

**UNIVERSITY OF EL SALVADOR
SCHOOL OF ARTS AND SCIENCES
DEPARTMENT OF FOREIGN LANGUAGES**



TITLE:

**THE ROLE OF AI IN THE CREATION OF GAMIFIED LEARNING ENVIRONMENTS AND ITS
EFFECTIVENESS**

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ABSTRACT

Artificial Intelligence (AI) is revolutionizing education by enhancing the design and effectiveness of gamified learning environments. This report explores how AI-driven technologies facilitate the development of personalized, adaptive, and engaging educational experiences through gamification. In response to the growing demand for effective online education, it examines the application of AI in gamification, particularly its role in foreign language teaching and the creation of engaging virtual learning environments. The study includes various activities and AI-driven tools utilized in gamified learning, such as Learning Management Systems (LMS) like Moodle and Google Classroom, which incorporate AI to create more interactive and dynamic experiences. Additionally, tools such as Liveworksheet and Google Sites are analyzed for their contributions to enhancing the delivery of online education through gamified elements. The conclusions offer valuable guidance for educators and institutional leaders seeking to optimize AI-driven gamified approaches in online education, particularly within the context of foreign language instruction.

Keywords: artificial intelligence, gamification, online education, virtual learning tools, Learning Management Systems (LMS), course development, educators

INTRODUCTION

In today's rapidly evolving educational landscape, Artificial Intelligence (AI) is playing a crucial role in transforming how educators approach online teaching, particularly through the use of gamified learning environments. The demand for more engaging and effective online education, especially in foreign language teaching, has surged as institutions increasingly shift towards digital platforms.

This report explores the role of AI in the creation of gamified learning environments, focusing on how AI-powered technologies are utilized to increase student engagement, and learning outcomes. Specifically, it examines the course "Administration of Virtual Environments for the Teaching and Learning of Foreign Languages," which was designed to equip future educators with the skills to effectively teach in virtual settings, utilizing AI-driven gamification tools. Through the integration of AI in platforms like Moodle, Google Classroom, and tools such as Liveworksheet and Google Sites, this course demonstrates how technology can be used to create interactive and dynamic educational experiences.

This document begins with an overview of the objectives of the course, followed by a theoretical framework that highlights the significance of AI in enhancing gamified virtual environments for education. It then presents a detailed account of the activities completed during the course, organized into three modules, and discusses the AI-driven tools introduced. The achievements made

throughout the course are also examined, alongside an analysis of the effectiveness of these technologies in fostering successful learning outcomes.

Finally, the report offers recommendations for foreign language departments and educators, suggesting ways to further integrate AI into future specialization programs, thus optimizing the teaching and learning process in virtual environments.

OBJECTIVES

General Objective

- To demonstrate the role and significance of Artificial Intelligence (AI) in the creation of gamified virtual environments for foreign language education.

Specific Objectives

- To outline the AI driven technological tools integrated into the course and discuss their practical benefits for both teachers and students.
- To provide a comprehensive overview of the activities conducted throughout the course and the effectiveness of using AI-powered tools and gamification strategies in the teaching and assessment process.
- To highlight the key advantages of utilizing AI-enhanced virtual platforms for foreign language instruction, focusing on their impact on student engagement and learning outcomes.

THEORETICAL FRAMEWORK

In the current educational reality, the implementation of technology in its different forms into the learning processes and teaching methods is a very common and useful practice. This can surely apply to the gamified system since it can easily adapt the alignments of a task performed in a traditional way into a virtual one.

First, the concept of Gamified must be, and based on the article published by Ellie Swain (2023) Gamified learning is a teaching approach that applies game design elements to learning where the goal is to engage people in a way that makes learning not just effective, but also fun. This can be interpreted as the use of games that are attractive and that at the same time leads to students understanding each topic successfully.

There is also a more specific definition provided by the University of Waterloo, in which they say, “Gamification is the integration of game elements like point systems, leaderboards, badges, or other elements related to games into “conventional” learning activities in order to increase engagement and motivation. In this description of the term some characteristics of the gamified learning are more notorious, since it is mention that it is not only the fact of incorporating games to entertain the students, but to modified the traditional activities so they can feel a sense of achievement by getting rewarded based on their performance at the end of each activity.

Besides this definition of Gamification, the University of Waterloo also emphasizes in the difference of a gamified environment from a game-based learning system, defining the latter as “the design of learning activities so that game characteristics and game principles are inherent within the learning activities themselves.” Therefore, a game-based environment is more aimed at students getting the knowledge or information through conventional games created directly to combine the enthusiasms of games with the appliance of theory so the learning process is lighter for students; this with no other goal such as being rewarded at the performance of each like it is with the gamified system.

Besides those definitions of Gamified, the journal of Helyon published in 2019 mentions key information of this system, where the authors established that “the term "gamification" It had origin in the digital media industry. The first document that used it was published in 2008, but “gamification” was only adopted in the scientific community, in a general way, in 2010, when many promoters at symposiums, disseminate this designation (Deterding et al., 2011).

