



Funded by the
Erasmus+ Programme
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Games Used in Engaging Virtual Environments for Real-time Language Education

IO 14 Teacher Training Course development (Self-study course)

Disclaimer

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EU FUNDED GUINEVERE PROJECT (2017-2019)

IO Number: 14

IO Name: Teacher Training Course development

Description: Any project that develops new technology for classroom use stands and falls on implementation. In order to optimise implementation two elements are key: training teachers in the use of games in 3D virtual environments, both from a technical perspective and how they might be used in the classroom and piloting their use. IO14 will capitalise on the technical guidelines produced in IO 04, and 05 and information received from the field testing in IO 013 to create a teacher training package to enable teachers will be used to create and use games effectively in a variety of situations. The package will provide a two-stage approach - the creation of games themselves and the uses they might be put to in the classroom.

Games that have been produced in IO 06 and tested in IO 011 will be used as part of the base material for the teacher-training package. The package itself will be a blended learning solution of online resources and documents that can be downloaded and worked on as part of the trainees' reflection processes and self-evaluation. Part of the training course will be delivered asynchronously, which has the advantage of allowing teachers to engage with the material at times that suit them. It also avoids the logistical, financial and time expense of removing busy professionals from their working environment for a period of time. In order to demonstrate the application of games, some of the training sessions themselves will be produced using the same technology. Some training sessions will be delivered synchronously to give teachers the chance to try out the games they created with peers to test their usability and functionality.

The training package itself will be subject to quality review. In order for this to take place, there will be two training courses so that lessons learned from the first iteration may be implemented in a second course and materials revised accordingly. This will allow the project to arrive at a complete production and training solution of quality by the end of the lifetime of the project.

Part of the quality processes will be to subject the finished product (teacher training course) to an external accreditation procedure. UCLAN operates as a certifying body for teaching and teacher training courses as well as examination suites and materials.

Dissemination Level: Public

Signed off by:

Date Signed off:

European Commission Lifelong Learning Programme Key Activity 2 (ICT)

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Figure 1: Welcome image to the self-study course

Figure 2: Minecraft landing page

Figure 3: Second Life Official page

Teacher Training Course Development

GUINEVERE Self-study course

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List of Technical Terms and Abbreviations

AI	Artificial Intelligence is a term for simulated intelligence in machines
Avatar	Digital representation of a player, 'Resident' in a Virtual World
Build	Create, make objects out of prims in a 3D Virtual World
CLIL	Content and Language Integrated Learning
	Copy Object permission that controls if you can make copies, modify, move or transfer objects.
Destination	In-world locations and Resident creations of simulations of cities, places

EU	European Union
GUINEVERE	Games Used IN Engaging Virtual Environments for Real-time
Holodeck	Storing system in which to save different forms of content such as entire virtual environments
HUD	Heads-up Display; a 2D control panel for an object that appears only on language Education the screen of the avatar 'wearing' it
In-world	In the environment of the virtual world
Inventory	The collection of the items you own or have access to in the virtual world
Island	A virtual region
Item	Asset types in the inventory, such as clothes, landmarks or objects
Land	An area of the virtual world;
	Landmark A shortcut to a place stored in the Inventory Parcel: the smallest division of land
Prim	Primitive; a 3D cube, sphere, or cone
Region	Two or more parcels together; 256m x 256m (65,536 m ²) area
Resident	A user and participant in a virtual world
Rez	To create or to make an object appear
	Sandbox Meeting space permitting practice, creativity and rezzing, depending on privacy settings
	Skybox A virtual box which gives the impression of being in the air high above the land where material can be placed
Teleport	A way of changing location in-world
Texture	Image to put on the faces of a prim or object to change its appearance
VLE	Virtual learning environment

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1. Introduction

The GUINEVERE course is the final outcome of the project during which language educators learn how to build a game in a virtual world. The development of the course included the project partners previous experience with the field test and the theoretical framework of game design.

It was planned to be a single course which would be delivered and with the feedback of the participants refined and delivered again in, what would have been the second reiteration of the course.

However, the project partners agreed, that if these two courses were different, they might reach a wider audience. If the two courses were designed for two different types of learners: those who prefer to study by themselves in their own time and those who would like to attend a teacher led course.

Hence two online courses were planned:

1. A self-study course (available for two months)
2. A teacher-led course (delivered over a period of 5 weeks with set online sessions)

This decision turned out to be the most effective and useful for the participants, as it provided the opportunity to tailor-make the learning offer, according to two different options:

- a self-study learning pathway without any synchronous meetings, providing the theoretical background on game-based learning and gamification in virtual worlds
- a teacher-led course, with regular synchronous meeting either in Open Sim or in Minecraft, according to the choice of the participants.

2. Overview of the self-study course

The course focused on connecting online for collaborative learning and teaching through different types of games in immersive worlds such as Minecraft and Open Sim. It is mainly designed as a peer learning pathway, encouraging peer to peer activities and feedback in the forum.

Here there is the description of the Self-Study Course experience, following the steps the learners took when accessing the platform and logging in.

GUINEVERE SELF - STUDY COURSE

A very warm welcome to the self-study teacher training course.



Photo of Guinevere Island by Nick Zwart

Figure 1: Welcome image to the self-study course

Below Guinevere Island picture, a short description introduced the course's goals, providing key information about its duration and workload as well. Here is the introduction:

This course is a self-study learning pathway aimed at getting participants familiar with some theories of game design and an understanding of the digital environments for teaching and learning languages in immersive worlds. The course has been designed to be around 20 hours in total, approximately five hours each week.

Before entering the first Module, three functionalities were available:

- 1) A technical forum
- 2) The overview of the syllabus
- 3) The Teacher Training Courses Introduction Video.

The technical forum had been intended as a practical help for technical or practical problems with functionalities and tasks assigned. Actually, it had been mainly used as a reminder for taking the final survey and interview in time. No particular issue had been reported.

The Overview of the syllabus provided key information about each of the 4 Modules. The 4-modules scheme is in line with the standard online courses such as the majority of the currently available MOOCs on major platforms.

The information provided by this brief introduction of the Syllabus were the following:

Module 1: Introduction

In this module participants introduced themselves, met their colleagues and learnt about the GUINEVERE project. Participants familiarised with various concepts related to game-based learning and gamification and some theories of game design.

Module 2: Opensim and GUINEVERE World.

In this module participants experienced Opensim and the GUINEVERE Immersive world.

Module 3: Minecraft.

In this module participants experienced Minecraft. During the course participants were asked to create a portfolio of learning which would be shared at the end to generate a certificate.

Module 4: Second Life an example for learning in immersive worlds.

In this module participants started to get familiar with the digital immersive environment called Second Life.

The introduction video is a 4' general presentation of the whole project (<https://www.youtube.com/watch?v=-AF3hZGQd8k&feature=youtu.be>), providing key information about its aims and contents.

In the following paragraphs the description of the different sections and the content of each module is provided, also adding information from the post-intervention survey.

4. Self-study course syllabus

MODULE 1 INTRODUCTION AND FIRST TASKS

Task 1 - Take initial survey

Module 1 was about getting into the course: users had to know each other, get familiar with the environment and the project. In particular, module 1 aimed at making users know the basic principles and concepts of game-based learning, gamification and the most relevant theories of game design. Furthermore, the module contained an initial survey aiming at collecting data from participants.

The survey was undertaken by 30/30 participants, most of them coming from Italy (13 of 30) and Turkey (10/30). Greece, Israel, Japan, Poland, Sweden, UK and Venezuela were represented by a single participant.

Regarding their occupational status, as it is easy to imagine the majority of the respondents were teachers (21/30), mostly working in an upper secondary school (10/30). Most participants were teachers of English (14/30).

Regarding their knowledge and mastery of learning technology, the majority of them self-evaluated good, and indicated they often use learning technologies in their work. Active and interactive methodologies such as work group and project work resulted as the most frequently applied.

Many teachers affirmed they used games to motivate and reward students, to foster collaboration, develop creativity, socialization and peer learning.

Regarding the knowledge and use of Minecraft, Second Life and Open Simulator, the majority of respondents reported they had never used any of them. We can therefore argue they greatly benefitted from this course for their teaching purposes, since they also added that game based-learning in school curricula would be beneficial for students, especially in terms of increased motivation (13/30 participants) and in terms of development of 21st century skills (12/30 participants).

Other data from the survey, together with a selection of the most interesting and meaningful answers, are included into the complete initial survey data-set (see below).

The other 3 tasks of module 1 were the following:

Taks 2 - Let's get to know each other! Learn about GUINEVERE

The task aimed at promoting mutual knowledge between participants, who were invited to post their presentation on the padlet.

Task 3 - Start to create your digital portfolio. This will form a record of your progress.

Within the GUINEVERE project, portfolios were intended as a means of documenting the effectiveness of both teachers and learners. Since teaching is a process that requires a complex approach to accurately measure its effectiveness; portfolios are among the recent and essential tools faculty can use for such a task. In Seldin (1997:2) words, "The portfolio is not an exhaustive compilation of all the document and materials that bear on teaching performance. Instead, it presents selected information on teaching activities and solid evidence of their effectiveness". If students are lifelong learners as they are in GUINEVERE project, they need to be able to monitor and control their own process of learning, and creating

and implementing a personal portfolio is an effective tool in this sense. Given the relevance of portfolios for the project, a list of useful resources was provided, so that participants had the opportunity both to get a first-hand knowledge of the instrument and to choose that one fitting their needs best. [examples of portfolios created and shared by participants are provided below, in the “Finishing the course” section.

Task 4 - Further Reading/ Viewing

The 4th task was an additional one, allowing participants to get more information about topics of interest. Each participant was asked to choose three readings/ videos among a list of five and to post personal reflections and comments on the dedicated forum.

