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TIME MANAGEMENT OF HIGHER EDUCATION TEACHING USING ARTIFICIAL INTELLIGENCE

Cindy Kristhell Márquez Suárez

D. (c) in Leadership and Senior Management from the Instituto Universitario de Yucatán - Villahermosa Campus Institution: Instituto Universitario Metropolitano de Villahermosa Tecolutilla Campus, Comalcalco, Tabasco, Mexico

José Ramón Peralta Jiménez

D. in Administration from the Universidad Mundo Maya - Villahermosa Campus. Institution: Universidad Politécnica del Golfo de México, Paraíso, Tabasco, Mexico

Blanca Jasmín Silva Pérez

D. (c) in Leadership and Senior Management from the Instituto Universitario de Yucatán - Villahermosa Campus Institution: Instituto Universitario de Yucatán , Villahermosa, Tabasco, Mexico

Blanca Eni Moreno Roa

D. (c) in Leadership and Senior Management from the Instituto Universitario de Yucatán - Villahermosa Campus Institution: Instituto de Estudios Universitarios Villahermosa Campus, Villahermosa, Tabasco, Mexico



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Abstract: Teachers at different educational levels perform two main tasks: on the one hand, classes in the classroom and, on the other hand, administrative management consisting of processes that are carried out before the class to be applied during the class and to be graded after the class. Therefore, the objective of the research is to optimize the time of high school teachers through AI, achieving the organization and control of activities and tasks in an efficient way to maximize the productivity expected in the classroom space in the XXI century. This paper is developed as a theoretical reflection that belongs to a quantitative research with previously reviewed sources of information. The results describe the use and advantages of the different AI according to their purpose of creation, such is the case of the algorithms for the realization of slides, creation of rubrics, or elaboration of some activities to apply in the classroom space. It is perceived that this digital space supports the teaching work, but for a greater precision in the results, it is necessary to purchase a membership (premium space) or, if necessary, and annexed to this, to review the activities derived from the process.

Keywords: Time Management, Teaching Activities, Higher Education, Artificial Intelligence.

INTRODUCTION

The education of each zone, region, city, state and/or country is in the hands of the teachers, so they bear a great responsibility for the present and future of development. Therefore, they must carry out a series of programs and administrative deliveries to demonstrate their work in the classroom before, during and at the end of the subject or module. As a result of the above, teachers normally invest more time in "non-class" activities than in the classes themselves.

In accordance with the above and in relation to the innovative technologies that the

21st century brings with it, in this case AI proposes an optimization of teachers' "non-class" time with the objective of minimizing the time spent on presentations, evaluation instruments and activities applicable during the class session and thus generating a greater social relationship with the students or, as the case may be, more quality time with the family.

In the present work we will deal with examples of AI that have as purpose the elaboration of slides according to certain characteristics that are required; in the same way spaces with innovation for the realization of evaluation instruments and some others for the practice of time intervals for the preparation of professional or executive conferences for teachers of the superior level.

DESCRIPTION OF THE METHOD

ARTIFICIAL INTELLIGENCE

The topic of artificial intelligence (AI) has been defined in different ways since its field of application today is innumerable in the different fields in which it is developed. According to Ponce et. al. (2014, p. 13) this defines it as "branch of computational sciences concerned with the automation of intelligent behavior", while Boden (2017, p. 5) describes it "as computers doing the activities that a human mind can perform", on the other hand, Rouhiainen (2018, p.17) simplifies it in his seminars as "the ability of computers to do activities that normally require human intelligence".

Based on the above, it is perceived that AI is related to computational sciences and has the objective of automating and optimizing the times of each action, as well as the activities that the mind or human intelligence must perform. One of the branches in which AI is implemented is teaching, according to Barcia and Montalván et. al (2024, cited in Souzza 2024, p. 3) mention the following:

Artificial intelligence (AI) has positioned itself as one of the most promising and disruptive technologies in many fields, and education is no exception. Montalván et al. (2024) cite that the rapid evolution of AI has opened up new possibilities and challenges in education, where its impact is seen as a determining factor in the transformation of teaching and learning processes.