In this journal, the authors also specify that “Gamification is a recent new field of research (Bargen et al., 2014), consisting in the development of game characteristics in non-game contexts (Deterding et al., 2011).

Now that these definitions of the term have been presented, it is important to highlight its main characteristics to perform it in an educational environment. The authors Gabriela Kiryakova, Nadezhda Angelova and Lina Yordanova mention in their report the following steps with their descriptions to achieve successfully the implementation of gamification in education.

1. Determination of learners' characteristics:

When teachers implement new approaches in the learning process it is essential to define students' characteristics (profiles) in order to determine whether the new tools and techniques would be suitable. It is essential for teachers to establish and take in mind what skills are required by the participants to achieve the objectives. Students' motivation to participate in training depends on the context of learning process and what follows from their achievements (W. Hsin-Yuan Huang, D. Soman, 2013). This first step explains how important is to adapt the activities to be performed so every learner has the correct skills to execute them according to their levels and not get frustrated in the process, in that way teachers can ensure that all students or the majority of them are willing and eager to participate. Besides that, they know they are capable and have the opportunity of outstanding in their classes because it is a task that they feel comfortable carrying it out.

2. Definition of learning objectives:

The learning objectives have to be specific and clearly defined. The purpose of education is to achieve the learning objectives, because otherwise all activities (including gamification activities) will seem pointless. The objectives determine what educational content and activities to be included in the learning process and selection of appropriate game mechanics and techniques to achieve them. In this second step, the relevance of objectives in the development of activities is clear;

teachers must create and select carefully the activities to be performed so they boost the theory that is being taught in each level, having an objective reason depending on the topic, ages and skills.

3. Creation of educational content and activities for gamification:

In this third step, the three authors developed four distinguished key points that the content and activities should have; they mention that the educational content should be interactive, engaging and rich in multimedia elements. The training activities should be developed tailored to the learning objectives and allow (Simões, J., R. Díaz Redondo, A. Fernández Vilas, 2013):

- **Multiple performances** – the learning activities need to be designed so that students can repeat them in case of an unsuccessful attempt. It is very important to create conditions and opportunities to achieve the ultimate goal. Because of repetitions, students will improve their skills. The authors explain that having just one opportunity to perform such activities can impact negatively in the learning process of the student, the goal is for them to acquire the knowledge not just to get a grade, they can perform it again in case they want to get higher results, study the correct options, practice for a test and more.
- **Feasibility** – the learning activities should be achievable. They have to be tailored and adapted to students' potential and skill levels. Like it was

mentioned by the authors in step one, students will have different levels academically speaking, that is why the activities have to be adjusted to their potential not losing the objective so everyone can obtain the same knowledge or information despite the form of the activity.

- **Increasing difficulty level** – each subsequent task is expected to be more complex, requiring more efforts from students and corresponding to their newly acquired knowledge and skills. Like the authors mention, gradually the complexity of the activities must increase so their skills are continuously polished, and that avoids students being stuck in their learning process and in that way, they are opened to new academic challenges.
- **Multiple paths** – in order to develop diverse skills in learners, they need to be able to reach the objectives by various paths. This allows students to build their own strategies, which is one of the key characteristics of active learning. Like it is mentioned, depending on the nature of the activity and its level, it should possess more than one possibility to get the correct result, so that learners can activate their critical thinking and accomplish the required results.

4. Adding game elements and mechanisms:

The key element of gamification is the inclusion of tasks that learners have to perform. The performance of tasks leads to accumulation of points, transition to

higher levels, and winning awards. All these actions are aimed at achieving predetermined learning objectives. This fourth step points out one of the most important characteristics of a gamified learning environment, since the rewarding system is what makes it so unique and encouraging for students. Teachers can create or apply these games for learners to complete them in an individual form or in groups, in the classroom itself or through virtual tools that help with the efficiency of the game and students themselves.

Continuing with this last step, it has been mentioned that gamified looks to develop the skills of the students with different levels, needs and ages with the use of games. Therefore, to incorporate technology to be able to achieve this goal plays a big part in this system with the current academic situation, one that has outstood these last years has been the artificial intelligence and its efficiency to create activities from scratch, including the necessary characteristics that involve the information trying to be presented and the gaming part.

First, it is important to define what artificial intelligence is. Based on the report published in 2023 by the project team of Educational Technology of the United States AI can be defined as “automation based on associations.” When computers automate reasoning based on associations in data (or associations deduced from expert knowledge), two shifts fundamental to AI occur and shift computing beyond conventional tech: (1) from capturing data to detecting patterns in data and (2) from providing access to instructional resources to automating decisions about instruction and other educational processes.

Having this term defined it is important now to highlight the way that AI can be an undeniable support in the creation of suitable activities for learners. “Design and validate an integrated system that provides real-time access to learning experiences tuned to the levels of difficulty and assistance that optimize learning for all learners and that incorporates self-improving features that enable it to become increasingly effective through interaction with learners” U.S. Department of Education, Office of Educational Technology (2010).