The videos were:

What is game-based learning?

https://www.youtube.com/watch?time_continue=21&v=etg0Kvi2pjj

Game-Based Learning: benefits and challenges by University of Toronto
Digital Pedagogy - A Guide for Librarians, Faculty, and Students

<https://guides.library.utoronto.ca/c.php?g=448614&p=3505475>

Gamification and the future of education by World Government Summit

<https://www.youtube.com/watch?v=SWPDYhtX96Y>

Learn or Die! by FluentU

<https://www.fluentu.com/blog/language-learning-video-games/>

Tips for using videogames for language learning by Lindsay Williams

https://www.youtube.com/watch?v=X19ix1_cFwU

The forum resulted quite well populated, with 36 + 10 interactions (10 from the moderator, who started the discussion with the question: “What is game-based learning for you?”) and several long and interesting comments, such as the following:

When we talk about game-based learning, we usually think about learning through playing games; the video “What is Game Based Learning?” underlines some of the most important advantages in using this methodology in Education and Training, for

example simulation, problem solving, learning about the past, learning languages and so on. However I like to see the GBL from a different point of view that is closer to a modern and open didactical approach: which are the advantages of learning through the making of a game? What about the developing of cooperation skills in the creation of a game? Which consequences would we have in teaching and learning at schools? As stated by Matthew Farber in his article “The Benefits of Constructionist Gaming” (<https://www.edutopia.org/article/benefits-constructionist-gaming>), “when students make and share games, they learn not only about course content but also about their own thinking”, in this way the constructionist gaming combines, in a metacognitive approach, game-based learning with project-based learning, developing team working skills or cooperation skills or role-play based learning. This kind of vision is strictly connected to the new tech world of education, where teachers are tutors and students work and learn together (peer-to-peer) to create new didactical material to be shared on the Internet.

The Module 1 provided the following videos as learning content:

VIDEOS in the Module 1

“What is game-based learning?”, 11’20” Video from YouTube

<https://www.youtube.com/watch?v=etg0Kvi2pjpg&feature=youtu.be>

From war games to job simulations, from problem solving activities to Virtual Reality, 10 different types of game-based learning are listed and presented, by making reference to actual applications in reality and fictional contexts, and also to possible future development.

A 1.28’.11” Video from Youtube is embedded in a digital Guide by the University of Toronto at <https://guides.library.utoronto.ca/c.php?g=448614&p=3505475> about “Digital Pedagogy,

Gaming, and Mass Collaboration”

<https://youtu.be/YaXB2AnSMRU>

“Gamification and the future of education”, 3 ’10” Video by World Government Summit on YouTube

<https://www.youtube.com/watch?v=SWPDYhtX96Y&feature=youtu.be>

Gamification, by definition, is the use of game design and mechanics to enhance non-game contexts. As gaming technology grew more sophisticated, there came the introduction of “serious games”, based on strategy, time management, and role-playing elements, further

enhancing the potential offered by gamification. When it is integrated into schools and curriculums, it opens up many possibilities for new learning experiences, which we invite you to come and explore with us. [Source: introduction to the video]

“5 Tips for Using Video Games for Language Learning”, 2’38” video from YouTube

https://www.youtube.com/watch?v=X19ix1_cFwU&feature=youtu.be

Video games can be a great way to learn a language by doing simple tasks such as changing language setting, playing online games with other people around the world, watching gamers playing in their native languages, choosing a type of game that uses the target language or make a new game with one of the dedicated online apps.

MODULE 2 - OPENSIM AND GUINEVERE WORLD

Module 2 aimed at introducing participants into the worlds of OpenSim and GUINEVERE.

As the first module, it was divided into 4 tasks: with the first two (instructional videos) users were introduced into the GUINEVERE environment; once they were familiar with it, they could join the GUINEVERE island and get into Exploria Castle. The 4th task was an invitation to analyse games and game-like activities created in and used in Second Life, OpenSim and Minecraft.

Here there is a detailed description of the tasks, as it appears on the platform.

Task 1 – Watch the video created by Nick Zwart telling us about GUINEVERE

The video (3’12”) <https://youtu.be/tbeG0gIH8FQ>, created with Open Simulator, gives ideas and suggestions about the relationships between playing games in a virtual environment and language learning. Users were asked to write a short paragraph (no more than 250 words) about this topic, and to post it in the Module 2 Forum Discussion, where 15 interactions has taken place.

We report here one of the most meaningful comments:

The process of identifying oneself with the avatar brings about crucial psychological, social and emotional advantages - for students and teachers alike: a decreased level of anxiety in carrying out activities through an imaginary self and it makes it easier to relate socially with mates (avatars are sort of detached from the usual selves).

Avatars can speak but can also text in the target language (for L2 teachers/students) and can also role play or even act using an infinite variety of outfits and clothes in a varied and easily changeable environment (different environments can be arranged/assembled or built on purpose for the target activity).

The virtual world in itself as a whole can be easily used as a virtual learning platform, i.e. a Learning Management System where the student can find, use and post resources, previously placed by the teacher, other mates or him/herself and that can be carried out on a self-access individual base, collaboratively or cooperatively, synchronously or not.

Being a simulation of Real World, the Virtual World lends itself very well to the creation of resources, without all the needs and the limits of real world planning in terms of paper, photocopies, use of hardware etc.: resources created, while 'learning by doing', whether images, videos (machinimas), texts or 3d assets, will always be virtual, permanent (saved), editable, reusable and produced with no costs, other than the time and skills needed to make them.

Task 2 - Watch the video how to join the GUINEVERE Island by Nick Zwart

Spaces, rooms and statues – such as Guinevere's one – are described in the 3'10" video, also describing activities that can be done inside King Arthur's Castle. The participant was guided by an experienced guide through the most important places, inside and outside the castle.

Task 3 - Join the GUINEVERE Island and do the orientation in Exploria Castle which is where you enter the world

Once got familiar with the GUINEVERE Island, the user can actually play the role of visitor, and hence take some screen shots of his/her experience for the portfolio.

Task 4 - Reading: Categorising Games

The last task of the module 2 was about game-based activities for learning purposes.

Participants were asked to choose 2 activities that appeal to them most among those listed and illustrated in the Report on Categorizing of Games of GUINEVERE project and comment on them in the Module 2 Discussion Forum, where 8 interactions took place.

We report here one of the most meaningful comments:

The Opinions games gives the students the chance to express their opinions about different topics, forcing them to have conversations where they have to give reasons for statements made; this kind of game could raise some issues to be discussed in a more advanced didactical activity which is the debate. A 3D Debate Game could be added to the list of Defining Simulations and Roleplays, together with Task-Based Learning, Experiential Learning, Role-Play in Teaching, Simulations, Interaction as Digital Learning Experience, and The Use of IA's for Communication and Interaction. In setting the place, it could be useful to have an interactive screen displaying the material the students can use in their interaction (presentations, video, audio files, documents, statistics, graphs, etc.)

Role-Play activities are fit for the purpose of learning a foreign language in 3D worlds; the constructivist paradigm (to be active creators of one's own knowledge) is the natural infrastructure to implement such activities: the more the students are the makers of their own scenarios, the more they will be motivated and engaged. Once the scenarios are ready, the playing of the roles can be enriched by the element of improvisation and the methodology of problem solving.

In module 2 the following videos were provided:

Videos in the Module 2

3'11' Video by Nick Zwart introducing the Guinevere island with its main virtual spaces, with special attention to Exploria Castle

<https://youtu.be/tbeG0gIH8FQ>

35 video tutorials are listed in a spreadsheet in order to provide information and guidance for Firestorm and Opensim.

They are organized in different sections:

- 1) Getting started (3);
- 2) Making your own resources (17);
- 3) Getting started in OpenSim using Firestorm (10);
- 4) Making games (14), plus an extra video about Audacity software.

MODULE 3 - MINECRAFT

Module 3 was all about Minecraft.

Minecraft is a Lego style adventure game which has massively increased in popularity since it was released in 2011 and it is now the most popular game of its type (190 million sales according with the last data). It puts players in a randomly-generated world where they can create their own structures and contraptions out of textured cubes. The cubes are made of different materials such as dirt, rock, sand and lava. The GUINEVERE project focuses on Minecraft since it can be considered “the” game, i.e. one of the most influential and greatest video games in history. It has also been used in educational environments, especially in the realm of computing systems, as virtual computers and hardware devices have been built in it. As for the other modules, module 3 is composed of four tasks:

Task 1 - Go to the Mojang page where you can try a demonstration version of Minecraft freely for up to 100 minutes.

The task aimed at allowing users to get a direct experience of Minecraft, so that they could see spaces, people, objects and functionalities available.

Task 2 - Gain access to the GUINEVERE Island by following the instructions on this paper

GUINEVERE Island is located inside Minecraft, so users have to discover how to get there. Task 2 asked users to get to the area where the children have done lots of work.

Task 3 - Once in Minecraft look around at what the children have created. Take screen shots (press F2) to add to your portfolio

Like Task 3 of module 2, task 3 of module 3 is the “visitor’s task”: like every classic visitor exploring new interesting places, users had to take pictures of what interest them most and add them to their portfolio, as proofs of the exploration.

Task 4 - Choose at least two readings among the ones suggested below and comment on them in Module 3 Forum Discussion

Similarly to the previous modules, the task was about expanding the study of the topics through additional readings among a list provided of 6 resources. Proofs of readings are provided through discussions within the dedicated Forum, that hosted 16 interactions and therefore resulted quite active.

The choices for the readings were...

Digging Deeper: Learning and Re-learning with Student and Teacher Minecraft Communities by David Dodgson

<http://www.tesl-ej.org/pdf/ej80/int.pdf>

How The Minecraft Classroom Can Transform Your World Language Classroom by Glen Irvin

<https://edtechmagazine.com/k12/article/2017/11/minecraft-can-transform-your-world-language-classroom>

Using Minecraft for Learning English by Marjana Smircoc

<http://www.tesl-ej.org/wordpress/issues/volume18/ej70/ej70int/>

Ideas for Using Minecraft in the Classroom by Andrew Miller

<https://www.edutopia.org/blog/minecraft-in-classroom-andrew-miller>

Additionally some useful links were mentioned

<https://education.minecraft.net/>

<http://minecraftinschool.pbworks.com/w/page/37244189/FrontPage>

<http://minecraftteacher.tumblr.com/>

<https://groups.google.com/forum/#!forum/minecraft-teachers>

As usual, we report here one of the most interesting contributions:

Ideas for Using Minecraft in the Classroom

It's really interesting to see how the social dimension of the didactical activities in Minecraft can foster the relationships among the students, developing soft skills such as communication and team working, especially for elementary and junior high school pupils. In that educational context Minecraft could play a useful role, because it has a kind of graphic interface perfectly suitable for students of that age: so teachers should focus more on the competences than on the content of the subject matter.

