

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



TOPIC:

“ADVANTAGES AND DISADVANTAGES OF AI IN EDUCATION”

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ABSTRACT

Virtual learning and teaching have become an area of great interest for innovation and development within the educational system. Thanks to the efforts of the University of El Salvador, the Department of Foreign Languages has created specialization courses that work closely with students to achieve meaningful learning. One of these courses is the 'Specialization Course in the Management of Virtual Environments for the Teaching and Learning of Foreign Languages.' This document is based on that course and aims to identify the advantages and disadvantages of using artificial intelligence in education from the perspective of university students. The rate of modernization and technological advance that took over the education sector today is discussed, and what can be expected with regard to the new role of technological tools, one of the most important being AI; this indeed generates great interest and a considerable debate in light of its possible impacts on these processes. However, this paper attempts to present a balanced argument about the role of AI in education, underlining how a thoughtful application maximizes benefits and mitigates drawbacks. Furthermore, the application, benefits, and limitations of AI in education have been elaborated in this study. The second part of this paper includes a summary of each week of classes during the specialization course, as well as a description of the evaluative activities developed in the three modules of the course. It also includes some achievements listed by the course participants.

Keywords: *artificial Intelligence, education system, virtual learning and teaching, tool, benefits, limitations.*

RESUMEN

El aprendizaje y la enseñanza virtuales se han convertido en un área de gran interés para la innovación y el desarrollo en el Sistema Educativo. Gracias a los esfuerzos de la Universidad de El Salvador, el Departamento de Idiomas Extranjeros ha creado cursos de especialización en los que se trabaja de la mano con los estudiantes para lograr un aprendizaje significativo. Uno de estos Cursos es el de Especialización: Administración de Ambientes Virtuales para la Enseñanza y Aprendizaje de Idiomas Extranjeros. Este documento se basa en dicho curso y tiene como objetivo identificar las ventajas y desventajas del uso de la inteligencia artificial en la educación desde la perspectiva de los estudiantes universitarios. Esta investigación explica la modernización y los avances tecnológicos que han revolucionado la educación en la actualidad, así como el rol de las herramientas tecnológicas, entre las que destaca la inteligencia artificial (IA), que ha generado un gran interés y debate en torno a su posible impacto en dichos procesos. Sin embargo, este trabajo pretende ofrecer una perspectiva equilibrada sobre el papel de la IA en la educación, enfatizando la necesidad de una aplicación meditada para maximizar los beneficios y mitigar los inconvenientes. Además, en esta investigación se explican los usos, beneficios y limitaciones de la IA en la educación. La segunda parte de este trabajo incluye un resumen de cada semana de clases durante el curso de especialización, así como una descripción de las actividades evaluativas desarrolladas en los tres módulos del curso. También contiene algunos logros enumerados por los estudiantes.

Palabras claves: *inteligencia artificial, sistema educativo, aprendizaje y enseñanza virtuales, herramientas tecnológicas, beneficios, limitaciones.*

I. INTRODUCTION

Artificial Intelligence has been growing tremendously for the last few years and has influenced most spheres of human activity, including education. AI-powered tools enabled transformational changes, such as personalized learning experiences, automation of administrative tasks, and increasing access to quality education. Be it adaptive learning platforms or intelligent tutoring systems, this is how technologies have made the learning process more efficient and engaging. These novelties are counterbalanced, however, by the negative growth of concerns about data privacy, algorithmic bias, and a reduction of human contact within educational processes. Furthermore, unequal access to AI technologies may further increase inequalities in education in different regions.

This document, therefore, tries to critically analyze the dual character of AI in education: how advantages like increased efficiency, accessibility, and personalization of learning can be accrued while simultaneously discussing some of the challenges and ethical issues arising from the adoption of AI. Drawing on research papers, case studies, and practical examples, this paper argues for a holistic view of the advantages and disadvantages of AI in education, balanced between its potential to change the face of learning in times to come and the critical factors that will form the foundation for responsible use of AI. With AI forging further and further, understanding its impact on education has become critical to determining how to harness its capabilities for the benefit of students and educators alike.

II. OBJECTIVES:

GENERAL OBJECTIVE

- To describe the various skills and knowledge acquired for effectively managing and enhancing virtual environments for teaching and learning foreign languages while emphasizing the advantages and disadvantages of artificial intelligence (AI) in education.

SPECIFIC OBJECTIVES

- To explain how AI-enhanced tools promote personalized experiences of learning and its impact on student engagement in learning and academic achievement.
- To examine digital tools and platforms that support interactive and engaging foreign language instruction in virtual settings.
- To analyze the effectiveness of various virtual platforms in facilitating foreign language teaching and learning within the course "Administration of Virtual Environments for Foreign Languages Teaching and Learning."

III. THEORETICAL FRAMEWORK:

Artificial intelligence revolutionizes the face of education over time in a modern way of teaching and learning and managing educational institutions. Examples are intelligent tutoring systems, adaptive learning technologies, automated administrative tools, and data-driven decision-making at various levels within education. Together with the increasing penetration of AI in educational systems across the globe, it is essential to survey the depth of benefits and drawbacks it comes along with. This paper has therefore critically analyzed the numerous benefits and drawbacks AI imparts upon education through academic literature studies that have thrown light on this transformative technology. The discussion will be based on how AI can enhance personalized learning, streamline administrative tasks, and improve access while also giving rise to issues of human response, algorithmic bias, and other privacy matters.

A. Introduction of AI to Education

The use of technology in education dates to the emergence of first-generation computers and their subsequent updated versions (Schindler et al., 2017). Teachers were seen using computers in teaching, researching, and recording students' grades and in doing other things. Similarly, students, among other things, made use of computers in studying, researching, and solving problems. Also, computers have been used as an educational resource (analogous to a library or laboratory), as well as a means for maintaining databases of student information. (Jones, 1985). Technology has been widely and deeply used in education since the development of artificial intelligence. According to McCarthy (2007), artificial intelligence is both

“the study and design of intelligent agents” and “a system that is artificial which behaves like a human being would if he were said to be intelligent.”

