ a lot from what takes place in a traditional class, where students become exposed to a learning concept for the first time. However, their satisfaction rates are much higher because their learning needs and styles were taken into account in the design of the learning process.

The researcher hypothesised that: 1) virtual Worlds' games (like Second Life) designed in quest formats can help English language students visualize and comprehed major linguistics concepts through perfroming kinesthetic, spatial-visual, and intepersonal related tasks, and that 2) learning in a Second Life enviroment is more efficient than traditional methods in terms of realizing learning outcomes and achieving students' satisfaction.

To substantiate the realization of the first hypothesis, the researcher analyzed the results of the summative test conducted at the end of the quest. The results demonstrated, as indicated previously that the quest-like learning experience was appreciated by students. To move from one stage to another, they were asked to answer a question. However, this question was turned into a task which a student has to perform alongside other students by "traversing the environment", "teleporting from one place to another", "clicking on objects", "moving 3D in an image gallery", "doing polls", "sitting in a theatre to watch a movie", etc. The 66.1% success indicator met by the students is not much considering the amount of time wasted and effort exerted in migrating to this virtual environment. Some would even suggest that the improvement in the performance is not that prominent. However, when breaking the test results down into students' incorrect input versus their "correct" input, as shown in Chart (1) below, one notes that above 50% of learners enrolled in this experiment have acquired a relatively adequate knowledge about the concept being introduced in less than 3 hours (most of them spent on preparing and initiating students into tasks). One of the limitations of the study, however, is that we did not test a control group, one that is exposed to the concept in a traditional classroom.
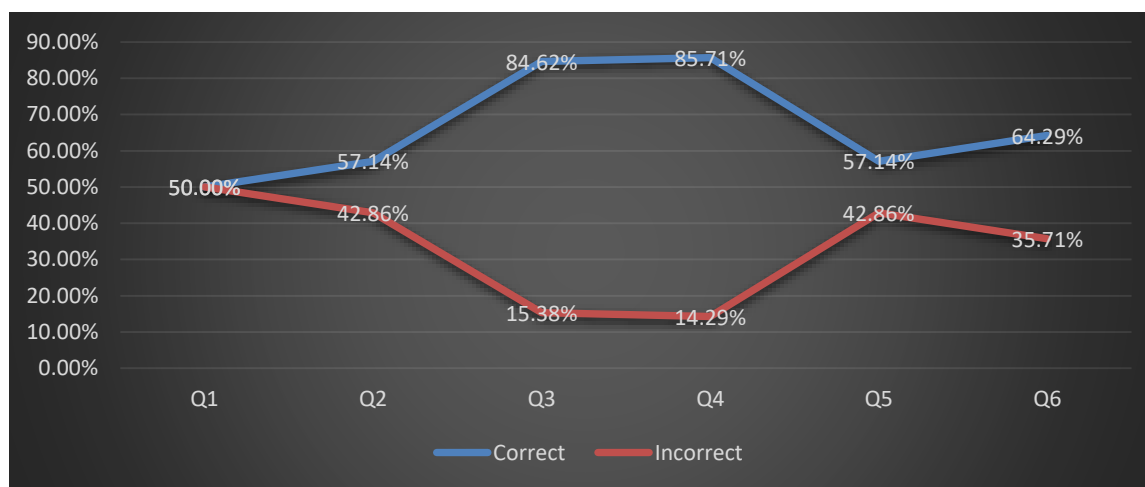