How The Minecraft Classroom Can Transform Your World Language Classroom

What I found really interesting in this article was the comparison between Game-Based Learning vs. Traditional Learning. Glen Irving gives us important facts and figures about this confrontation:

- 1. with the game-based learning student engagement was up with a 100% completion rate of assignments versus just over 70 percent of traditional assignments*
- 2. in the game-based learning 90% students consistently scored at least one level higher according to the ACTFL Performance Descriptors for Language Learners*
- 3. the game-based learning students outpaced their peers by at least one level, and sometimes even two levels in the modes of interpersonal communication and presentational speaking*
- 4. students who completed the game-based learning units were more likely (80 percent) to take another year of Spanish either at the high school level or university level than their traditional assignment peers (40 percent)*

These statistics help teachers realize the advantages of using such a tool in their didactical activities.

The module 3 contains an extra task, that is optional, consisting in the actual playing of the game, after watching supporting tutorials. As usual, the user is invited to add pictures of the game sessions to his/her portfolio.

Module 3 provided the following videos as learning content:

Videos in the Module 3

20 video tutorials about how to create a Minecraft world are listed in a supporting document is divided into several sections: 4 about how to start (sound setting, logging in, moving around and using the inventory); 11 about surviving (surviving the first night, making wooden and stone tools, eating, growing food, making light, fishing, mining for iron and coal, using a furnace to make iron ingots and making tools and armour from iron); 5 about creating (building, riding horses, playing the Alien Spaceship Quest).

<https://docs.google.com/spreadsheets/d/1OXXagilbwRhDVRuDRSDcu5nFqKVDhUnTtiyGbPVIsTY/edit#gid=0>

MODULE 4 - SECOND LIFE

An example for learning in immersive worlds

Module 4 was all about Second Life.



Figure 2: Second Life Official page

Second Life has a huge potential for education. In Second Life, users create avatars that represent them in the virtual world. Avatars interact with each other, with objects and environments. Users can create content within this virtual world, including buildings, environments, and objects, thus displaying all their creativity. Instructors can use this environment as a space to meet with students, and to create labs, buildings, and objects that can be used to learn many different content and skills. Students' engagement is fostered by the deep sense of community with each other and the multiple interactions occurring in Second Life world¹

Module 4 was composed of 3 tasks.

Task 1 - Please watch this video https://youtu.be/km_afd0_dEI. It was taken by pioneers of machinematography highlighting the possible educational uses of Second Life. Share your thoughts about how you and your colleagues should use it in the Module 4 Forum Discussion.

Machinematography is a term composed of machinima, a word derived from machine and Cinema, to indicate the art of using a pre-rendered gaming engine and making it into a film.

¹ Suzanne C. Baker, Ryan K. Wentz & Madison M. Woods (2009) Using Virtual Worlds in Education: Second Life® as an Educational Tool, *Teaching of Psychology*, 36:1, 59-64, DOI: 10.1080/00986280802529079

Machinima is therefore Filmmaking in virtual worlds. The video shows why and how Machinima can be used in education, and in language education in particular.

As for several other tasks, users were asked to post their comments in the dedicated forum (containing 8 interactions). Here there is one of the most interesting posts:

Machinimatography can be a very useful tool for presenting the target language or content to the students, as it shows avatars in a real- life context and the typical language or behaviour used in this kind of situation. Shown as a model to follow it can provoke the students to play similar roles and simulate real-life situations in the Second Life environment.

Machinimatography can also be a creative tool for students. By using it students can also create their own contents and in a creative way experiment with the acquired knowledge. It's also a great tool for collaboration, with a strong focus on communication and decision-making process as well as team - building skills. It can be extremely useful for developing 21st century competencies.

Task 2 - Visit www.secondlife.com and sign up for a free account.
Download and install the Second Life viewer

The second task was meant to let the user explore the Second Life world and to experience GUINEVERE games in particular. The user had to sign in the platform and to watch tutorial videos, then to try some of the games on the GUINEVERE site and post personal comments about the experience made on the module 4 Forum Discussion, where 19 interactions took place. Here there is one of the most interesting comments:

The opinionator

I thought about the possible uses of this tool to develop the ability to debate among students and to understand how to construct an argumentative text.

I imagined proposing this exercise first for small groups and then later also individually to verify the oral and written expression skills of each student.

For example, as a teacher, I propose this particular situation "A friend of yours claims that social networks are useless tools, they waste time and virtual friendships cannot replace real ones. What do you think about it? Where do you stand?"

Board Games

Board games could be built by students for work groups to verify the acquisition of certain skills. Each group could then exchange their game and test themselves while verifying the functionality of the game set by another group.

Task 3 - Add and notes, images or videos of this week's experiences to your portfolio

The third task was about documenting the exploration and the game sessions played with pictures or videos, to be added, as usual, to personal portfolios.

Module 4 provided the following videos:

Videos in the Module 4

“Why Second Life?”, 7’56” video by by Christel Schneider from YouTube

https://youtu.be/km_afd0_dE1

Second Life can be a good alternative for immersive learning if you cannot (or simply do not want to) be physically in another place. Christel tells her personal experience of teaching in Second Life, explaining how it can be exciting because you can do whatever you wish, and even rider a sheep, because “Second Life brings everything to life”.

FINISHING THE COURSE

The course closure aimed at promoting a comprehensive reflection about the content addressed and at stimulating further reasoning about potential use of the tools analysed for educational purposes and language learning in particular.

It was composed of 3 activities:

- 1) Portfolio submission: participants were invited to submit their portfolio to the portfolio repository, where 14 interactions took place. 12 out of 30 users submitted their portfolios, making use of a variety of tools, such as the following:

gblpathways.weebly.com/

<https://padlet.com/>

<https://sway.office.com>

www.smores.com

The portfolios submitted are very interesting and reveal a true engagement by the participant, as highlighted by the moderator: “Thank you for sharing your portfolio: valuable evidence of your learning pathways and of your own interpretation of the course! In fact we realize each of you attended the course from different perspectives, finding your own way. That is outstanding! Congrats!”

- 2) Writing the Final reflections: participants were asked to write a 500 word essay to answer the following questions: (a) Do you feel that immersion in a virtual world can contribute to language learning in a meaningful way?; (b) In light of this course, would you be likely to use a virtual world in your teaching at some point?

6 out of 30 participants uploaded their essay in time as requested. Even if the response rate has not been as high as expected, the essays produced presents many interesting reflections. We entirely quote here one of the most complete and significant essay:

Pros and cons

These are some final reflections about pros and cons of 3D worlds in language learning, also quoting the participants’ opinions and ideas posted in the forums of the 4 modules.

About advantages:

- which are the advantages of learning through the making of a game? What about the development of cooperation skills in the creation of a game? The constructionist gaming combines, in a metacognitive approach, game-based learning with project-based learning, developing team working skills or cooperation skills or role-play based learning

- the 4 freedoms of play (fail, experiment, assume different ID and effort) lead students to a new idea of learning, more enjoyable and motivating

- It’s the immersive dimension of the 3D world which helps students experience a “real” situation they can be involved in. Moreover the chance of synchronous activities in a setting where foreign language is the only way of communication urges to act according to the rules of “real life” situations, finding out linguistic solutions

immediately, so playing games in a virtual environment definitely enhances language learning.

- a 3D Debate Game could be added to the list of Defining Simulations and Roleplays, together with Task-Based Learning, Experiential Learning, Role-Play in Teaching, Simulations, Interaction as Digital Learning Experience.

- Role-Play activities are very fit for the purpose of learning a foreign language in 3D worlds; the constructivist paradigm (to be active creators of one's own knowledge) is the natural infrastructure to implement such activities: the more the students are the makers of their own scenarios, the more they will be motivated and engaged. Once the scenarios are ready, the playing of the roles can be enriched by the element of improvisation and the methodology of problem solving.

- It's really interesting to see how the social dimension of the didactical activities in Minecraft can foster the relationships among the students, developing soft skills such as communication and team working, especially for elementary and junior high school pupils.

About disadvantages:

- 3D worlds are, in some way, closed worlds, because you make use of elements from its immediate environment, even if you can import elements from outside, and it's not easy to show other people the activities and the final results, unless you shoot pictures or videos to publish on a website or blog or social network on the Internet

- there is still much to do in the technology area of usability and accessibility (user-friendly tools, easy-to-use software for hearing and speech impaired students) and in the field of evaluation and assessment (creation of rubrics with criteria planned for 3D world didactical activities);

- 3d world activities in order to learn a foreign language lack face-to-face communication traits which are fundamental to a complete understanding of the communication itself

- sometimes there could be a lack of flexibility in the rules which are the basis of the 3D world activities

At the end of the course the final survey was delivered to the participants as a post-intervention analysis tool, to get data about satisfaction level, usefulness of content provided and overall perception of the course.

The results from the final survey, completed by 8 participants, are described in the Appendix.

5. Final observations

The post-intervention survey provides us with relevant information about users' satisfaction and impact, even if it was not answered by all the participants, but only by 8 out of 30.

All the respondents evaluated very well the course: half of the declared they were extremely satisfied and the other half satisfied. Similarly, the majority of participants declared that the length of the course was just right. In this regard, one of the responded commented: "Well-planned self-study course, activities were organized in the right way and in the right time span"². The participants resulted satisfied with the provided support as well.

Regarding the course content, the most liked module resulted the module 2 about OpenSim and GUINEVERE World. The less liked, on the other hand, resulted in the first – probably because it was the introductory one. The preference for OpenSim and GUINEVERE world were justified because most participants already knew Minecraft (module 3) and Second Life (Module 4).

The usability of the learning platform and content was evaluated very good. Participants perceived the activities in Moodle easy or to accomplish and appropriate for the course. Only a respondent highlighted some difficulties about Minecraft: "The activities were appropriate to my level of knowledge of the topics. Some of those related to virtual world environments were quite easy but I found the Minecraft one's a bit challenging"³.

The rate of execution of the tasks assigned is of 75%.

It is interesting to report the comments given about the competencies promoted by the course, as they can show us the way participants experienced the course and what interested them most.

Which competences did the course help you develop?

Here are some of the answers:

"Building games in virtual worlds"

"It consolidated or deepened the use of different strategies to gamify teaching activities and base them more on learning by doing and situated learning approach"

"Building some gaming activities for children"

"I developed a further understanding of new virtual worlds and their possible uses in education"

"Relations"

"Interactivity"

² All the other open answers are available in the complete final report in attachment.