Loeckx (2016) had a different view, suggesting that AI could be helpful in lessening the workload on teachers as well as learners while at the same time providing quality education experiences to the latter. Coupled with current education reforms such as the digitalization of educational resources, gamification, and personalized learning experiences, there are many opportunities for the development of AI applications in education.

Artificial Intelligence, AI, received a quantum leap when, in November 2022, ChatGPT came forth as an AI system with a good predisposition to yield imaginative responses and sophisticated analyses by way of interactive human-like dialogues. Thus, it initiated an eruption of innovations, some of which gives the impression that we might approach a breakthrough toward an era of interactive, super-intelligent utilities.

In the last year, developers have unleashed a dizzying array of AI tools capable of creating text, images, music, and video without requiring any complicated coding but simply in response to instructions given in natural language. These technologies are rapidly getting better, with developers introducing features that not too long ago would have sounded like the stuff of science fiction. AI is also raising some pressing ethical questions around bias, appropriate use, and plagiarism.

This technology will affect the way students learn, the way teachers work, and eventually how we organize our schools in the year to come. Some educators and leaders look forward with considerable enthusiasm to these changes. Sal Kahn, founder of Khan Academy, went as far as to say in a TED talk that AI has the potential to cause "probably the biggest positive transformation that education has ever seen." But others warn it will enable the spread of misinformation, facilitate cheating in school and college, kill whatever vestiges of individual privacy remain, and cause massive job loss. The challenge involves tapping into the benefits while trying to reduce the adverse impacts.

B. What Is Generative AI?

Artificial Intelligence (AI) is a domain of computing that aims at designing software solutions that seem to have the same level of intelligence as humans by carrying out actions we consider as "intelligent" like reasoning, learning, problem solving and exercising creativity (Bailey, 2023). These software programs can help in different fields such as language translation, image recognition, autonomous vehicle navigation, cancer detection and treatment as well as generative AI which creates content and knowledge instead of seeking them.

Commonly, a "foundation model" in generative AI is a system that is trained on an extremely large dataset; thus, it acquires a general knowledge base that later can be fine-tuned for various specific purposes. This learning is self-supervised because the model learns from finding patterns and interrelations within the data it has received.

C. Uses of AI in Education

The U.S. Department of Education published a report titled “Artificial Intelligence and the Future of Teaching and Learning: Insights and Recommendations,” in May 2023. The department conducted listening sessions in 2022 with over seven hundred people, including educators and parents, to sense their thoughts on AI. The report noted, “Constituents believe action is required now, in order to get ahead of the expected increase of AI in education technology—and they want to roll up their sleeves and start working together.” People were anxious about “future potential risks” with AI but felt while “AI may enable achieving educational priorities in better ways, at scale, and with lower costs.”

1. AI could serve, or is already serving, in several teaching-and-learning roles:

a. Instructional assistants.

According to John Bailey (2023): “AI might tackle some of the administrative tasks that keep teachers from investing more time with their peers or students. Early uses include automated routine tasks such as drafting lesson plans, creating differentiated materials, designing worksheets, developing quizzes, and exploring ways of explaining complicated academic materials. AI can also provide educators with recommendations to meet student needs and help teachers reflect, plan, and improve their practice.”

b. Teaching assistants.

John Bailey (2023) states: “Parents can use AI to generate letters requesting individualized education plan (IEP) services or to ask that a child be evaluated for gifted and talented programs. For parents choosing a school for their child, AI could serve as an administrative assistant, mapping out school options within driving

distance of home, generating application timelines, compiling contact information, and the like. Generative AI can even create bedtime stories with evolving plots tailored to a child's interests.”.

c. Parent assistants.

Parents might use AI to compose letters requesting IEP services or to request a child be considered for gifted and talented programs. For families looking to choose a school for their child, AI could act like an administrator: mapping the schools within commuting distance of the house and establishing timelines for application, cataloging contact information, and so on. Generative AI can even create bedtime stories where the plot develops in concert with a child's interests (John Bailey 2023).

d. Administrator assistants.

With generative AI, school administrators can generate many types of communication; for instance, parent materials, newsletters, and other documents related to engaging the community. In addition, AI systems will support more complex tasks such as preparing class schedules or bus schedules and may also analyze complex data to identify needs or patterns. ChatGPT can provide sophisticated sentiment analysis that could be useful for measuring school-climate and other survey data (John Bailey 2023).

D. Benefits of AI in Education

1. Personalized Learning.

Other advantages of AI in education include the fact that it personalizes learning. Traditionally, methodologies of teaching are, at best, one-size-fits-all, with some vague design somehow to make up for this shortcoming by extra effort. AI can, therefore, change the adaptability in learning content with respect to each student. It does so by delivering personalized instruction tailored on the base of performance and levels of engagement. To put this into perspective, Li, and Zhao (2020) state:

“AI-powered learning platforms such as Coursera and edX implement algorithms that, in recommending routes of learning, tell students where to develop and focus.”. Personalized learning is just impossible for teachers to realize in large classrooms and at the same time can make large class sizes manageable.

The system will even point out learning gaps and offer relevant interventions. For example, intelligent tutoring systems (ITS) like Carnegie Learning and ALEKS personalize the pace and performance of the students in that they will adapt to the student's progress and immediately present feedback to the learner while adjusting exercise difficulties (Zawacki-Richter et al., 2019). Research has proven that such systems have been proven to increase academic performance among students and enhance student engagement due to a more active and responsive learning process. (Holmes et al., 2019).