Chart (1): Learning Curve for the summative test

The second hypothesis presented in this paper focuses on how learning a linguistic concept in SL can ensure students' satisfaction. Creating an average percentage of students' input in Tab. (6), alongside an average of their "neutral" and "not satisfactory" responses, as demonstrated in the Chart (2) below, shows that the highly positive satisfaction rate is testimony to the realization of the research hypothesis. The researcher has to note that the learning components which students evaluated were actually reproductions of authentic learning components which can be used in the traditional classroom. So the element of familiarity is there. It is possible that a complex SL module on language learning might not elicit the same positive rating of satisfaction, but this is indicative of how learning experiences should be looked upon as personalized experiences that depend on content and context, not on media or technology.
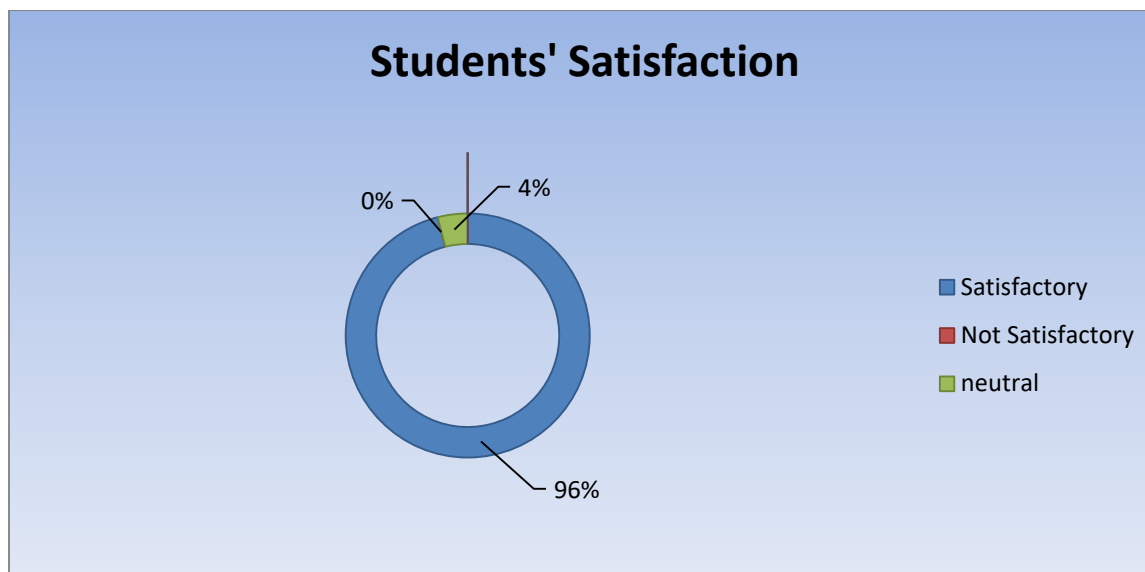
Chart (2) Students' satisfaction

The study demonstrated the potential of Second Life activities in an educational setting. Based on our observations and students' feedback, it appears that SL activities do have a positive impact on the students' learning experience. Learners were often excited to learn how they can move through the stages, communicate with other students, interact with 3D models, and use objects in Second Life.

Although the study discussed some overt technical limitations to using SL as an educational tool for KAU students, the researcher still believes in the potential of this 3-D environment if the hardware and security requirements were addressed by the university and special, high-performance labs were built to test this Virtual World.

Most importantly, she noted how the lack of extensive training on using the core functions of SL contributed to most of the reported criticisms of the system: like not being able to use body language, move smoothly, or engage in monetary exchanges. The researcher pointed out that it was the structured learning tasks and experiences which actually made the learners appreciate SL platform. Therefore, it is essential that the instructors who decide to teach in SL should 1) be trained on effective instructional design for Virtual Worlds, 2) be prepared for instruction and course delivery in the SL environment which includes setting up their roles as learning facilitators, 3) constantly make the learning resources available to students in-world, 4) be trained on how to evaluate students' performance in the SL environment.

Further research that brings together language learning and Second Life, can explore the potential of this world in creating effective settings for student communication with native speakers—what current research called virtual mobility. Experimentation with the design and production of specialized content for the teaching of languages, and linguistic topics can be also a research path

that has never been explored. Research on gamifying learning experiences especially for EFL students can as well be explored.

Despite the students' reported problems while using SL in this experiment, the researcher still encourages the implementation of SL as a learning platform but while taking into consideration the necessity of proper training and instructional design. She, as well, call upon KAU faculty to research the educational potential of Virtual Worlds and in particular how it can be applied to realize specific learning outcomes in specific domains.