³ See note 2.

“Instructional design competencies, from analyzing learner needs to developing training assets”

“Innovative approaches to learning about game-based learning additional ways of involving students, new ways to build educational games and other ways to develop creativity”.

The last part of the final survey was dedicated to the possible adoption of what participants have learned during the course and to possible improvements for further course editions. The majority of respondents declared that they would probably use more Minecraft and OpenSim, less Second Life. The reasons why Second Life was not considered the best option include difficulties of usage for younger students and privacy stings – the latter connected with parents’ possible worries.

All the respondents declared they would recommend the course to others, mainly because of its innovativeness and the great support during the learning process.

Recommendations for future implementations of the course include the adoption of Minecraft Education Edition (Minecraft EE) and the inclusion of online synchronous meetings.

6. Certificate of attendance

The certificate of attendance for the 25 hour self-study course was issued to 8 participants who had completed the learning pathway.

The following statements were stated on the certificate:

Holders of the certificate have been actively engaged in the course, in particular:

- have been active in the Moodle training pathway
- have successfully created their own digital Portfolio.

Holders of the certificate have acquired the following skills:

- can understand the importance of game-based learning and gamification for language learning
- can understand the terminology used with reference to gamification in Virtual Worlds
- can design games in virtual worlds with language learning aims.

Further they can:

- adapt virtual games to learners’ motivation and needs
- understand game mechanics, elements and design
- support learners through the learning process with virtual games.

APPENDIX

Data about the participants

Guinevere Self-study course involved 56 participants. At the end of the course 12 participants submitted their portfolio. Six final reflections were collected with reference to the questions: *Do you feel that immersion in a virtual world can contribute to language learning in a meaningful way? In light of this course would you be likely to use a virtual world in your teaching at some point?*

Participation in the forums:

Module 1 Forum Discussion

- *What is game-based learning for you?* 10 posts
- *Your comments on the articles* 36 posts

Module 2 Forum Discussion

- *Task 1 Module 2* - 13 posts
- *Guinevere project in firestorm* 2 posts
- *Task 4 Module 2 - Categorising games* 8 posts

Module 3 Forum Discussion

- *Task 4 Module 3* - 9 posts
- *Task 3 Module 3* - 7 posts

Module 4 Forum Discussion

- *Task 2 - Module 4* - 19 posts
- *Task 1 Module 4* - 8 posts

The initial survey was completed by 30 participants and only 8 of them completed the final one.

GUINEVERE INITIAL SURVEY: DATA EXTRACTION

This survey is part of GUINEVERE project.

PERSONAL INFORMATION

1. What is your name? (optional)

24 participants out of 30 answered

2. What is your email address? (optional. Please add if you would like to participate in a follow-up interview)

23 people out of 30 indicated their email address.

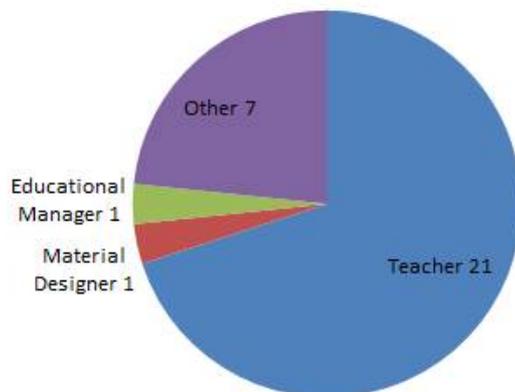
3. Which country are you from?

Total answers to the questionnaire 30/30.

Most of the participants came from Italy (13 of 30) and Turkey (10/30). Greece, Israel, Japan, Poland, Sweden, UK and Venezuela were represented by a single participant.

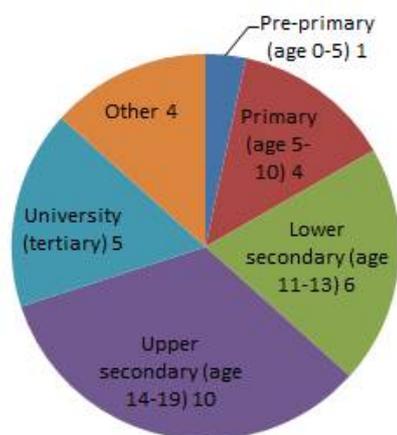
4. What is your job title?

Teacher is the profession declared by 21 participants out of 30.



5. Which school sector do you work in?

Most participants were teachers at upper secondary (10/30) and lower secondary level (6/30).



6. Which subject(s) do you teach?

Most participants were teachers of English (14/30).

The other subjects had only one hit: Computer Science, Italian, Geography, History, Art and ICT, Digital Literacy, New Media, Tourism, English Language, Digital Literacy, New Media, Tourism, Maths, Science, English and PE, English, technology, geography, English as foreign language, Culture and Italian language, History, Geography.

One of the participants declared not to teach at the moment and in 3 cases there was no response.

Your Experience

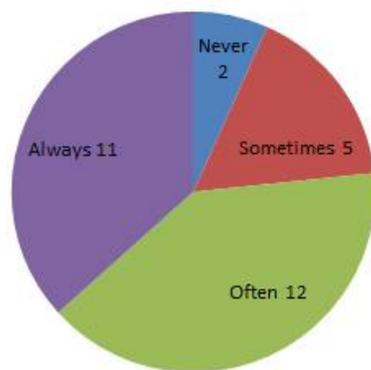
7. How would you rate your skills with learning technologies?

Most answered very good.



8. How often do you use learning technologies in your teaching?

Participants often use learning technologies in their work.



9. Briefly describe your experience of using learning technologies.

26 /30 answered this question.

Many use LMS tools such as Google Suite / Classroom, coding platforms like Khan Academy or Scratch for encoding (HTML, JavaScript,) or learning content, storytelling, concept maps or data maps. Someone also uses social Facebook or Youtube.

Here are some examples of answers:

"I utilise Google for education suite et ses applis, Microsoft for education et plusieurs autres applications..."

"Using LMS like Google Suite/Classroom, coding platforms like khan academy or Scratch for coding (html, javascript,) or Content learning, storytelling, concept maps or data maps (Arcgis online), Opensimulator and SimOnAStick, various web tools and software."

"I mainly use Facebook groups . In there I post videos, articles and have students use it for sharing and interacting by asking and answering questions."

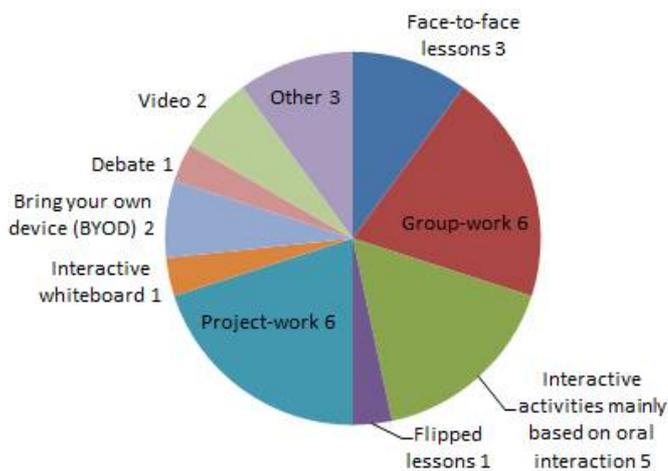
"My students work in class and at home with their personal devices in a collaborative key for the creation of paths. We use a virtual class, the Office package (especially OneNote, Sway, Teams, PowerPoint, Word)."

The response of one of the Turkish participants was significant:

"I am a new teacher and I am teaching English for kids in Turkey (ages 6-7) for a while. I am just using Youtube videos (cinevision) during my lessons. Unfortunately because I am working at a government school, we don't have internet access in our classes."

10. What learning approach(es) do you generally use in your daily teaching activity?

The most commonly used approach is group-work and also project work followed by interactive activities mainly based on oral interaction.



11. Please describe what experience you have had if any with game-based learning.

Everyone answered this question. Many use the game to motivate and reward students, to foster collaboration, develop creativity, socialization and peer learning. Most significant answers:

“Learners in our country love gamification and want to learn more when a lesson is based on a game. I try to use different software and sometimes even I prepare interactive software for them to learn better. I've never used a game as a basis to my teaching but I tried to gamificate the lesson with additional materials and software.”

“- Use of social games as a platform for speaking practice and error correction. Use of RPG elements to motivate and reward students. Use of language-based games and board games to enhance the learning experience and build learner engagement.”

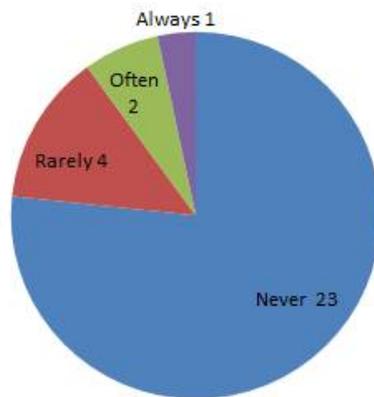
“I have done a few online courses on gamification (coursera) and game based learning (European Schoolnet), and practiced a lot in class. I have planned and carried out lessons on game-like environments on Opensimulator and simonastick with 11 to 13 old students. I've done some research on Virtual World and Coding pedagogy.”

“For three years I use edMondo in class to foster collaboration, develop creativity, socialization and peer learning. In particular, I am interested in the opportunities related to the training and management of emotions and to the personal growth of students. These are aspects, in my opinion, often underestimated within the learning pathways. In fact, the positive interaction favors a high degree of learning and the ability to interact in a team.”

“I try to introduce game-based learning activities, such as quizzes or crosswords. This year I am working on an eTwinning project on mystery fiction with GBL activities including, among other things, the creation of riddles and escape games. Two years ago I took part in a course on how to teach EFL in immersive worlds. However, I feel I still have to learn a lot.”

12. Have you ever used Minecraft in your teaching?

Most participants had never used Minecraft, only 2 to answered often.



13. Briefly describe how you use Minecraft.

Most significant answers:

"My colleague and I usually use Minecraft teaching PBL (Project Based Learning). It becomes a GBL using Minecraft. The school must be a learning environment in which to experience a laboratory teaching that takes into account the experiences and "to enhance the differences, learn the similarities, and grow confidence of pupils." If learning is then an experience in which pupils build, live, design and modify situations according to their needs solid, we must be aware that it is not always possible, however, to "bring the real world" into the classroom in order to have direct experience. Then the technology "reproduces models, in which it can be operated..."