2. Administrative Efficiency

AI is changing not just the pedagogic dimensions of education but also the administration aspects, where several tools automate tasks that used to weigh heavy on the educators and people in administration. According to Luckin et al. (2016): “AI automates such time-consuming tasks as grading, scheduling, and managing communications with students.”. For instance, AI-based grading systems analyze written responses and give immediate feedback within seconds, hence releasing teachers to teach and develop students. This will automate teacher workflows, making them able to focus on high-impact work in lesson planning and one-on-one student support.

The education system in South Korea is a good example where AI systems are utilized for setting test questions and grading answer scripts (Hwang et al., 2020). The use of AI in the administrative capacities is an augmentation that goes along with the increase in productivity and scaling up the level of educational institutes.

3. Enhancing Accessibility and Inclusion

AI's ability to improve accessibility is another key advantage, particularly for students with disabilities or those who face language barriers. AI-powered assistive technologies can help students with physical or cognitive disabilities access educational materials. For example, voice recognition tools, such as Microsoft's Immersive Reader and Google's Read&Write, convert spoken language into text, aiding students with dyslexia or other learning disabilities (Holmes et al., 2019). These tools allow for a more inclusive learning environment by ensuring that students of varying abilities can engage with the material.

Moreover, AI translation services can help non-native speakers participate in educational programs, breaking down language barriers. Machine translation tools, such as Google Translate and Microsoft Translator, allow students to access learning materials in their native languages, which is particularly beneficial in multicultural classrooms (Zawacki-Richter et al., 2019). AI can also provide real-time captions during online lectures, making education more accessible to hearing-impaired students.

4. Data-Driven Insights for Improved Teaching

Another significant benefit of AI is its ability to analyze vast amounts of data, providing educators with valuable insights into student performance. AI systems can track student behavior, engagement levels, and academic progress, using predictive analytics to identify students who may be struggling. According to Williamson and Eynon (2020): “This allows teachers to intervene early and provide additional support to students at risk of falling behind.”. For example, platforms like Brightspace and Blackboard incorporate AI-powered analytics dashboards that provide real-time insights into student engagement, helping educators tailor their teaching strategies.

Zawacki-Richter et al. (2019) emphasize that: “AI’s data-driven insights are not limited to individual students; they can also be used to inform curriculum design, identify trends in student performance, and assess the effectiveness of different teaching methods. By using AI, educators can make evidence-based decisions that enhance the learning experience for all students.”

E. Constraints of AI for Learning

1. Loss of Human Interaction

It certainly enriches many aspects, but at the same time worries of eliminating the human touch might be associated as one of the most important parts in teaching and learning. Education is more than just transferring knowledge; it involves developing social skills, emotional intelligence, critical thinking, and human

interactions. As Selwyn (2019) explains: "This is because AI lacks the emotional and relational qualities of the teacher: empathy, encouragement, and mentorship."

These systems leave students isolated even more and represent a deepening of the isolation students would already feel. As Holmes et al. (2019) stated: "Fully self-directed AI learning reduced perceived social engagement levels in online learning." The question begs to be continued on whether AI can replace, or even augment, the more complex dynamics happening between teachers and students.

2. Algorithmic bias and Inequality.

Other issues relate to the potential for bias in AI algorithms. An AI system is only as good as its training data; if that data reflects biases in society, then the results can be just as prejudiced. O'Neil (2016) shows that biased algorithms embedded in AI systems may contribute to a lot of negative consequences for marginalized groups and promote inequalities in education. For example, automated grading has been criticized as favoring linguistic styles or cultural norms, so students from other backgrounds are placed at a disadvantage. AI systems in educational assessments may also serve to increase unequal opportunities because they could provide differential support to students based on biased input. Indeed, Zawacki-Richter et al. (2019) found that predictive models based on AI overestimate the chances of academic success for privileged students in higher education and at the same time underestimate the chances for success that students from disadvantaged groups hold. Biases in AI systems must be managed with great consideration of the data that trains the system and designing ethical algorithms.

3. Privacy and Data Security Issues.

Many are worried that AI might need so much data that it will interfere with privacy. Where AI is used in the field of education to take in a lot of personal information about individuals like academic transcripts, students' behaviors, even biometric data, it may lead to hacking and misapplication of such information as Williamson & Eynon (2020) posit. Therefore, if students' personal information is stolen or misused this could have far-reaching negative effects. Moreover, a good proportion of AI systems are made by private entities hence the commercialization of students' data is another major concern.

Schools have the responsibility to ensure that privacy laws, such as the European Union's General Data Protection Regulation (GDPR) or the US Family Educational Rights and Privacy Act (FERPA), are followed by AI tools which they employ. Nevertheless, ethical implications surrounding data use within AI systems continue to be hotly debated because students along with their parents are sometimes unaware about what specifically happens with their data.

4. Teacher Resistance and Professional Development.

Teacher adoption and professional development face challenges when AI is integrated into learning systems. Generally, educators have little knowledge about these AI systems. Hsu (2020) discovered that teachers usually view AI as something that would one day take away their jobs by leading to automation in which human educators would be replaced.

The concept that AI might most probably work as a facilitator instrument in helping teachers rather than replacing them builds resistance towards AI application. The successful adoption of AI can only be achieved when the instructors are facilitated through training. The induction of AI tools would otherwise be left unknown to the tutors themselves whereas it calls for constant training to teachers to fully incorporate AI in the education system.