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Appendix A
Stages of the Dyslexia Quest as presented in SL

STAGE ONE: ENTER GAME

Figure 1 Stage One: Enter Game at Conference Room 1

Figure 2 Stage One: Enter Game: Video streaming in SL

Figure 3 Stage One: Enter Game: Polling System

STAGE TWO: Experience Dyslexia

Figure 4 Stage Two: Conference Room 2

SATGES THREE, FOUR, AND FIVE: Decoding Exercises

Figure 5 Stages 3,4,5: Roof

STAGE SIX: EXIT GAME

Figure 6 Stage six: Exit Game: holodeck
Example Learning Components
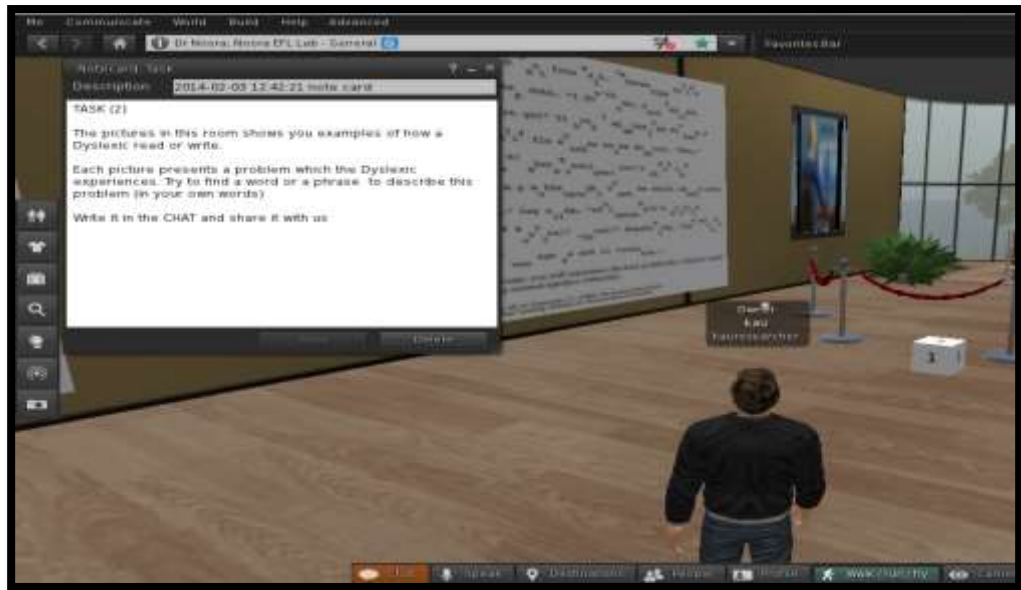
Figure 7 Object giving Link
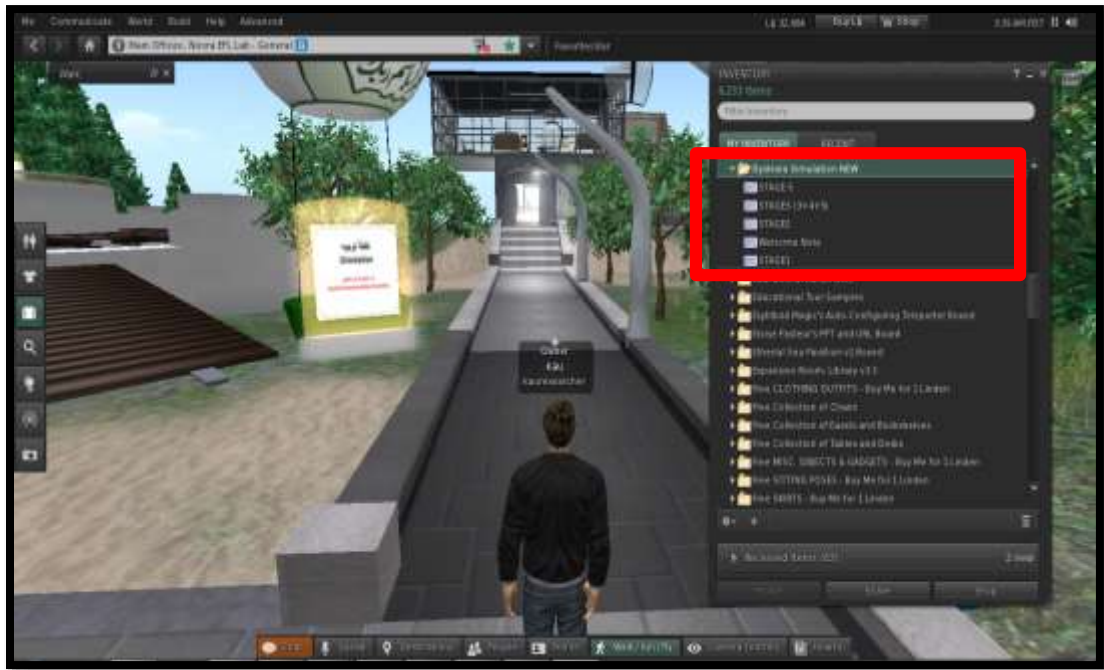