The integration of AI in education is revolutionizing how things work at school, offering remarkable advancements particularly in the domain of educational assessment. Instead of teaching every student in the same way, AI-driven adaptive assessments are now enabling schools to personalize lessons to meet the unique needs of each student, fostering more engaging and effective learning journeys. Teachers are beginning to view “AIEd as a pedagogical instrument” rather than a replacement, using these tools to provide real-time feedback and better understand their students’ confidence and motivation ([Selwyn, 2021](#); Luckin et al., 2016).

This last perspective on AI taken from the article written by Vali Huseyn, Strategic Assessment Specialist, shows the positive impact that artificial intelligence can cause in the education area. The traditional practices can be left behind in a positive way; for many years, teachers have followed the same systematical pattern, in terms of methods, to teach every student in their classrooms year by year. Now, with the assistance of artificial intelligence teachers can create activities or games suitable for the different types of students, as it is common knowledge now that we all learn in different ways.

A blog posted by Central's website established the following definition "Gamification AI is the integration of artificial intelligence (AI) technologies with gamification strategies. This combination results in a more personalized, adaptive, and engaging experience for users than gamification on its own. This fusion of AI and gamification enables businesses to create highly targeted and responsive experiences that cater to individual user preferences, behaviors, and learning styles, ultimately increasing user engagement and driving business growth".

On the other hand, this definition shows the benefits of incorporating artificial intelligence with the gamified system, because it includes all its requirements with some other technological advantages. The blog by Central highlights these two main advantages:

1. **The Power of Personalization:** The blog mentions that personalization is king in our current world and that a significant advantage of gamification AI is its ability to personalize experiences for individuals. By analyzing user data and incorporating machine learning algorithms, AI-powered gamification systems can adapt content and challenges to match the interests of the users, their skills, and progress. This level of personalization keeps users engaged and motivated by consistently presenting content and challenges that are relevant and level appropriate.

2. **Real-time Feedback and Adaptive Learning:** Real-time feedback and adaptive learning are two more significant advantages of gamification AI. AI algorithms are able to examine user behavior and performance as they

engage with the gamified platform, determining areas in which the user is succeeding and those in which they might be failing. With this information at its disposal, the AI can modify the level of difficulties, offer focused advice, or propose alternative learning paths. This dynamic approach to learning and engagement enhances user pleasure, fosters long-term retention and loyalty, and helps users stay motivated and engaged.

These two advantages show how smooth is the combination of these two systems for the benefit of both, students and teacher, since it makes the grading process completely on its own, students get activities and tasks based on their needs, the frustration of “failing” can be diminished, since the students obtain automatic feedback. Consequently, they can immediately evaluate these results and know what can be done to improve, combined with the fact that these tasks are created to be attractive for the students, in that way completing them is not a matter of frustration but of interest for them.

In the report of the University of Waterloo some gamification and game-based learning tools are mentioned, these are some of the examples:

- **Duolingo** – gamifying language learning by having students complete drill-and-kill grammar and vocabulary exercises while receiving experience points to gain levels and access more difficult exercises.
- **Coursera** – a platform that provides free educational courses for anyone who is interested, but to promote interactivity and retention, badges and other reward systems are implemented for participants.

- **Brainscape** – improved flashcards that promote retention of knowledge using what they call “confidence-based repetition”, designed to be more appealing and fun to use to also assist in retention.
- **Kahoot** – a classroom response system that is free to use and does not require student sign-up, simply create a game of Kahoot, enter in questions, and supply the provided pin to your students, who will then use their phones or laptops to play the game and answer questions.
- **Credly** – an open-source badge making tool to create badges for tasks in your course, with the ability as well to distribute badges to students as well.
- **TopHat** – a classroom response system, like Kahoot, that allows students to provide responses to questions in the class anonymously; unlike Kahoot, this has a fee associated with it, but it allows for better integration in the LMS for grading purposes, and has a tournament mode to encourage competition in-class.

Now, talking about its effectiveness, there is an article published by Nikita Verma (2023) that shows the following results of ten case studies and the impact of gamified AI in the students, these are the results:

1. 89% increase in student performance via challenge-based, gamified learning.
2. Gamification led to a 65% increase in user engagement
3. Gamification boosts memory and recall by 40%.

4. 68% of students feel more motivated and engaged when using gamified learning.
5. 300% higher homework completion rate when using a gamified course with levels, badges, and a feedback system.
6. The use of gamification in training led to a 44% increase in motivation.
7. Learners using gamified tutorials completed tasks 57.5% faster than the control group.
8. Gamification improved students' understanding of the curriculum by 75.5% and 89% wanted gamification for other subjects.
9. 73% of children with ADHD reported a lasting improvement in attention after regularly playing the game EndeavorRx.
10. 95% of medical students felt engaged during gamified learning and 74% agreed it was better than traditional lectures.