IV. KEY TERMS

1. **Artificial Intelligence:** The study of how to produce machines that have some of the qualities that the human mind has, such as the ability to understand language, recognize pictures, solve problems, and learn. (Cambridge.org., 2024).
2. **Software:** The instructions that control what a computer does; computer programs. (Cambridge.org., 2024).
3. **Data:** Information, especially facts or numbers, collected to be examined, considered, and used to help decision-making, or information in an electronic form that can be stored and used by a computer. (Cambridge.org., 2024).
4. **Algorithmic Bias:** Algorithmic bias refers to the lack of fairness in the outputs generated by an algorithm. These biases may include age discrimination, gender bias, and racial bias. (*Algorithmic Bias | Engati*, s. f.).
5. **Data-driven Insights:** Data-Driven Insights refer to the process of obtaining valuable information and knowledge through meticulous analysis of large datasets. It involves collecting, organizing, and analyzing data from various sources to identify patterns, trends, and relationships. (*Data-Driven Insights: Everything You Need To Know When Assessing Data-Driven Insights Skills*, s. f.).
6. **Generative AI:** Artificial intelligence that can generate new content (such as images or text) in response to a submitted prompt (such as a query) by learning from a large reference database of examples. (Merriam-webster.com., 2024).

7. Education System: An education system refers to the economic and social factors that typically make up public schools at the federal, state or community levels. Such factors include public funding, school facilities, staffing, compensation, employee benefits, teaching resources and more. (Top Hat, 2024).

8. Human Interaction: Human interaction refers to the various interactions that occur between individuals in real time and physical space. These interactions can take place through interpersonal acknowledgement of achievements or through technological means, fostering a sense of belonging and engagement. (Marlow et al., 2016).

9. Inequality: An unfair situation in which some people have more rights or better opportunities than other people. (*Inequality Definition & Meaning | Britannica Dictionary*, s. f.).

10. AI Tools: An AI tool is a software application that uses artificial intelligence algorithms to perform specific tasks and solve problems. (*What Is An AI Tool? | Synthesia Glossary*, s. f.).

V. DESCRIPTION OF ACTIVITIES

Module I: Online Foreign Languages Teaching.

In this first module, undergraduates studied theories of learning in virtual environments and how they are essential for teaching foreign languages, including the use of Learning Management Systems (LMS) like Moodle and Schoology. Moreover, Participants explored two fundamental concepts: asynchronous and synchronous learning. Indeed, participants performed activities both asynchronously and synchronously. Additionally, students learned about diverse video conferencing platforms, such as Google Meet and Microsoft Teams. Finally, they created a virtual classroom that integrated the knowledge acquired during the first module.



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Week one

Students introduced themselves using a tool called Padlet, which allowed everyone to share a bit about who they are in a fun and interactive way; additionally, the teacher took some time to explain the class policies, session time, and what the overall program would look like for the module I.

Afterward, the instructor explained some important learning theories in virtual environments, such as behaviorism, cognitivism, and constructivism. To conclude the first class, students watched a video about these theories and discussed the most relevant information.

Week two

To start the second class, students played a true or false game to recap some of the concepts they had learned in the last session.

In addition, the undergraduates studied new concepts, which were synchronous and asynchronous. The facilitator also emphasized why it is important to understand their differences and how these concepts are essential in today's educational environment.

Learners studied new terms such as methodology, remote learning, e-learning, distance education, online education, and hybrid learning. The instructor also explained their importance and why it is crucial to distinguish between them.

To conclude, this week, the students completed their first evaluated activity. It was about a discussion forum on learning theories through the university's Moodle site.

Week three

This week, the professor introduced a new topic: Learning Management System (LMS). She also showed a video that explained the features of LMS.

Furthermore, the instructor explained a significant tool called Pixabay. It is a tool used for searching and downloading free images.

The facilitator showed how to create a course in Moodle. Finally, participants practiced adding classmates and some materials to their course.

Week four

Throughout this week, the professor also explained the distinct roles in Moodle as administrator, student, teacher, and course creator. Additionally, students learned about a new platform called Edmodo, an educational website where teachers can create content for students. Participants also learned what an infographic is and how to create one using Canva. Moreover, students explored more information about Edmodo, Schoology, and Sakai through a video and shared the most relevant information about them.

This week concluded with the second evaluated activity, which was to create an infographic about Moodle, its features, uses, and the resources available on the platform.

week five

Participants began learning about a valuable tool called Google Classroom. Moreover, they practiced using Google Classroom as a group by posting a forum, sharing a video with their students, creating an assignment, and adding some students to their class.

This week, students worked on a group task involving the creation of a virtual class in Google Classroom and they presented their class to their peers during a live session next week.

Week six

This week, undergraduates presented and explained their evaluated activity with their peers during a live class on Google Meet. The task involved creating a virtual class in Google Classroom on an English-related topic. They were required to post

and add four resources, such as YouTube videos, web page links, and more. Additionally, they included four basic activities available in Google Classroom: Forum, Assignment, Quiz, and Material. Finally, students added four participants to their course.

Week seven

Undergraduates learned about a user-friendly and useful tool called Google Meet for synchronous classes. Its features include playing videos, breakout rooms, diverse backgrounds, reactions, screen sharing, and more. The facilitator demonstrated how to use the tool with an example. Additionally, students practiced by creating a meeting in the calendar, adding guests to their meeting, creating a survey, trying out breakout rooms, and applying visual effects.

The second part of the class focused on another essential tool, Microsoft Teams, which supports synchronous and asynchronous work, including video conferencing. Students explored its features and, finally, practiced using the platform.

Week eight

In the final session of Module I, students completed a group assignment focused on demonstrating the use of video conferencing platforms. They utilized Google Meet and other web-based tools to present during a synchronous class.

Module II: Educational Application for Learning a Foreign Language.

The second module focused on technological tools for educational purposes and their foundations and principles for teaching and learning a foreign language in a virtual modality.

This module was through both synchronous and asynchronous practices where they shared knowledge and information about diverse educational tools, such as Edpuzzle, Flip, Narakeet, and Liveworksheets, among other technological tools, like Nearpod, Padlet, Kahoot, Powtoon, and Classroomscreen.