Figure 8 Object giving notecard of task 2

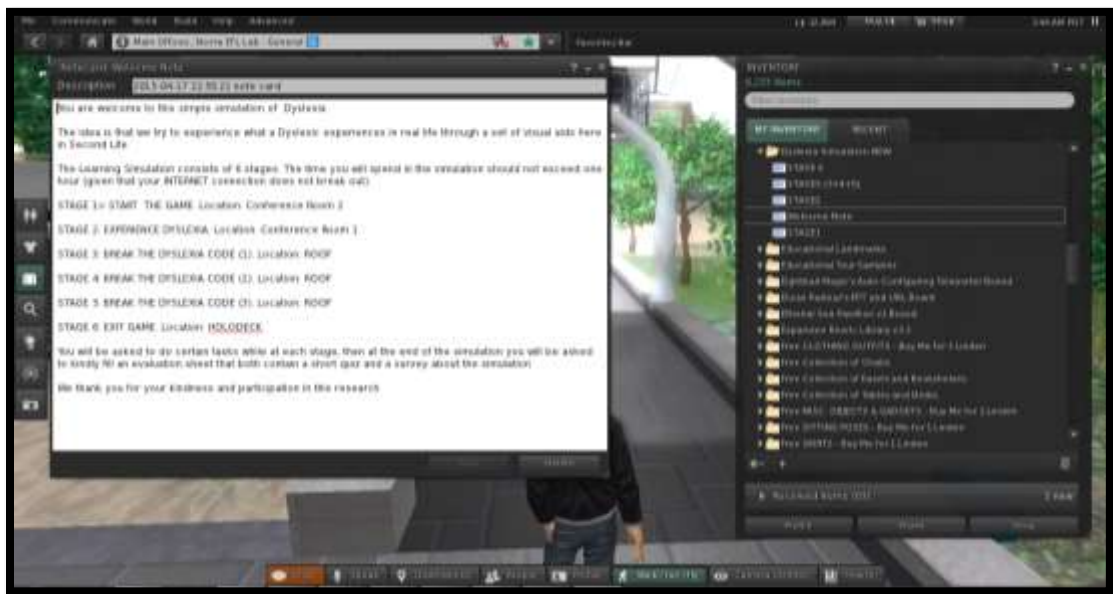*Figure 9 Learning Module arranged in a folder and shared with students in SL*