"World building and design"

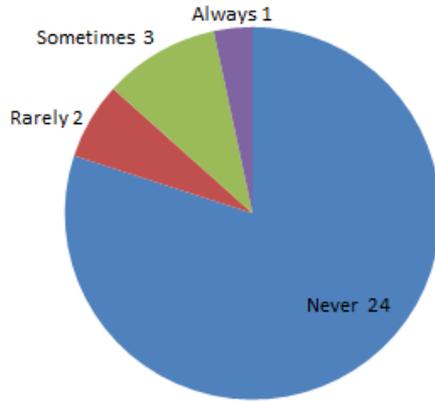
"... We usually start with a driving question, to which our pupils must respond by assuming models of construction within Minecraft. Since often the guiding question starts with a real problem and certain topics are usually addressed in several industry experts. In the case of our project "The bridge", we usually contact a STEAM expert of the territory that can give us adequate support on the subject matter. In This case we asked for help from a construction engineer who came to the classroom to explain the different types of bridges, costs and construction techniques..."

"I asked some of my private adult students if they wanted to try a lesson in Minecraft. I had two sessions in Minecraft with them, we explored the world and used Discord to talk during the lesson. I didn't plan anything specific. I gave them written feedback on specific improvements/errors after the lesson via email."

"My students build historical worlds and sustainable worlds. The approach is the mode of the small group. I play the role of tutor. I have obtained improvements in terms of self-esteem and socialization in general, especially with dyslexic students and with students with very serious difficulties."

14. Have you ever used Second Life in your teaching?

Most participants had never used Second Life, only 1 answered Always and 3 Sometimes.



15. Briefly describe how you use Second Life

Most significant answers:

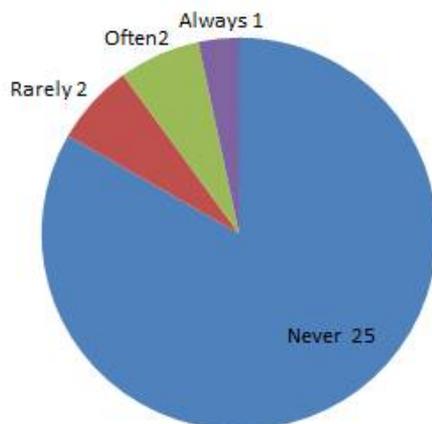
“To explore some educational places and landmarks, to build immersive scenes, to communicate with other avatars, etc.”

“I mainly use second Life for Learning scripting and building or for social purposes. I have only used OpenSim and SOAS for teaching students.”

“In this case, the students interacted with projects in which they had to build content within the Italian language.”

16. Have you ever used any Open Simulator in your teaching?

Most participants had never used Open Simulator, only 2 answered often and rarely, 1 always.



17. If yes, briefly describe how you use Open Simulator

Most significant answers:

“edMondo”

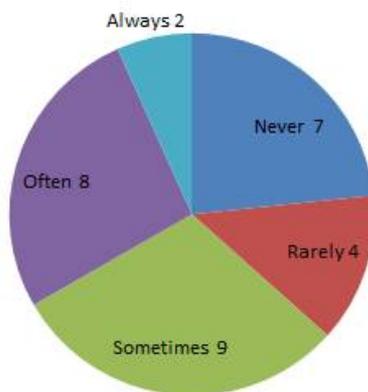
"I participated to a training (Virtualia), I also used with students to build virtual galleries for an Erasmus project about history."

"Role playing, guided activities on vocabulary or grammar practice using interactive objects, sometimes creating learning objects (e.g. interactive quizzes) using or adapting pre-compiled scripts"

"Students interacted with each other in a virtual school to build a community class. They told their emotions in poetry by discovering to feel the same feelings and not to be so different."

18. Have often have you attended training on technology-enhanced teaching?

Many replied sometimes (9/30), often (8/30) and never (7/30)



19. Please briefly describe these training programmes.

Most significant answers:

"I took training courses for the use of platforms (Edmodo, WEschool), for the use of digital manuals, application to create videos, e-book, storytelling, sites, blog"

"I attended these training courses in the European Schoolnet Academy site, Teacher Academy site, edMondo virtual world, MIE Microsoft site"

"My MSc in Digital Education has some modules specifically looking at teaching with technology (others are policy and resource based). One module was an introduction to game-based learning. This looked at some theory and we had lessons in World of Warcraft. I have also attended conference sessions on the use of Edmodo, Kahoot and similar tools"

"Latest training programs were about: Gimp software for image editing, QuestBase for creating quizzes online/offline, cMapTools for concept mapping, eTwinning LearningLab EFL for technology enhanced efl teaching, eTwinningTools, Scratch for Education, HTML and Javascript for web design"

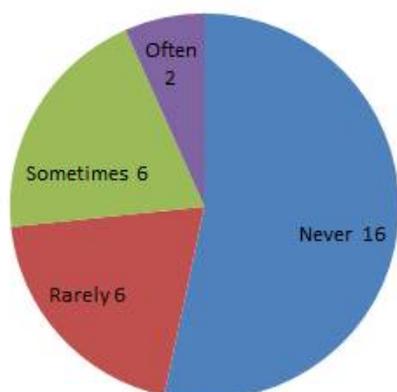
"In Second life, I attended a 6 week course to use SL in the teaching of languages"

"I am taking education technologies class in scope of my master degree education in Istanbul University from Tuncer Can. One day a week I am learning the theoretical reasons and different modals which support technology engagement in teaching and learning environments. Also I am learning how to use Web tools (2.0, 3.0 and 4.0), different platforms and mobile applications to create my own content. This class is too much beneficial and exciting for me"

"General training of technology-enhanced teaching & learning (European Schoolnet & Teacher Academy courses). Training on EFL teaching in immersive worlds (EdMondo)"
"I just attended a basic training course for an online 3D virtual world, called edMondo, developed by the National Institute of Educational Research in Italy (INDIRE) and dedicated exclusively to teachers and students for classroom teaching innovation."

20. Have often do you attend training programmes on game-based learning?

Half of the participants never attended training on game based learning.



21. Please briefly describe the training

Most significant answers:

"Didacta and other PNSD conferences"

"MOOC course about gamification"

"I'm a tutor in the Mineclass course about Minecraft and in two Minecraft Summer schools"

"I attended some courses held by Anitel and Edmondo Courses, but I never used them in my day to day activities"

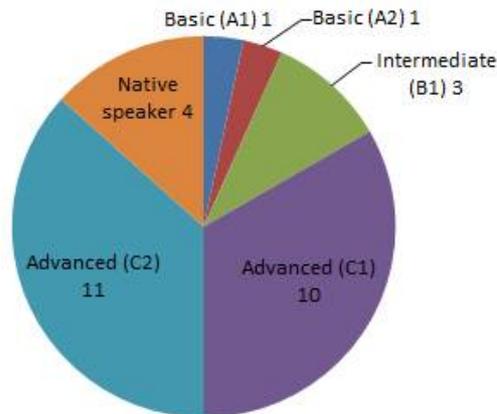
"Mostly like storytelling"

"I have just participated in Evo Minecraft 2019 which was mostly on exploring Minecraft with experts and hands-on workshops"

"I have followed the training offered by the Indire."

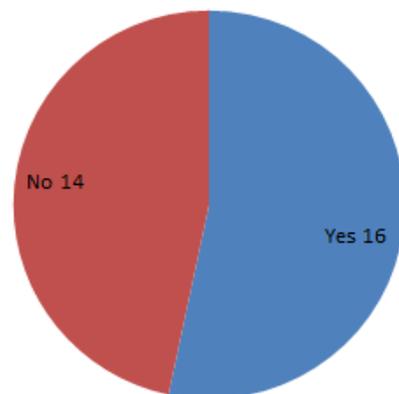
22. How would you describe your level of competence in the English language?

Many declare a level Advanced C2 (11/30) e Advanced C1 (10/30).



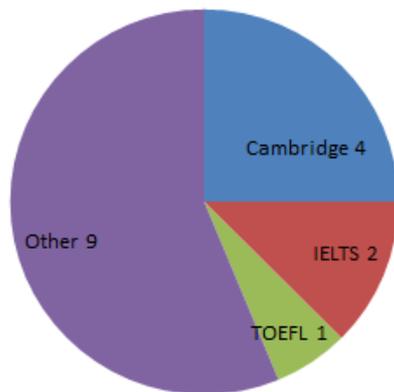
23. Have you achieved a certificate in the language competence?

Participants were divided equally between those who had a certificate and those who did not, except for two.



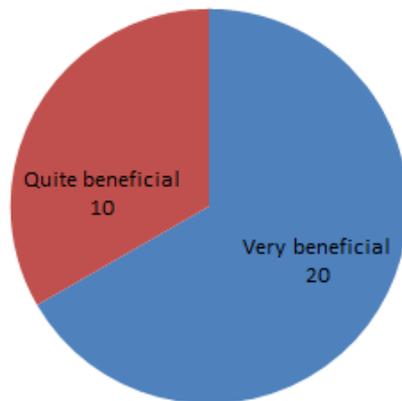
24. Specify please.

Among those who answered Yes, the certificates declared: Cambridge (4), IELTS (2) and TOELF (1). Many said Other.



25. Would using game based-learning in the school curricula be beneficial in your opinion?

Game-based learning in school curricula would be very useful for most participants.



26. Please justify your answer.

Keywords: motivation and immersive environment. Most significant answers:

"It would combine language skills with soft skills and ICT literacy"

"To improve the student's soft skills (formals, informal and no--formals)"

"Game-based learning is an authentic way of teaching. It can be used in every lecture and it helps learners to store information in their long term memory."