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Week one

In the beginning, students learned about technological tools for educational purposes, some facts about the history of technology, its impact, and the use of computer technology (both hardware and software). Educational technology is not just about using computers but about transforming the way teaching and learning occur.

Moreover, undergraduates studied how to select the appropriate tools as teachers and how to design activities for their students. In addition, They learned the importance of considering the objectives when using any tool. They also learned about different tools and activities, such as individual and group work, organizing collaborative work, and searching for and selecting information. Finally, students studied about TPACK: content knowledge, pedagogical knowledge, and technological knowledge.

Week two

The instructor explained the new topic called gamification. It is game-based learning that emphasizes creativity, motivation, collaboration, and the development of social skills. The facilitator introduced another tool called Padlet; in addition, she explained their features. On the other hand, they learned about Genially, which allows the creation of visually appealing, interactive content for lessons. To assess students, they studied LiveWorksheets, which turn traditional printable worksheets (like docs, PDF, and images) into interactive online exercises with self-correction, known as interactive worksheets. Furthermore, the professor showed another tool called Nearpod, which helps make any lesson interactive. However, the facilitator emphasized the importance of including clear objectives when selecting any tool or designing an activity. Finally, the instructor taught a new tool called Word Art, after that, students practiced by creating their projects during the session.

Week three

This week, the undergraduates presented their first assignment to the second module, "My T Tool." The assignment involved researching and selecting

appropriate technological tools for the online education context. They explored the benefits and limitations of each tool and put together clear and engaging presentations that included objectives for using the tool. After that, they highlighted the activities they had designed using the chosen tools in their class, encouraging their classmates to participate.

Week four

At the beginning of the live session, students presented the activities they had created using a different tool from the previous assignment. The facilitator introduced them to a new tool called Liveworksheets, through a video tutorial that explained how to use it, how to create exams, and how its features benefit educators. Learners studied that Liveworksheets allows users to upload images or PDFs and make them interactive, with options like multiple choice, fill-in-the-blank, checkboxes, word searches, matching, and more.

This week, participants completed the second evaluated activity, which involved creating a video tutorial on how to use Liveworksheets to create a short exam in this tool.

Week five

This week's topic was AI, standing for a kind of intelligence about machines and computing systems that empower them to do tasks usually performed by humans: learning, reasoning, decision-making, and understanding human language. Additionally, the facilitator introduced them to a new AI tool called Narakeet, which helps create videos easily. They learned how to use it, creating narrated videos from PowerPoint presentations. To conclude, they also explored another AI tool called Gamma, which allows users to create and customize presentations based on their

needs. Students practiced by making presentations using this tool and then shared them with their classmates.

Week six

In this class, students learned how to use Classroom Screen and its features like adding text, timers, and picking names, among others. Additionally, the instructor presented a new tool called Powtoon, an easy-to-use application for creating animated and creative videos. The facilitator also introduced Nearpod and its features which are uploading presentations, adding interactive questions, creating activities or exams, and sharing their work via links or codes. Furthermore, they learned how to use Edpuzzle, a free tool that allows teachers and students to customize video content. Edpuzzle allows adding questions through video. The last tool covered in this class was Padlet, an important technological tool for Module II. Its features include a wall, canvas, stream, grid, shelf, map, and timeline.

This week, participants completed the third evaluated activity, which involved creating a video in Powtoon to demonstrate the importance of Artificial Intelligence (AI) in education, its advantages, and disadvantages.

Weeks 7 and 8

Throughout these two last weeks, students worked on their final evaluated activity, which was about planning a short class that was conducted through Google Meet and using some technological tools and resources from the Web to have a dynamic Online class.

Module III: Design of Didactic Materials for Virtual Environments.

As the name implies, students learned to create materials, like podcasts, interactive images, engaging presentations, and videos. They also learned how to build their websites, guided by the teacher's expertise and advice. This module was designed to help students apply the skills acquired throughout the specialization course.



Images were taken legally from Google Images©, credits belong to their rightful owners, see references for more information.

Week one

During the first week, students explored the uses of multimedia resources and their benefits in a virtual learning environment. The facilitator emphasized the importance of the audience whether children, teenagers, or adults. Additionally, students learned about diverse types of educational multimedia, such as text, images, audio, animations, and video. The choice of the right multimedia tool depends on what the teacher aims to convey. To conclude, participants learned to insert audio into a Google Slides presentation.

Week two

In this class, students explored the fascinating world of podcasts. They learned about different audio formats, discovering that the format can vary depending on whether

they are recording on a phone or computer. If the audio is not in the correct format, they learned to convert it to MP3.

Students also studied the steps needed to create a podcast, such as identifying their audience, introducing the topic, providing examples, and writing a script. The facilitator explained a website called Purple Planet, where they can find free music. Additionally, they explored the audio editing tool Audacity, which has many features. They learned about SoundCloud, a platform where they can easily upload and share their podcasts.

Finally, participants completed the first evaluated activity of this last module, which involved creating an educational podcast and uploading it to SoundCloud.

Week three

The undergraduates learned about the importance of using images in education. Additionally, the professor introduced simple and effective tools called Reduce Images and Fotor, for resizing images, and Pixabay, a platform for finding and downloading free images. Later, they learned about another helpful tool called Pizap, which offers features like photo collages.

The students watched a video shared by the professor that explained the important aspects of copyright. Furthermore, the instructor showed tutorial videos about Genially to create interactive images and make them more engaging and dynamic. The participants explored features such as templates, inspiration, and the option to add text, videos, audio, and links. This week, participants completed the second evaluated activity, which involved creating an interactive image in Genially.