In these results, there are different populations being taken into consideration, but one thing that they have in common is the positive response that they have had to the gamified and gamified AI environment.

In conclusion, we can confirm that making use of a gamified system combined with artificial intelligence can lead to a positive change in the learning environment. We need to give technology the correct use so it influences the teaching methods and the different learning types that students present in the best way possible. All that just with one same objective, to capture the attention of learners and assure their effective learning, appliance and correction of the knowledge.

DESCRIPTION OF ACTIVITIES

Module I: Online Foreign Language Teaching



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In Module I, students explored and recognized the significance of various learning theories in shaping English language teaching methodologies within virtual learning environments. They also gained practical experience with different LMS (Learning Management System) tools, such as Moodle, Google Classroom, and Google Meet, to facilitate both synchronous and asynchronous activities in online learning. (See images in Appendix A).

To help participants explore and apply these tools in online classrooms, they were tasked with several activities during a synchronous session. Divided into groups, they were asked to research the terms *synchronous* and *asynchronous* learning, after which they created presentations to share their findings with the class,

focusing on the advantages and disadvantages of each teaching modality, participants also researched about some Learning Management Systems (LMS) and presented it to the class. Following this collaborative activity, participants engaged in the following tasks in asynchronous mode:

Discussion Forum: To carry out this activity, the course participants were asked to answer the question “Which learning theory(s) do you think influences the way foreign languages are taught online and why do you think so?” and posted it in a discussion forum created by the professor. The answer to that question must be based on the different learning theories studied in the class. Besides answering the main question, students also needed to comment on another peer’s answer and provide their opinion providing supportive details about it.

Infographics: This activity consisted of elaborating an infographic explaining the main features and resources or activities that can be carried out with the Moodle platform. For this activity, students needed to research information about the assigned LMS, analyze it, and select the features of the platform to include them in the infographic.

A virtual class in Google Classroom: Participants designed a course in Google Classroom on an English-related topic, incorporating four different types of resources, including videos, web links, and exercises. They utilized various Google Classroom features such as forums, assignments, quizzes, and materials. Participants then presented their courses in a live session, explaining the features they used and demonstrating how they integrated them into their course.

An online class in Google Meet: The final activity involved planning a short class to be conducted via Google Meet, based on a topic chosen during the session. Team members were required to incorporate four distinct resources and four different activities, using platforms such as Educaplay, YouTube videos, Classkick and others to create an engaging and interactive learning experience.

Module II: Educational Applications for Learning a Foreign Language



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In Module II, students explored how to integrate technological tools to design dynamic and engaging online classes (see images in Appendix B). To demonstrate their understanding and experiment with various educational tools, they completed several tasks during the live session. One activity involved researching the components of Technological Pedagogical Content Knowledge (TPACK) and organizing their findings using the Jamboard tool, which they then shared with their classmates. They also explored the use of AI in education and were introduced to

platforms like Narakeet, which allows for creating videos from presentations. Additionally, the group completed four evaluated activities asynchronously:

My T Tool: Participants were tasked with researching and selecting an appropriate tool such as Bamboozle, Socrative, Quizlet among others, assessing its benefits and limitations, and exploring its accessibility. They also investigated its application in an online educational context. Each team prepared a presentation to showcase their chosen tool to the rest of the class. This included an overview of its features, advantages, disadvantages, and a brief demo illustrating how it could be used effectively in an online learning environment.

Video Tutorial: involved recording a video tutorial using Google Meet to demonstrate how to use Liveworksheets as an educator. Participants were required to show how to create a short exam with two distinct sections by converting a PDF document into an interactive online worksheet that students could complete on either a computer or mobile device. Team members recorded the entire step-by-step process through Google Meet, highlighting the tool's practical application.

Video in Powtoon: Students created a video using Powtoon which is a cloud-based video creation platform that allows users to create engaging animated videos and presentations. In this assignment, learners were asked to explain the role of Artificial Intelligence (AI) in education, highlighting its advantages and disadvantages. They also researched and recommended three AI-powered tools for educators, detailing their key features and uses. To complete this task, team members signed up on Powtoon, imported a PowerPoint presentation containing the information on the selected tools, and recorded an audio introduction to the topic.

The final video was shared with the instructor via a link. Through this activity, students demonstrated how to effectively use Powtoon's features in an online educational context, while integrating other essential tools like PowerPoint.

Online class using technological tools: Course participants planned a short class to be delivered through Google Meet. In this assignment, the professor provided each student with three different technological tools such as Miro, Narakeet and Edpuzzle among others, requiring them to incorporate interactive activities that would enhance the class's engagement and effectiveness. Learners developed a detailed lesson plan outlining the activities created with each tool and presented it to their peers during a live session. This gave each participant the opportunity to showcase their work and learn from the activities shared by others.