*"I am teaching English for the 5th and 6th graders and I have experienced that the game based learning is very beneficial for them in many aspects. Students learn * the subject by having fun which promotes their imagination as well * by involving the process * by doing * to use technological tools *how to work together * through games which promote their creativity .. encourages critical thinking"*

"My experience with using games in the classroom has shown me that learners become more engaged and motivated due to the competitive element and because of the clearer challenges that are presented to them. Though there are a lot of students who will shy

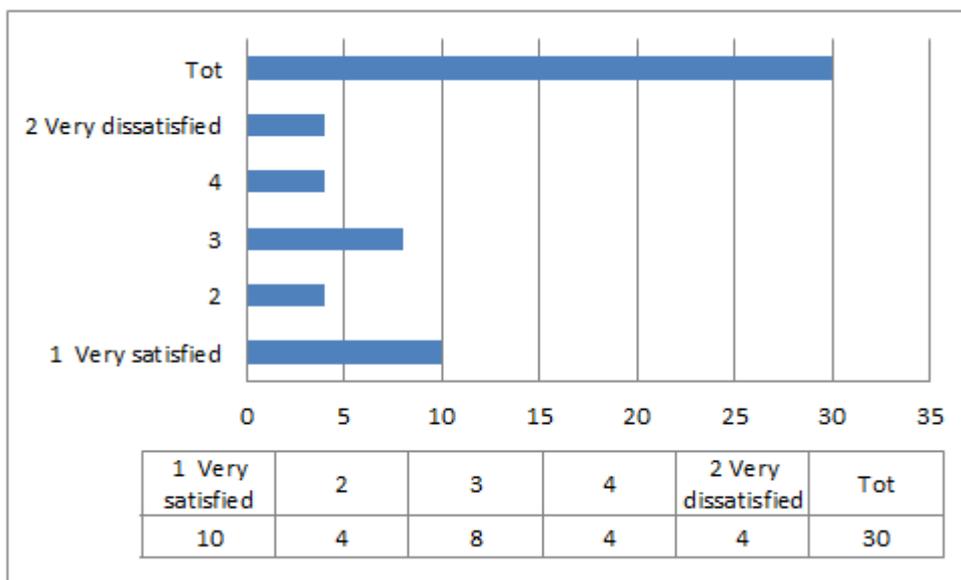
away from competition, learners enjoy using what they've learned in a game. The fact that games define clear goals and expectations also acts as an additional motivator with the added benefit of building class community”

“Game based learning is engaging and promotes a deeper level of processing and understanding of material”

“Game-based learning can be very beneficial. However, the achievement of game based learning should remain same always, because gaming can be very distractive also.”

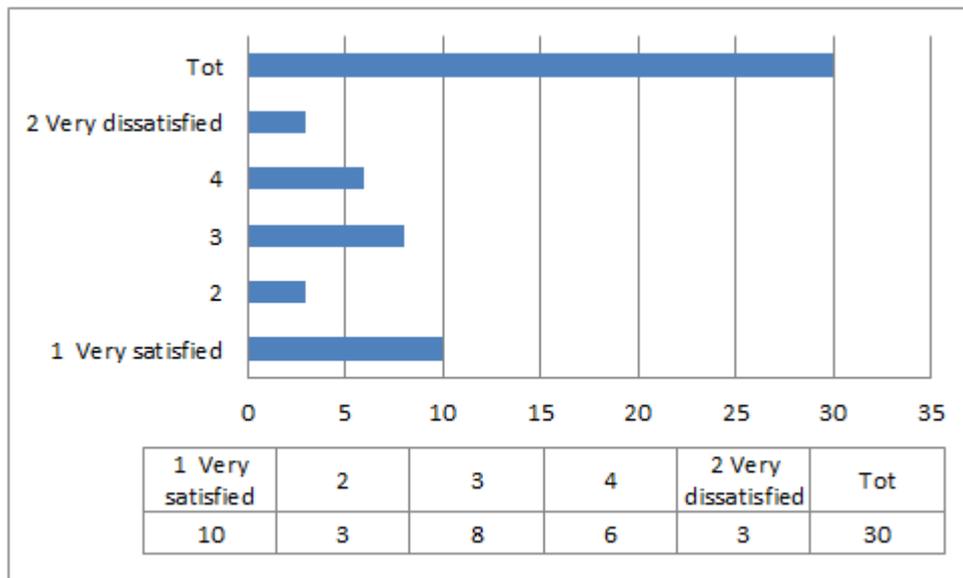
27. If you have used game-based learning, how satisfied are you with the added value of this form of instruction on students' learning outcomes?

As you can see from the graph, most of the participants were very satisfied.



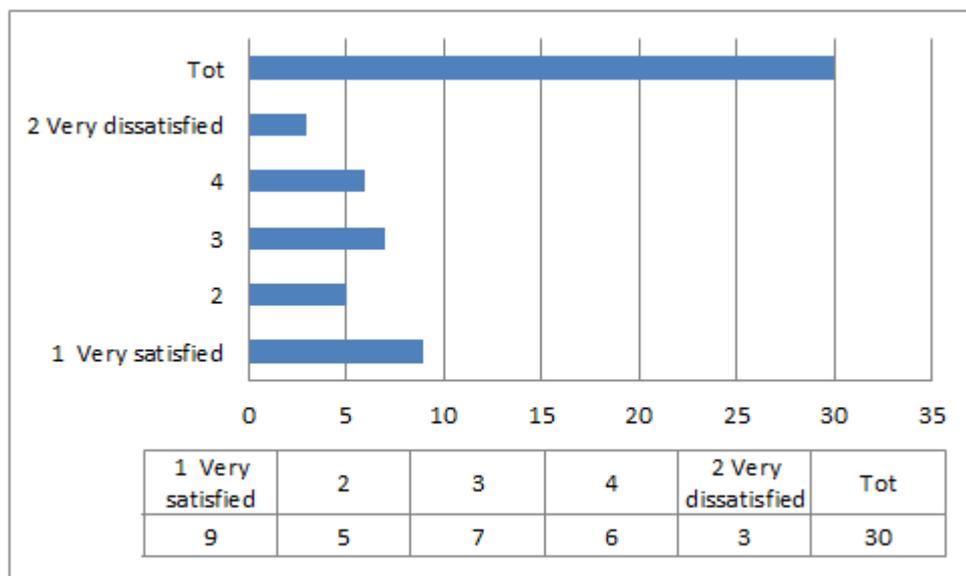
28. If you have used game-based learning, how satisfied are you with the added value of this form of instruction in terms of teaching strategies?

Also in this case the majority declared to be satisfied even if many opted for the average value 3.



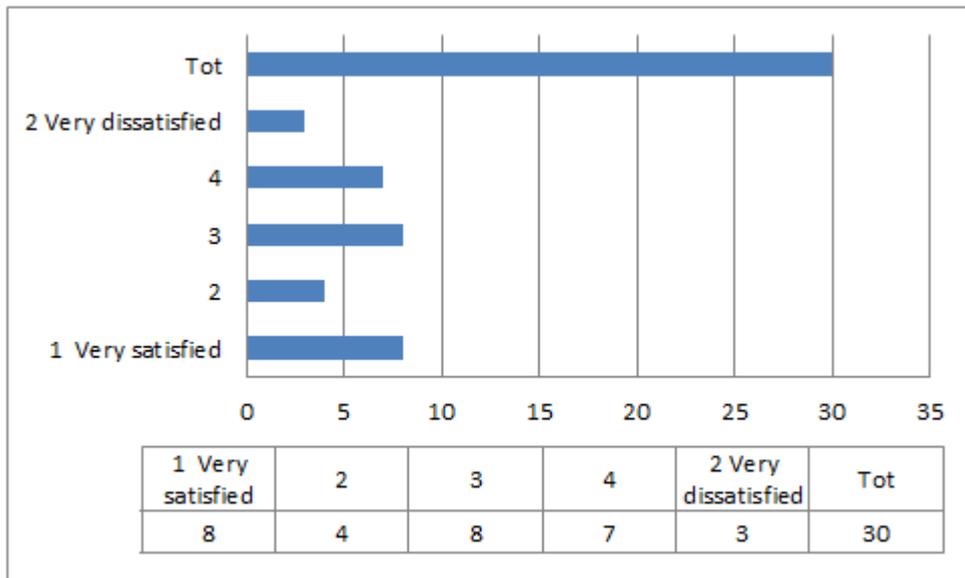
29. If you have used game-based learning, how satisfied are you with the added value of this form of instruction in terms of a better learning environment in your class?

In terms of improvement of the learning environment 9 participants said they were very satisfied while the rest distributed on values 3 and 4, less satisfactory.



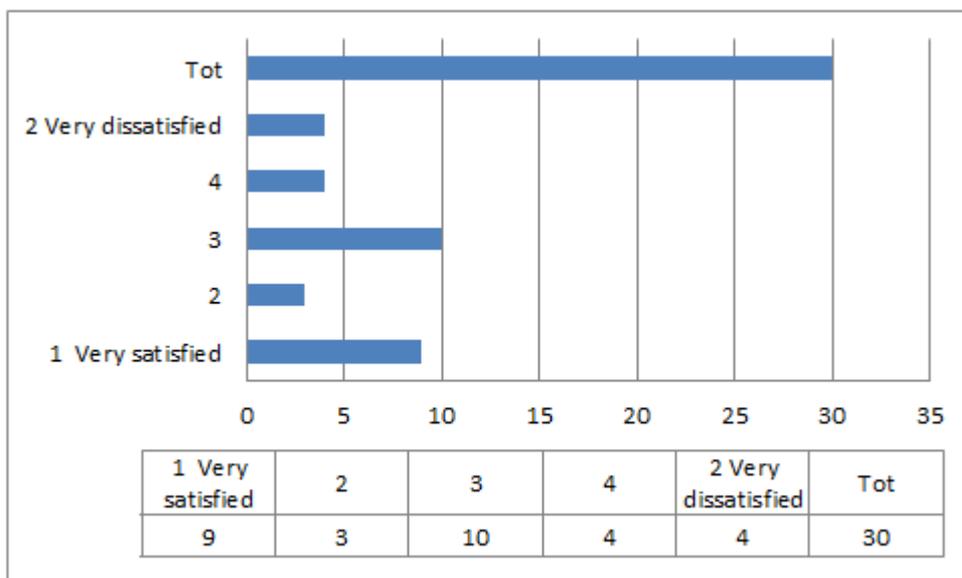
30. If you have used game-based learning, how satisfied are you with the added value of this form of instruction in terms of the use of learning technologies in your class?

In this case we have an equal distribution between very satisfied and the average value 3, there is also a tendency towards the value 4.