Week four

In this class, the professor explained key aspects of content design, such as the importance of color choices, and recommended font types like Arial, Verdana, and Calibri. She also shared a presentation on the steps to prepare an effective presentation. Additionally, the professor introduced the concept of a color palette, which refers to the full range of colors that can be displayed on a device or interface. She shared a video about how to mix colors and some basic color theory. Moreover, the facilitator introduced a new topic called typography, which is the style and appearance of text. She also presented a video to the students about the purpose and rules of typography, including common font types.

The instructor presented a video explaining the features of Google Presentations. Finally, the students practiced using Google Presentations, creating their presentations while applying everything they had learned in this session and following the teacher's advice.

Week five

Students were introduced to Photofunia, a practical tool for editing photos. The professor shared an engaging tutorial video and explained the basic theory behind the tool, then, students practiced by modifying their photos.

On the other hand, Google Sites was another tool explored this week. The instructor presented a video explaining its key features and how to use the platform. To conclude, students practiced by creating their websites, using the distinctive features and options that Google Sites offers.

Week six

The professor introduced the topic of video creation and then showed a video she had created. After that, the students watched a video with tips on how to record with a cell phone. Additionally, the facilitator presented videos on camera angles, lighting for video, and using the camera to record.

Moreover, participants worked in groups to rewatch the videos and create a presentation highlighting the most essential information. They then presented their findings, focusing on the most relevant details.

The facilitator also showed a tutorial on uploading a video to YouTube. Furthermore, she introduced some editing software such as Active Presenter, OpenShot, and Camtasia through tutorial videos. She then demonstrated how to create a video using OpenShot Video Editor. Finally, the instructor explained the guidelines for the evaluation activity.

Week seven

During this session, the facilitator clarified questions about recording videos using smartphones and provided additional information to consider for recording a video. She also showed examples of videos created by other students. Finally, the professor explained the guidelines for the final evaluated activity, which involved presenting their website.

Week eight

In the last class, participants completed their final live defense of the integrative task. They applied the knowledge they had acquired throughout the three modules by presenting their website.

VI. ACHIEVEMENTS

1. Participants learned to apply learning theories for teaching foreign languages online using new technological tools.
2. Learners became familiar with the virtual environments that are used nowadays.
3. Students learned to create a virtual classroom using a useful and engaging Learning Management System.
4. Participants learned the usage of Moodle for the development of courses, adding students, and uploading different types of materials like videos, images, and websites.
5. Learners understood the importance of concepts and principles related to the use of technological tools in education.
6. Students learned the correct use of Artificial Intelligence (AI) for educational purposes.
7. The team learned how to use technological tools to design didactic materials.
8. Participants learned to create digital materials for teaching and learning foreign languages, such as interactive images, videos, websites, and podcasts.
9. Learners acquired the skills and knowledge to incorporate tools to present content within a Virtual Learning Environment.

VII. CONCLUSIONS

It is important to reflect on critical observations and lessons gathered while analyzing the course content. This specialization indeed exposed participants to some of the possibilities virtual environments impose on language teaching and learning. Through various theoretical insights into its practical application, the course has thus equipped educators with the necessary arsenal to know how best to navigate and optimize online teaching platforms. For that reason, the report presents below some critical learnings derived and debates further their implications for future foreign language instruction practices.

1. The course was effective in providing an extraordinarily solid foundation to the undergraduates about the theories of learning pertaining to virtual environments. A review of Learning Management Systems, such as Moodle and Schoology, informed the students about how such tools can assist foreign language teaching. Asynchronous and synchronous learning modes were highlighted that made the participants cognizant of the diverse dimensions of teaching dynamics. Reinforcing the flexibility needed in digital education will also be beneficial. Besides this, experience with varied types of video conferencing platforms, such as Google Meet and Microsoft Teams, prepares students for on-site teaching situations where the use of technology will play a key role in terms of communication and engagement.

2. The practical component of this module really cemented the students' learning to produce a virtual classroom. Such a practical exercise allowed creativity and signaled an intention of incorporating theory into practice to ensure that participants apply whatever they will have learned within real life teaching situations.

Through both asynchronous and synchronous activities, students developed the ability to overcome various problems arising with online teaching and created a crucial point of reference for future flexibility and responsiveness in language education. Overall, this module sets quite a sound foundation for further studies and professional practice in online foreign language instruction.

3. The discovery of different tools in this course showed how versatile and adaptable modern language teaching should be. First, participants learned how these resources can be put into action to develop an immersive learning environment catering for different learning styles. By the end of this course, students had not only developed practical competencies in working with these tools but also realized the potential for using them to enhance student engagement and motivation, thus preparing the ground for the more effective foreign language education virtually.

4. This course indeed equipped the students with the skills necessary in developing creative and instructive educational resources. Focusing on different formats, such as podcasts, interactive images, and videos, the participants learned to adapt their materials to better facilitate language learning online. Firsthand activities that cultivate creativity and innovation allowed students to consider the diverse ways of delivering content-those methods that work best for learners who have different modes of learning.

VIII. RECOMMENDATIONS

The following recommendations are addressed to the Department of Foreign Languages of the University of El Salvador and its academic members, taking into consideration the facts discussed:

1. Students from the Department of Foreign Languages of the University of El Salvador: Practice that proficiency in using the new AI tools does not come but rather is an acquired skill through practice and exploration. During the process of learning, students should be encouraged to try applications of AI technologies to language learning and teaching. This would help students get first-hand experience with the novel educational tool and then apply it in the improvement of their academic achievements and future teaching practices.

2. Students of the Foreign Languages Department at the University of El Salvador: Take an initiative-taking and inquisitive stance concerning learning technologies influenced by AI. The dynamics of changes throughout the years within the education sector demand that prospective teachers be prepared for competencies in technological tools that would help them provide better service. Thus, through AI-enabled exploration and experimentation, students will then be in an even better position to resolve educational challenges, make learning more relevant, and help the next generation of language learners.