Module III: Desing of Didactic Materials for Virtual Environments



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In module III, students explored the implementation of multimedia in modern education. To provide participants with hands-on experience and learning

opportunities for exploring and using these tools in online classrooms, they were given various synchronous and asynchronous activities during module III. (See images in Appendix C).

Podcast in SoundCloud: Students started by studying the benefits of audio podcasts in online teaching and were tasked with creating their own educational podcast. This involved recording audio on an electronic device and converting it to MP3 format using Audacity for enhancement. Finally, they uploaded their finished podcast to SoundCloud, a streaming service that allows playback on any electronic device at any time.

Interactive image in Genially: students learned how to select appropriate images for specific topics. The students familiarized themselves with interactive images, which are innovative visuals with embedded buttons for displaying images, links, text, and videos. To apply their learning practically, they designed an interactive graphic using Genially based on the same topic covered in the podcast. The objective was to design creative content by using technology.

Google Slides: students watched some videos and honed their skills in using Google Slides and coordinating color schemes. Google Slides is a tool for crafting engaging presentations that allow users to incorporate videos, images, and links. To practice, students created a Google presentation with visual elements and links while also focusing on selecting colors to captivate the audience.

Educational video in OpenShot: Students were taught how to produce professional videos for a course. The importance of selecting the right background

color was emphasized due to its significant impact on the final result. Additionally, careful attention was given to selecting appropriate attire and accessories for the presenter. Through practical experimentation and editing videos using smartphones and the OpenShot application, students tactically chose camera angles and voice tones to create an engaging visual and listening experience. Adding background music was also highlighted to enhance the overall effect. After editing, participants shared their videos by uploading them onto YouTube.

To finish the module, students used their new knowledge to design a customized Google site for undergraduate students. The site included three out of four activities learned in the module and aims to improve the overall learning experience for learners. The individuals are confident in their ability to apply the acquired skills effectively and look forward to using them in future endeavors.

ACHIEVEMENTS

After completing Module I, course participants were able to explore and analyze the impact of various learning theories on online English language teaching methodologies and how their principles can be applied in virtual learning environments. Participants gained experience using different Learning Management Systems (LMS), including Moodle, Google Classroom, and Google Meet which enabled them to effectively facilitate both synchronous and asynchronous activities in online education. Furthermore, they enhanced their ability to create engaging and interactive online lessons, integrating diverse educational technologies.

In Module II, students explored and understood the benefits and limitations of various educational tools. They assessed each tool's accessibility and application in online learning, gaining the skills needed to integrate these tools into their teaching practice. Moreover, they enhanced their skills in multimedia content creation and demonstrated their ability to use various digital tools effectively by using Powtoon among others. Overall, the module equipped students with practical skills in using diverse educational technologies, enhanced their ability to create and present

engaging online content, and provided them with hands-on experience in designing interactive and effective online lessons.

In the third module, participants produced a podcast, learned to create interactive images using Genially, developed a Google Presentation with creative slides, and produced a professional video using OpenShot. They also built a webpage and integrated materials using the tools learned in the course to support online English teaching. Throughout the course, students gained proficiency in utilizing various virtual resources to create interactive and engaging teaching materials for online classes.

CONCLUSION

In recent years, technology has had a significant impact by offering tools for academic achievement. The use of these tools has enhanced the learning and teaching environment, and digital platforms and applications have enabled us to continue with academic pursuits. These platforms serve as communication channels and allow for the input and output of information. Additionally, the ability to store large volumes of data is crucial for sharing various types of content through these platforms.

We can also confirm that teachers themselves can experience some other benefits, knowing that they have different tools and applications handy to create activities based on the necessities of their students, with a previous profile obtained. They can also be adjusted to different topics in different levels based on the characteristics of the information that they want the students to understand.

To conclude, the correct use of technology can give many great tools and techniques to the academic area. It all depends on the way that the information and tasks are presented to learners, all these to create the best learning environment in the current virtual reality where learners develop every day.

RECOMMENDATIONS

To authorities for the Foreign Languages Department:

To develop a guideline for professors to get familiar with the different tools and applications that are available to teach efficiently making the use of technology.

To evaluate an update and adaptation in their lessons and methods to assure the correct use of technology and understanding of students in classes.

To teachers:

To get familiar with new teaching techniques and resources to implement during classes. In that way, they can easily create elements and activities to apply in classes, changing the traditional teaching to a more updated one, so they can encourage and capture the students' attention through the learning process.

To students:

To look for interactive content and educational games to enhance student's learning experience. At the same time, it is recommended to pupils to start their investigation process about these resources, so they can apply them effectively in the future.