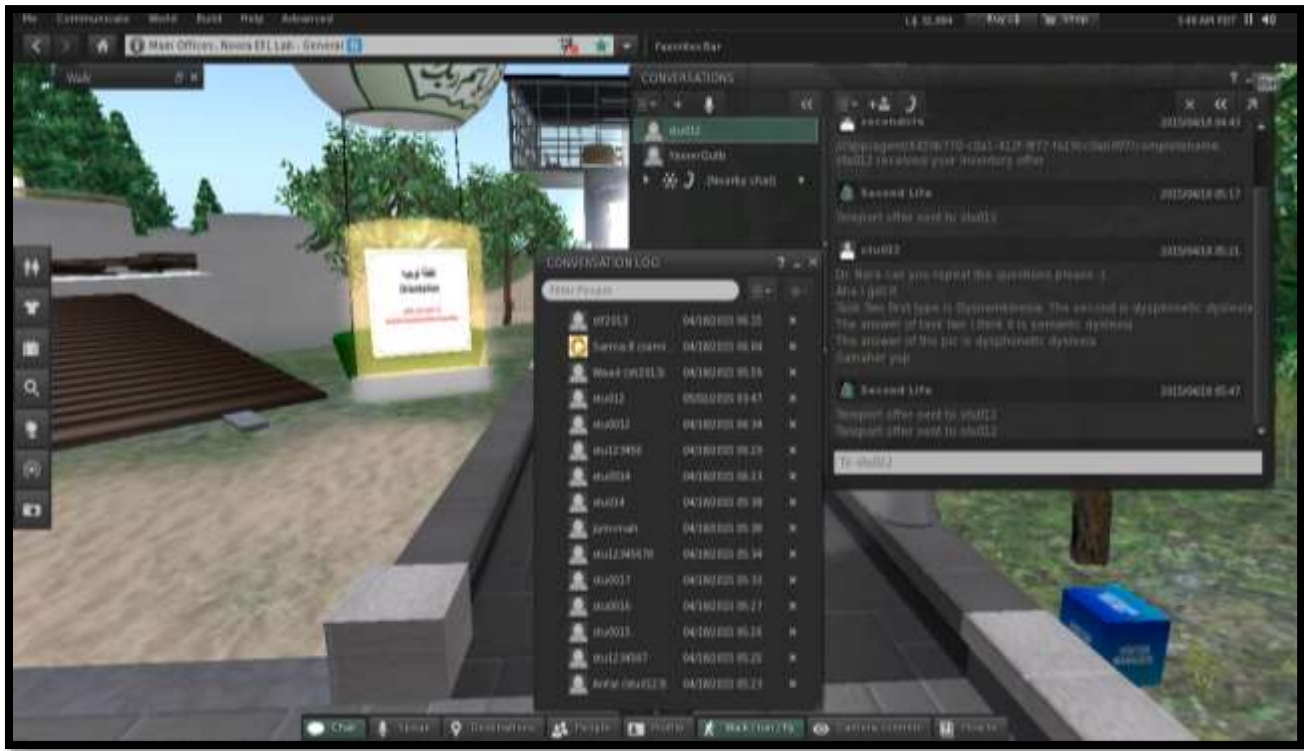*Figure 10 Welcome Note for students with syllabus*

Figure 11 part of the chat log during the session

Appendix

Survey including the Summative Test

Final Evaluation
Please Answer the Questions Below

1. Name

2. Level

3. Tell us more about yourself... (Check all that apply)
▪ Tell us more about▪ You are a visual learner ▪ You like to learn about a
yourself...(check all that▪ You like to learn withconcept step-by-step
apply) you play online games friends
▪ you like learning about▪ You've already known
things by doing Second Life
▪ You like 3D worlds

4. Indicate your agreement or disagreement with each of the statements below

	Agree	Disagree
Dyslexia is a psychological problem.		
Dyslexia can be cured by medical intervention.		
The clearest aspects of Dyslexia are linguistic in nature.		
In the case of Semantic Dyslexia, a person might read a word as its opposite.		
Dyslexia always affects intelligence and creativity of the person.		
Dyslexic people are excellent in math and using numbers.		

5. Rate each of the following components of the learning experience in Second Life

Item	Satisfactory	Sometimes Satisfactory	Neutral	Not Satisfactory
Videos				
Images				
Sequenced Stages				
Tasks				
Prizes				
Evaluation				
Learning by Games				
Social Learning (learning with others)				
Learning by Doing (Task-based Learning)				

6. Rate your interaction with the Second Life Software

Item	Easy	Somewhat Easy	Neutral	Difficult
Downloading & Installing Second Life				
Accessing Second Life World				
Accessing Noora EFL LAB				
Moving				

Item	Easy	Somewhat Easy	Neutral	Difficult
Using Voice				
Using Chat				
Teleporting				
Creating Notecard				
Writing Notecard				
Sharing Notecard				
Using IM				
zooming on objects or video				
Staying Connected to the internet				

Survey Link
https://www.surveymonkey.com/s/JGDJ3X6