3. Department of Foreign Languages at the University of El Salvador: It is urgent that the growth in the importance of AI in education be recognized and investment be made in updating the curricula of this department concerning these technologies. The rapid growth of AI enables opportunities that have never been seen in language teaching related to personalized and adaptive learning. Students and faculty alike should be given training and resources toward these ends so that they are better able to capitalize on AI systems within their teaching and learning environments.

4. Professors of the Foreign Languages Department at the University of El Salvador: Promote the use of AI technologies in classroom settings, together with methodologies in teaching languages. The professors will encourage and motivate the students to make full use of various AI-powered tools, like language learning applications, automatic translation systems, and personalized tutoring while leading them in how to assess the functionality of those tools critically. While the traditional approaches hold a prominent place, integrating AI into teaching practices will provide students with greater flexibility and resourcefulness that they can further carry into their careers as educators.

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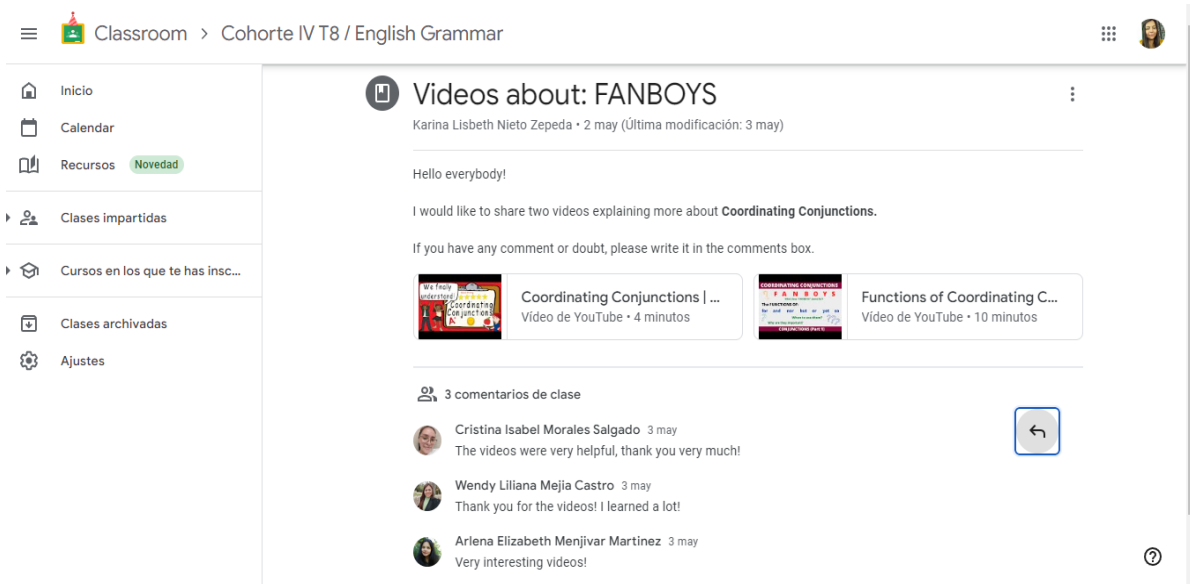
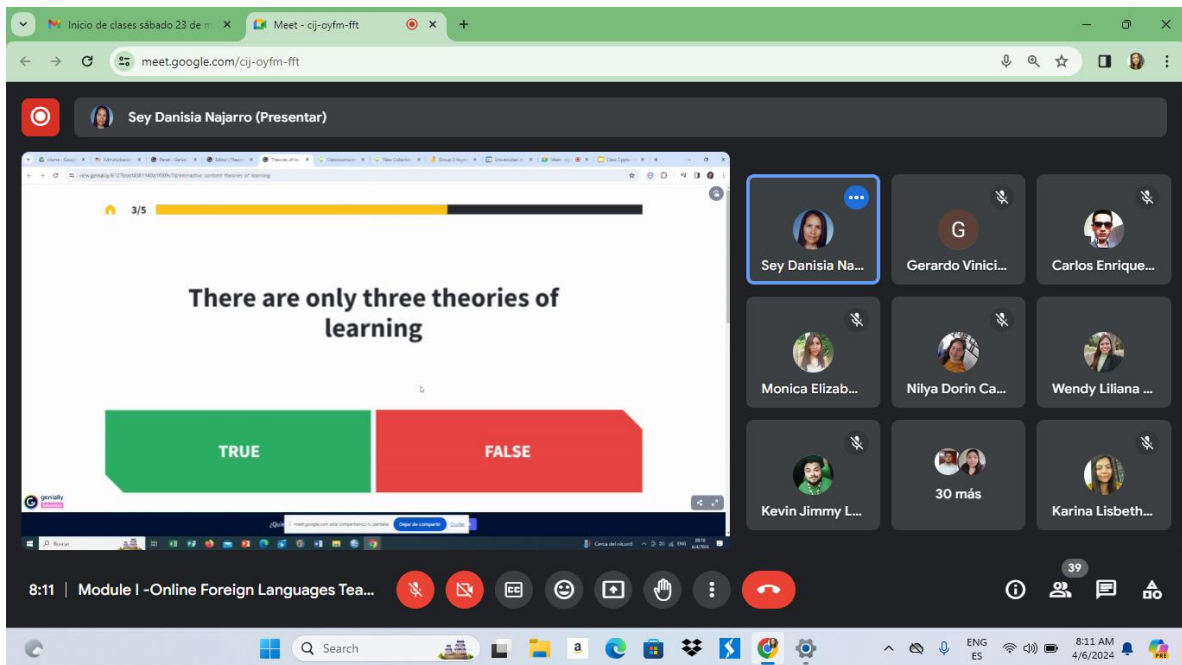
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X. APPENDIXES



Screenshot of the Edpuzzle interface. The browser address bar shows <https://edpuzzle.com/media/66a2ed42a36d29510db46757>. The page title is "Video Preview".