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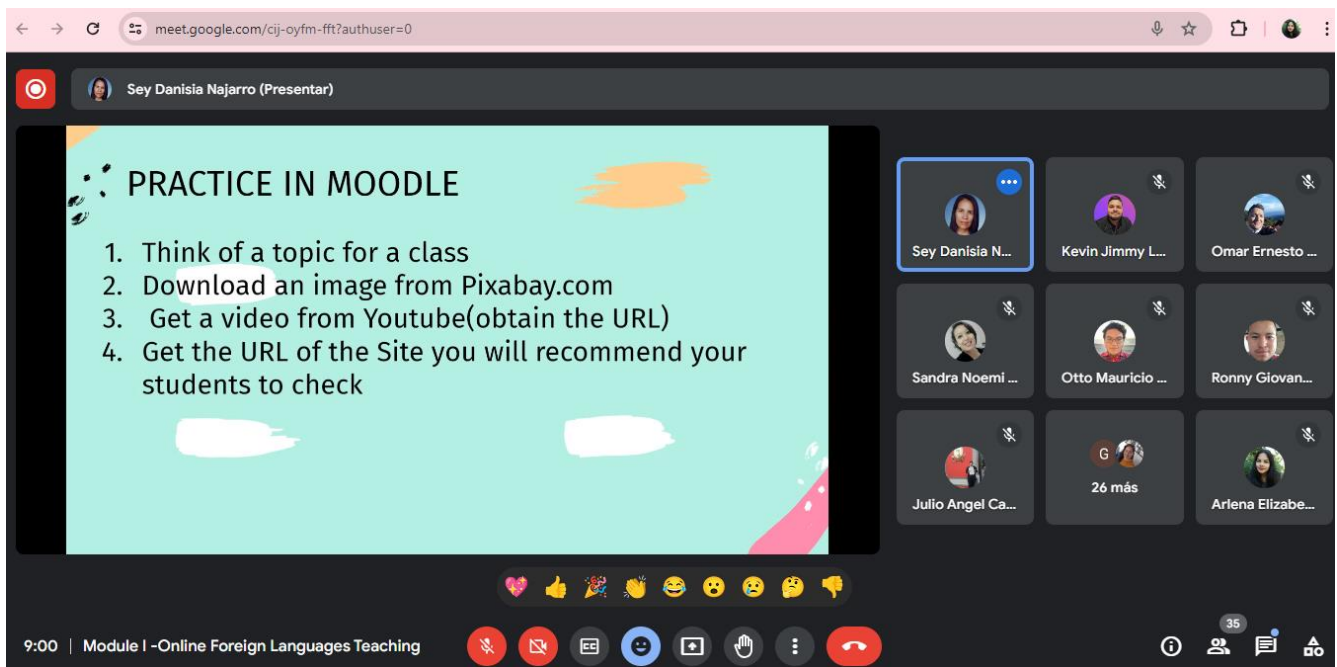
[examples/#:~:text=It%20was%20found%20that%20challenge,the%20students%20increased%20by%2034.75%25](#)

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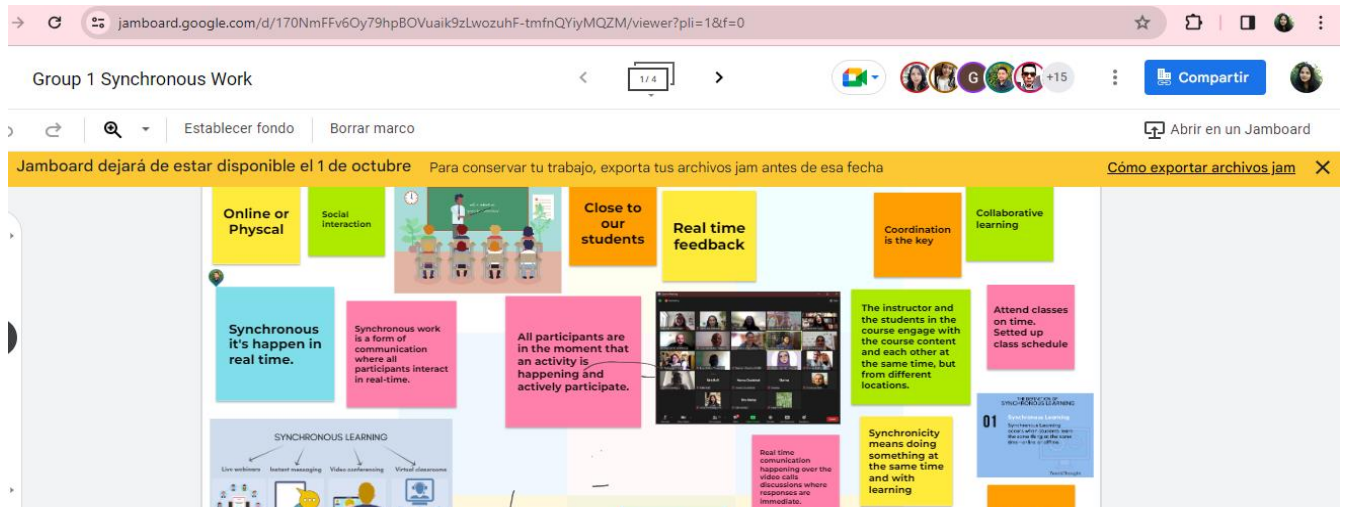
<https://www.youtube.com/?app=desktop&hl=es>

APPENDICES

Appendix A. Module I – Online Foreign Languages Teaching



Online Class – Module I.