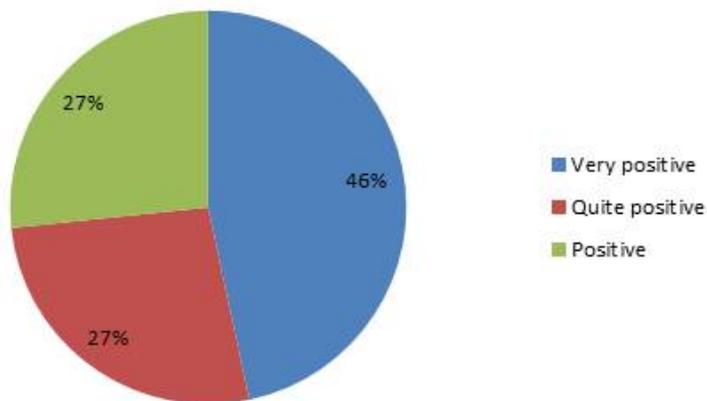
31. If you have used game-based learning, how satisfied are you with the added value of this form in terms of a better cooperation among teachers in your school?

Here there is a greater distribution of the answers on the average value, quite satisfied.



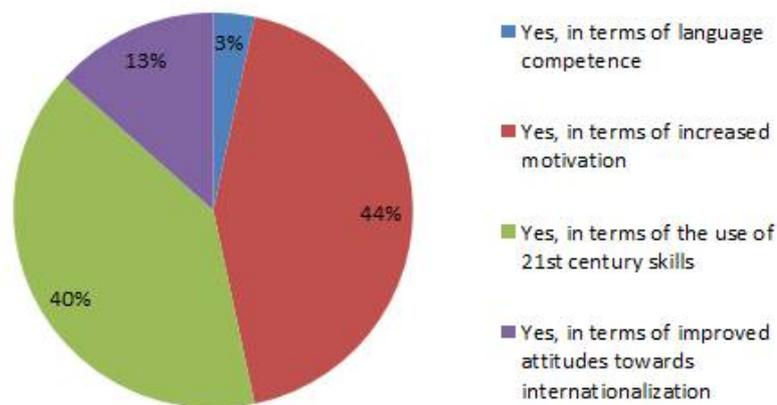
32. How do you rate your students' reactions to game-based learning and digital games in the school curriculum?

The reaction of the students is certainly judged very positively by almost half of the participants (46%).



33. Do you think game-based learning would result in improvements in your students' learning outcomes?

As you can see from the graph, most believe that the improvement on learning is above all in terms of increased motivation (13/30 participants) and in terms of the use of 21st century skills (12/30 participants).



34. How would you rate the reactions of your students' parents to game-based learning?

The parents' reactions were considered positive and very positive but many of them were neutral.

“Peer to peer learning and interesting hints from the tutors and the community”

“I want to gain a creativity skill for using games in my different teaching environments”

“I expect to learn how to design engaging and fruitful learning pathways and how to fully exploit the potential of this kind of technology.”

36. Please write any further comments in addition to those above.

Most significant answers:

“I would like to offer my students a different but systematic way for learning languages”

“Through games, students are more engaged in the learning process”

“I’m looking for ways to improve teaching by using technology. I hope this mooc will help accomplish that”

“I can see that 21st century kids need different learning styles, their motivation, their way of thinking and understanding the world is very different. Also, there are many examples that technology is very beneficial for especially language students.”

“I hope to use those games effectively and look for some ways to differentiate my class.”

“Because of the increased student motivation, implying higher levels of monitoring, and the increased dependency on technology, support of parents, school and parents becomes often crucial for positive outcomes.”

“I also hope to exchange the knowledge and experience of using games in the classroom with other teachers.”

“Also, I would like to learn what kind of tasks I can create with these game based-learning tools for different types of learners.”

“I am too excited and eager to learn. I am a lifetime learner and I would like to add value to myself and my environment until the last day of my life. So, thank you for this great opportunity.”

GUINEVERE FINAL SURVEY: DATA EXTRACTION

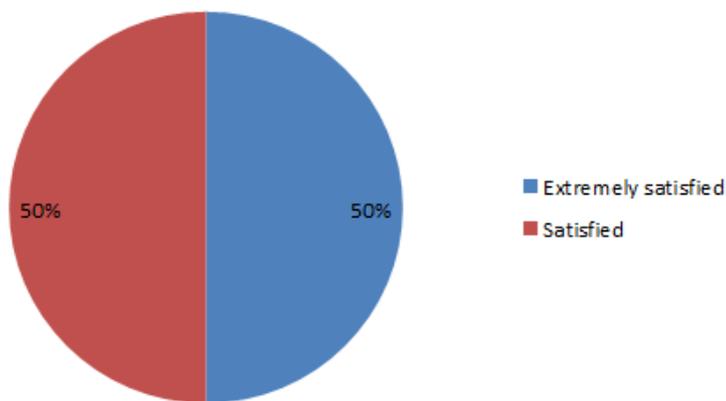
This survey is part of GUINEVERE project.

I COURSE SATISFACTION

The final survey was completed by 8 participants.

1. How satisfied were you with the Self-Study course?

The answers were distributed equally between extremely satisfied and satisfied.

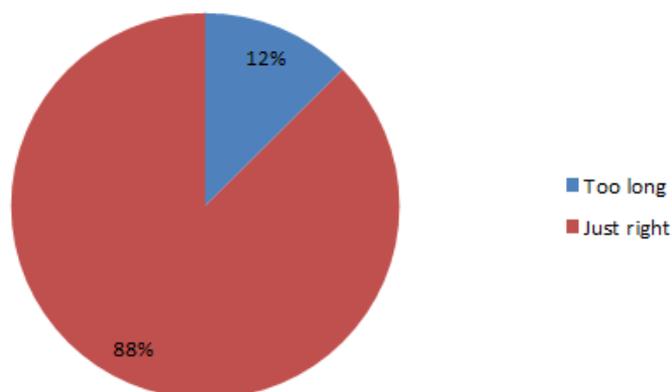


2. Did you find the course was...

All the respondents considered the course just right.

3. How did you perceive the length of the course?

For the most the course lasted the right time.



4. Please specify your response

"it was right"

"The course length was very reasonable. Activities were not too difficult but there were lots of extra materials that was useful to read"

"I had some trouble logging into the Guinevere virtual world. I planned to retry at a time when I hadn't just finished a long day at work and then completely forgot, so I cannot comment on the parts of the course relating to being inside that virtual world but the rest of the course was well-paced for my needs and easy to follow. The length was suitable for the content"

"I had to spend much time every week"

"Well-planned self-study course, activities were organized in the right way and in the right time span"

"The length of the course was adapted to the learning required by the modules"

"Very interesting."

5. Did you receive all the support needed during the course?

Everyone is satisfied with the support received.

6. Please specify

"I had all the support"

"the only difficulty regarding the access to the Guinevere world in SL but it was solved at the end, being registered as guest user"

"yes, I received all the support from tutors and other colleagues"

"I simply forgot to ask for support for my log in issues. I intended to try again and then ask, this has nothing to do with the support available on the course - simply a reflection of my everyday workload."

"Always"

"all the support was included in the course"

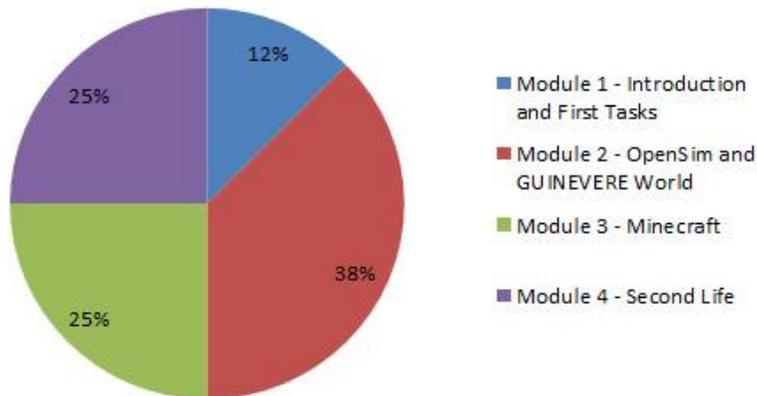
"I received all support needed"

"The support was punctual and continuous."

II COURSE CONTENT

1. Which of the course modules appealed to you most?

The course the participants liked the most was **Module 2 - OpenSim and GUINEVERE World**. Equal satisfaction for Module 3 and Module 4. Module 1 was the least appreciated.



2. Please give reasons for your response.

"I usually use it in my class"

"I am more interested in the use of virtual worlds in teaching rather than Minecraft."

"Because I use Minecraft EE in class"

"I have studied game-based digital learning previously so Module 1 and Minecraft were not new to me from a teaching perspective. Module 2 was interesting but given how widely used Second Life is in general I found that learning about it was more appealing for me."

"I have studied game-based digital learning previously so Module 1 and Minecraft were not new to me from a teaching perspective. Module 2 was interesting but given how widely used Second Life is in general I found that learning about it was more appealing for me"

"interesting and amusing way to create life online"

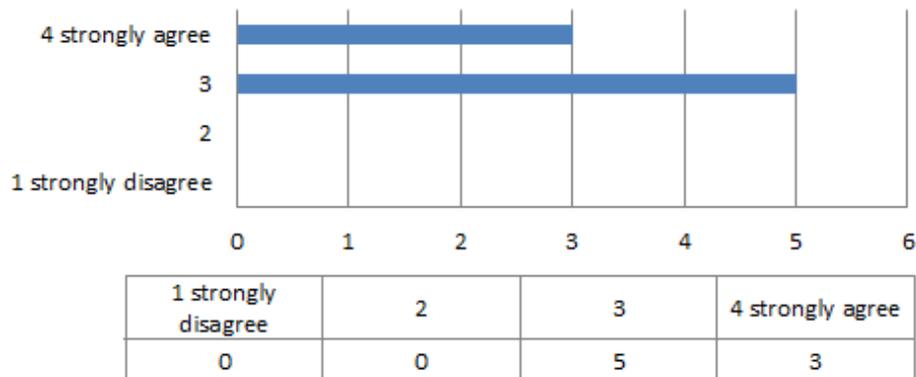
"I was interested in the kind of approach of instructional design of the Guinevere World"

"The insights present in this module represented a professional enrichment. I also appreciate other aspects of the other modules. The entire course represented an excellent opportunity for professional growth."