The video title is "Earthquakes & Volcanoes - the Story of Earth as a Violent Place | Down to Earth" by Karina Lisbeth Nieto Zepeda. The video player shows a thumbnail with the text "EARTHQUAKES & VOLCANOS" and a YouTube logo. The video is assigned to 1 class.

The "Video Events" sidebar on the right lists the following events:

- 00:25 Multiple-choice
- 00:54 Multiple-choice
- 01:04 Multiple-choice
- 01:10 Multiple-choice
- 01:33 Multiple-choice

The bottom of the screen shows a Windows taskbar with the date and time: 11:02 AM 7/27/2024.

Screenshot of a YouTube video player. The video title is "Method And Approach In Teaching" by Purple Planet Music, uploaded 20 days ago. The video player shows a waveform and a video thumbnail of a woman with a "Replace image" button.

Below the video player, there is a comment section with a "Write a comment" input field and a "Share" button. The share options include "Copy Link", "Replace File", "Edit", "Distribute", and "More".

Related tracks are shown below the video player, including "Purple Planet Music Method And Approach In Teaching".

The bottom of the screen shows a Windows taskbar with the date and time: 11:02 AM 7/27/2024.

gkn-yzze-tiv (2024-07-16 16:12 GMT-6) | drive.google.com/file/d/1RrftskHui0vwwDO7p2m0Jdf-K_J10YFT/view

Abrir con | Compartir

The video player displays a website for 'LIVEWORKSHEETS' with the title 'Interactive Worksheets For all Languages and Subjects'. The website content includes a navigation bar, a main heading, a sub-heading, and a call-to-action button. A video feed in the bottom right corner shows a man wearing a headset, identified as 'Omar Ernesto Fernandez Martinez'. The video player controls show a progress bar at 1:00 / 10:41.

Cohorte IV T4 Basic I A | classroom.google.com/c/NjgxNji3MzU2ODIz

Classroom > Cohorte IV T4 Basic I A

Tablón | Trabajo de clase | Personas | Calificaciones

Añade un comentario de clase...

Omar Ernesto Fernandez Martinez
1 may

Hey there!
Welcome to the course.

- I'm Omar Fernández. I'm all about music, languages, and making new friends. You'll usually find me strumming on my guitar, belting out tunes, or getting lost in a good book. Teaching foreign languages is my jam and I love helping others learn and grow. Let's connect and share our passions! Hope we have fun together during the course.


Let's get to know each other!

Añade un comentario de clase...

powtoon.com/online-presentation/dloL7pUE6gx?utm_medium=social-share&utm_campaign=studio+share&utm_source=copy+link&utm_content=dloL...

The Importance of Artificial Intelligence in Education

By fm05040 | Updated: July 30, 2024, 3:34 a.m. Slideshow Video



EDIT IN STUDIO

PUBLISH OPTIONS

SHARE THE AWESOMENESS

f t in

pptx2powtoon

POWTOON

WANT TO REMOVE THE POWTOON

Meet - Design of Didactic Materials for Virtual ...

meet.google.com/svx-fmx-xzj

Sey Danisia Najarro (Presentar)

Time to Practice

1. Download two images from Por Pixabay
2. Resize your images in <https://www.reduceimages.com/>
3. Create a collage in Pizap
4. Present your work

Mensajes de la llamada

Los mensajes se están grabando junto con la llamada

JIMMY STANLEY BATRES ZELADA 8:29
Yes :)

Sey Danisia Najarro 8:37
<https://www.reduceimages.com/>
pixab.com
Pizap.com
pizap.com

JIMMY STANLEY BATRES ZELADA 8:38
Thanks :)

Envía un mensaje

8:39 | Design of Didactic Materials for Virtual ...

ESP LAA 8:39 AM 8/31/2024



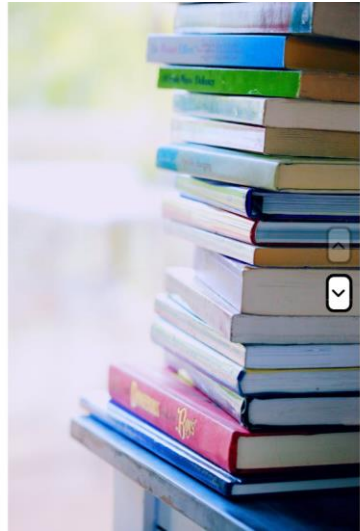
Curriculum Development and Design



Curriculum development and design are key aspects of educational planning and practice. This interactive image explores the processes, models, and elements involved in creating an effective curriculum, aimed at fostering learning experiences that meet both student and societal needs.

[Objective](#)

[Introduction video](#)



Add new element

Click & drag Elements to add to the worksheet

- Textfield
- Single Choice
- Checkboxes
- Select
- Word search
- Speak
- Drag
- Drop
- Join
- Play MP3
- Boost value
- Open Answer
- Simple Text
- Listening
- Link
- PowerPoint
- YouTube player

Instructions:

SIMPLE PRESENT QUIZ

Respond to the following questions accordingly.

Short-Answer Quest

1. Form a sentence
"The..."
2. What is the title
3. Use the verb
4. What is the name
5. Change the name

Settings for Textfield Element

General settings | Style settings

Font: Arial | Font size: 14

Font color: [Blue] | Background color: [White] | Border color: [Grey]

Background opacity: 0.5 | Border width: 1 | Rounded corners: 4

Text align: Center

SAVE | Close

Lázaro Josué Palacios Ramirez