Jamboard - Groupwork in class - Synchronous and asynchronous work.

The screenshot shows a Google Classroom interface. On the left is a navigation sidebar with options like 'Inicio', 'Calendar', 'Recursos', 'Clases impartidas', and 'Cursos en los que te has in...'. The main content area is titled 'Instrucciones' and 'Trabajo de los alumnos'. The assignment is 'Painting Your Perfect Day: Writing a Descriptive Paragraph' by Wendy Liliana Mejia Castro, worth 100 points, with a due date of May 5, 13:59. The instructions begin with watching an instructional video and then brainstorming ideas for a perfect day. A rubric is provided with 4 criteria and 10 points. A video thumbnail for 'How to write a Descriptive P...' is also visible.

Module I – Designing a course in Google Classroom.

The screenshot shows a Jamboard presentation titled 'Module I - Online Foreign Languages Teaching (2024-05-18 08:00 GMT-6)'. The board is titled 'Extreme Sports Match' and has a score of 29,166. It features a list of extreme sports on the left and their descriptions on the right. A green line connects 'Rock Climbing' on the left to 'Leap from high platform' on the right. A video thumbnail of Wendy Liliana Mejia Castro is visible in the bottom right corner.

Extreme Sport	Description
Rock Climbing	Leap from high platform
Snowboarding	Scaling vertical cliffs
Surfing	Riding ocean waves
Wingsuit Flying	Freefall from aircraft
Skydiving	Flying in special suit

Development of live class through Google Meet.

Appendix B.

Module II Educational Applications for Learning a Foreign Language

The screenshot shows a Google Slides presentation titled "The TPACK Model". The main slide features a central diagram of the TPACK model, which consists of three overlapping circles: Technology (top), Pedagogy (bottom-left), and Content (bottom-right). The intersection of all three is labeled "TPACK". The diagram is enclosed in a dashed red circle. The presentation interface includes a sidebar with five slides, a toolbar with various editing tools, and a status bar at the bottom that says "Haz clic para añadir notas del orador".

Group work – The TPACK Model – Module II.

The screenshot is split into two parts. The top part shows a Google Meet session header with the ID "tio-fwxh-viu (2024-07-17 16:20 GMT-6)". The bottom part shows a website interface for "Browse Worksheets". The website has a navigation bar with "My Dashboard", "Worksheets", "Plans", "Help", and "Community". Below the navigation bar, there are search and filter options: "Search Worksheets", "My Worksheets", "My Favorite Worksheets", and "Followed Users". The main content area has a "Browse Worksheets" section with a search bar, "From age" and "To age" dropdowns, and a "SEARCH" button. At the bottom right, there is a video feed of a woman, identified as "Arlene Elizabeth Menjivar Martinez".

Módulo II Aplicaciones Educativas para Aprender un Idioma Extranjero 2024 (2024-06-29 08:00 GMT-6)

The screenshot shows a presentation slide from Classkick. The slide is titled "You are helping jlm on slide 1". It features a grid of hand signs for letters. The top row shows letters J, k, l, m, n, o, p, q, r. The middle row shows s, t, u, v, w, x, y, z. Below the grid, there is a drawing of a vase and the word "vase" written in a simple font. The vase is a red and yellow patterned ceramic vessel. The word "vase" is written in a simple, sans-serif font. The slide is part of a presentation titled "2. Drag and drop word." The video player interface shows a progress bar at 3:04:22 / 4:49:13. The video is shared by Arlena Elizabeth Menjivar Martinez.

Presentation of tool – Classkick.

Appendix C.

Module III **Desing** of Didactic Materials for Virtual Environments

The screenshot shows a YouTube video player. The video is titled "Understanding Morphemes" and is by "Purple Planet Music". It was uploaded 21 days ago and has the hashtag "# Learning". The video thumbnail features a diagram illustrating the relationship between a word, its meaning, and its parts. At the top, there are two lightbulbs and an open book. Below them, the word "ME" is shown. In the center, there is a book labeled "WORD". Below the word, there are puzzle pieces and the words "MEANING" and "PARTS". The video player interface shows a progress bar at 2:42. The video is shared by Arlena Elizabeth Menjivar Martinez.