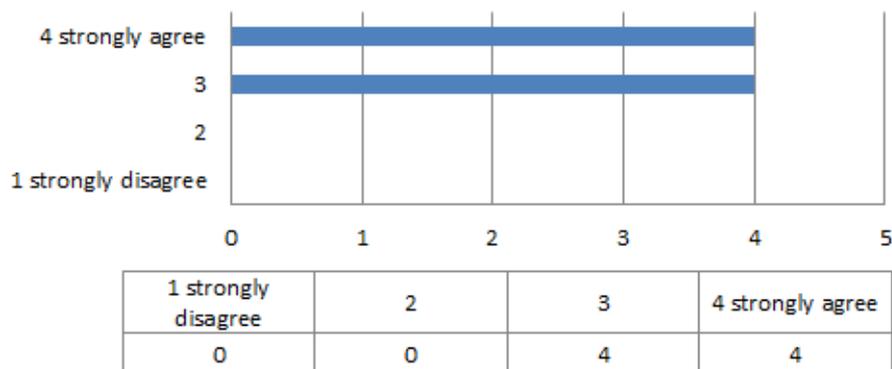
3. Please rate the following statements: (from 1= strongly disagree to 4= strongly agree)

Most agreed or strongly agreed.

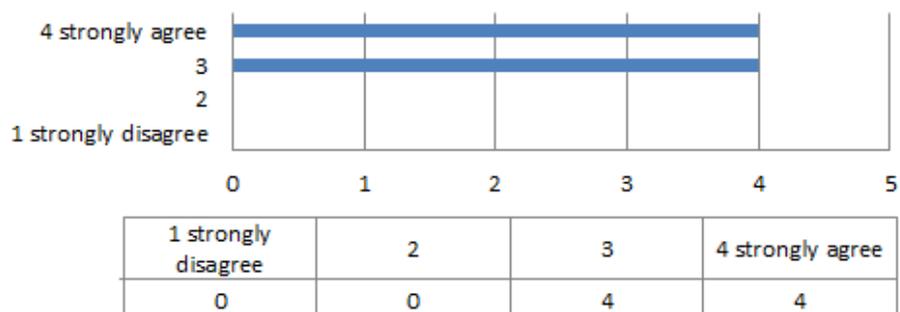
The activities in Moodle were easy to accomplish



The activities in Moodle were appropriate for the course



The video instructions on how to access virtual worlds were easy to follow



4. Please specify.

"It was ok"

“The activities were appropriate to my level of knowledge of the topics. Some of those related to virtual world environments were quite easy but I found the Minecraft one's a bit challenging.”

“I had some problems in SL”

“Everything was easy to follow”

“Most important”

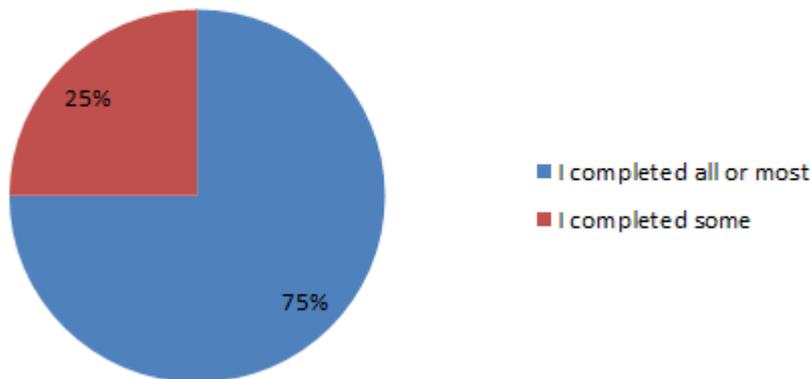
“it was easy to accomplish”

“I had no problem in the use of the platform; the video instructions were clear”

“The course was well structured and perfectly usable Moodle environment.”

5. Did you complete the tasks assigned?

75% completed almost everything.



6. Which competences did the course help you develop?

Here are some answers:

“Building games in virtual worlds”

“It consolidated or deepened the use of different strategies to gamify teaching activities and base them more on learning by doing and situated learning approach”

“Building some gaming activities for children”

“I developed a further understanding of new virtual worlds and their possible uses in education”

“Relations”

“Interactivity”

“Instructional design competencies, from analyzing learner needs to developing training assets”

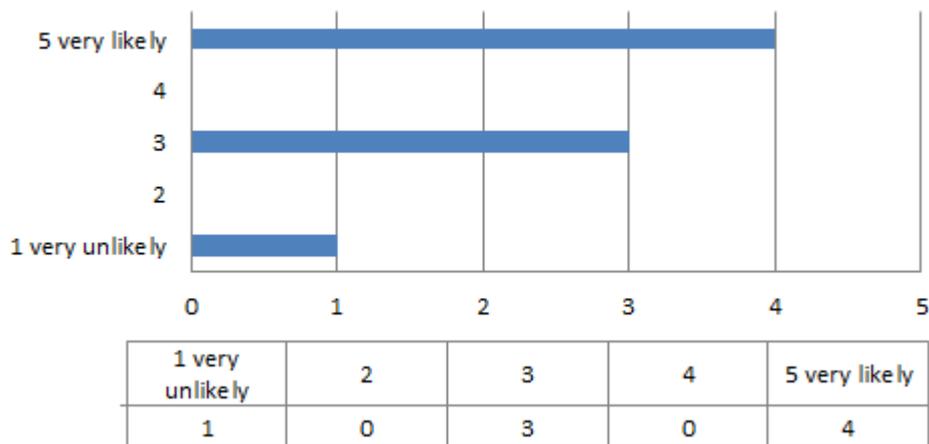
“Innovative approaches to learning about game-based learning additional ways of involving students, new ways to build educational games and other ways to develop creativity”

III Recommendations

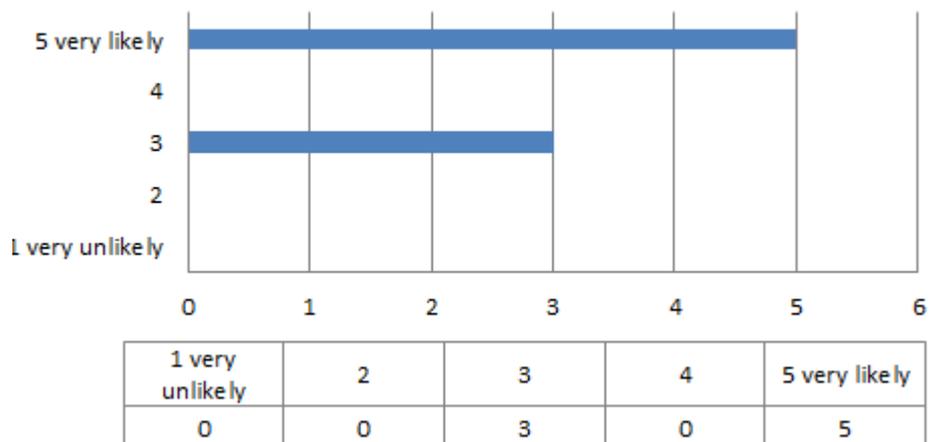
1. How likely are you to use the following in your teaching in future?
(from 1 = very unlikely to 5 = very likely)

In the future many will use Minecraft and OpenSim, less Second Life.

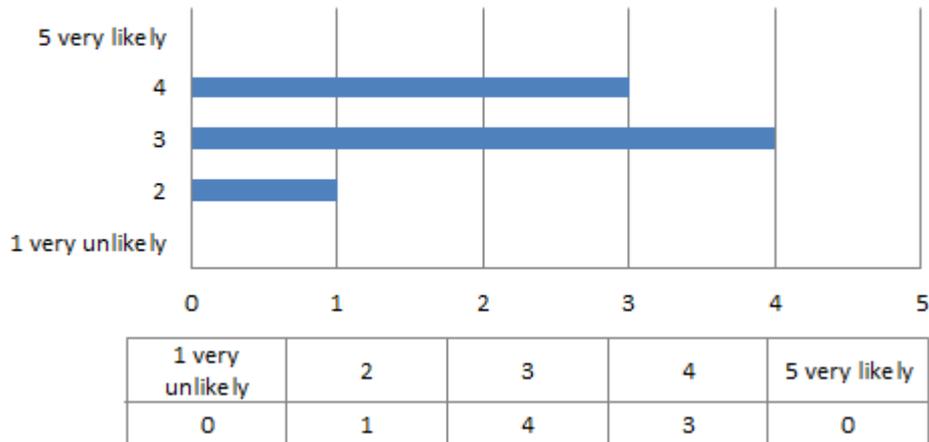
Minecraft



OpenSim



Second Life



2. Please specify

"I can't access in your SL region"

"Second life environment would be more difficult to use for my students age range - 11-13 years old. OpenSim might offer better privacy. I will need to study and practice Minecraft a lot more before planning to use it in class effectively."

"SL isn't for primary school"

"I have previously used Minecraft in my teaching and will continue to do so. I enjoyed Second Life and will likely use it in the future, it lends itself well to situation English lessons."

"Most important"

"second life seems to me more interesting"

"I have been training in the use of EdMondo and I would like to implement a project for my students"

"I intend to use all three tools. As far as Second Life is concerned, a separate discussion must be made with the parents. I teach in the Middle School and parents are not always willing because they don't see educational opportunities"

3. Would you recommend it to others?

Yes, everyone would take the course to others.

4. Please give reasons for your choice.

"It was a very innovative course"

"I'd strongly recommend the use of virtual world environment to supplement any digital based teaching environment, provided teachers are given sufficient training beforehand and the school supports the project accordingly"

"It was interesting"

"The use of virtual worlds for teaching gives a great environment for distance learning in ways that Skype or Zoom or similar do not. Everyone can gain something from experiential learning"

"Very interesting"

"I could recommend it to colleagues"

"School needs to be changed and the use of virtual world in teaching can be a chance not to be missed"

"Absolutely. I will also advise you to take this course."

5. How could the course be improved in future?

"More interaction during the course maybe."

"using Minecraft EE"

"A checklist for portfolio completion would be useful at the end. Part of the reason I didn't finish the portfolio is because once I had gotten behind with it (completing only some sections and readings in some modules) it had to go back through the course to find the bits I had missed. Part of the reason I didn't finish is also due to my own workload as well, however. Thank you for creating a great introductory course - even without completing all of it I found it really valuable and it was wonderful being able to connect with other educators who are interested in this topic."

"It could be a bit shorter and include online meetings sometimes"

"I believe you need to develop the Minecraft Mojang module by including references to Minecraft education Edition."