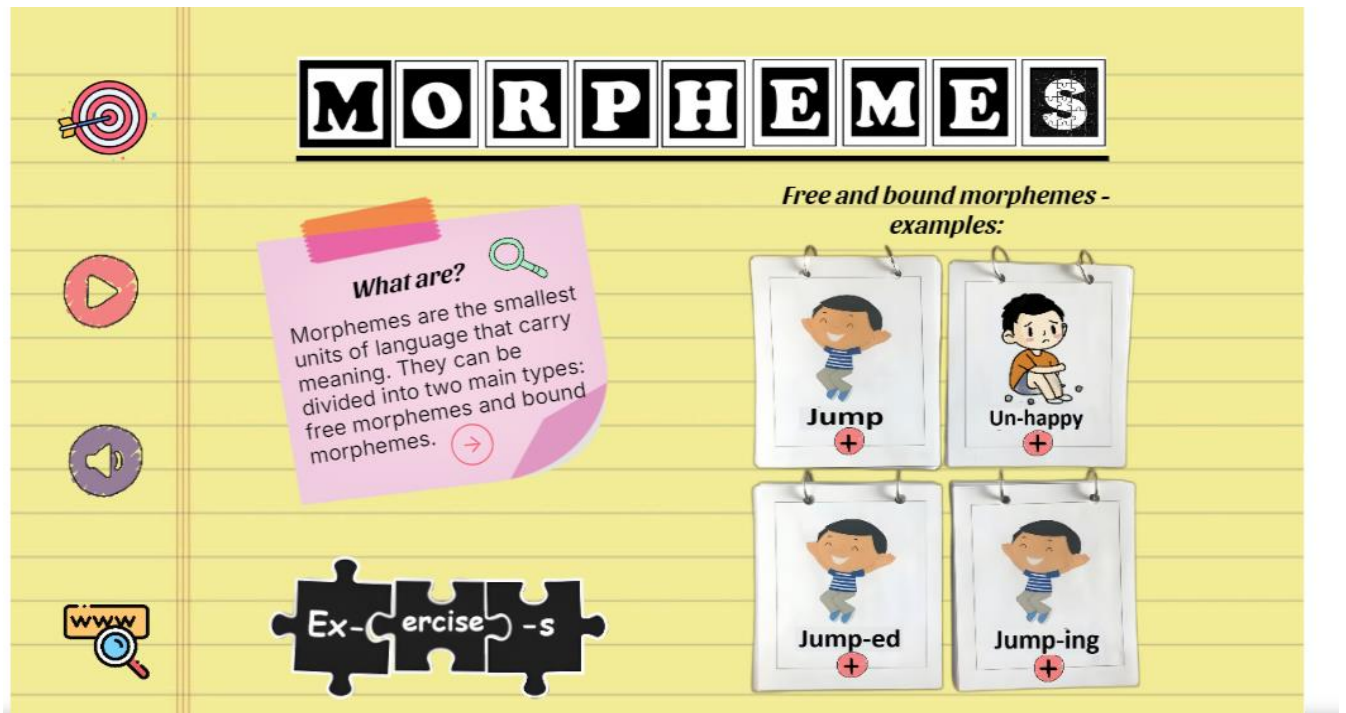
Write a comment



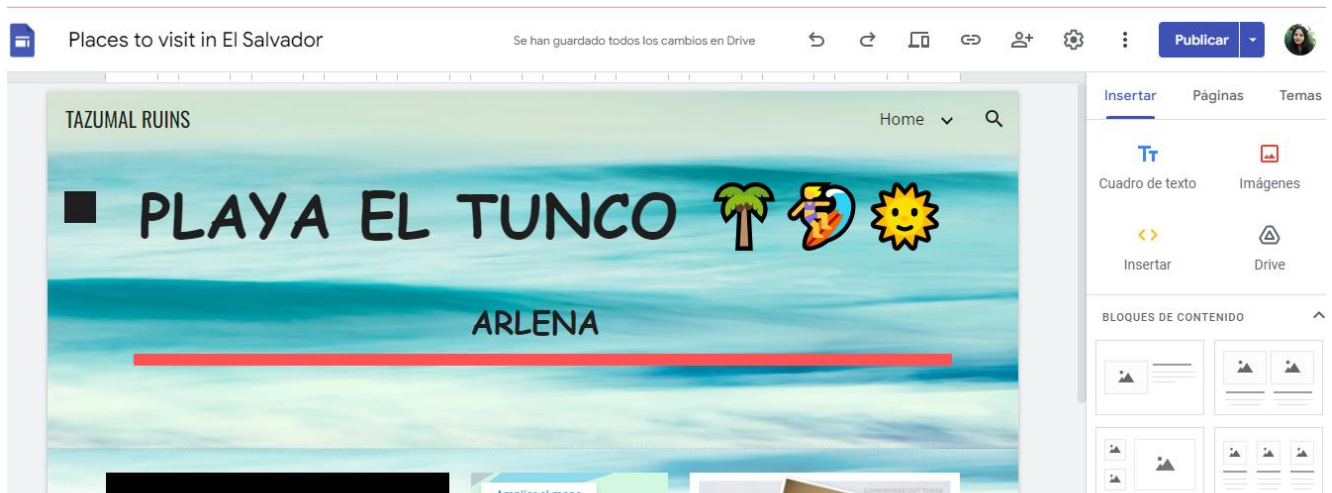
Related tracks

View all

Creation of a podcast on Soundcloud.



Creation of an interactive image with specific content on Genially.



Group work – Creation of a creative slide in Google Sites – Synchronous class.