Applying this new technology in education, two aspects can be identified, on the one hand, to be used by students in their daily tasks and projects, and on the other hand, to be used by teachers at different educational levels. The activities carried out by teachers are divided in turn, in the first instance, in the actions that form before the class and then, the work during it.

According to the Colegio de México (2024), the operational work that teachers normally perform before starting a semester is shown in Figure 1, which consists of five steps, including defining the structure of the course, determining the objectives and agenda, selecting the platform and managing communication, scheduling evidence, timetables, etc.



Figure 1. Operationality of teachers before the start of the cycle

Note: Figure created with IA (2024) based on information from Colegio de México (2024).

In the same way, teachers must carry out activities every week, fortnight or month depending on the productivity established at the time of work. Among the operations developed is the structuring of the session including synchronous and asynchronous moments, and considering the three moments that are beginning, development and closing. Description of the teaching activities carried out by the teacher and the learning activities of the students; in the same way, the selection of technological tools, providing the students with the bibliography, books and formats before the class session. Figure 2 shows graphically the teaching activities during the cycle; it is worth mentioning that this resource was obtained through AI.



Figure 2. Teacher activities during the cycle

Note: Figure designed by the author, made
with IA(2024) based on information from
Colegio de México (2024).

As can be seen, teachers develop an activity before starting classes in person or online, and then create the presentation of this in real time, and finally the exercise carried out in the session must be reviewed at the teacher's home or in the teacher's free time. As a result of the above, stress has originated in some of the educators, as described by the

Organisation for Economic Cooperation and Development (OECD, 2020) in its publication of the Teaching and Learning International Survey Results (TALIS, 2018) volume II.

TALIS 2018 first asked teachers to what extent they experience stress in their work ("not at all"; "to some extent"; "quite a bit"; "a lot"). On average across the OECD, 18% of teachers report experiencing a great deal of stress in their job. However, there is a large variation across countries and economies participating in TALIS. More than 30% of teachers report experiencing a lot of stress in England (UK), Hungary and Portugal. In contrast, less than 5% of teachers report experiencing a lot of stress at work in Georgia, Kazakhstan, the Russian Federation and Vietnam.

When considering the proportion of teachers who report experiencing no stress at all, it is important to note that, on average across the OECD, only 9% of teachers report experiencing no stress at all. However, this is the case for 20% or more of teachers in CABA (Argentina), France, Georgia, Italy, Kazakhstan, Romania and the Russian Federation.... The large cross-country variation in the level of teacher stress may reflect the cross-country variation in general population stress and other subjective measures of well-being as measured in the Gallup World Poll (Ng et al., 2009[69]). The reported level of general population stress may depend on economic development, but it is also associated with the needs, goals, and culture of specific countries and economies. Diener and Tay (2015[70]) found that countries with high stress levels not only have high income levels, but also show high longevity and life satisfaction.

In OECD countries and others such as England (United Kingdom), Hungary and Portugal, it is identified that the stress that teachers mention having is related to personal issues, but it is also due to the different operational activities they have to perform. The OECD (2014 cited in the Public Policy Research Center IMCO, 2015) in the study *How much time do teachers spend teaching*

and in non-teaching activities? obtained, in one of the results of the exercise carried out that, "on an average across countries, teachers spend half of their working hours in non-teaching activities which include planning classes, grading and collaborating with other teachers"; in addition to the above must comply with the following operative as shown in Table 1. Source of stress due to the teaching workload, which shows the classification of teachers' work according to three sources and these in turn are divided into activities.

Operability	Teacher activities	
Workloa- d-related sources	Too much administrative work to do Having too many brands Having too much preparation for lessons Having too many lessons to teach Additional homework due to absent teachers	
Sources related to student behavior	Be accountable for student performance Maintaining discipline in the classroom Being bullied or verbally abused by students.	
Sources related to responsi- veness to stakeholders	Keeping up to date with changing requirements of local, municipal/regional, state or national/federal authorities, (Continuing education and training). Addressing parent/guardian concerns. Modification of lessons for students with special needs.	

Table 1. Source of stress due to the teaching workload

Source: Prepared by authors (2024) based on Organisation for Economic Cooperation and Development (OECD, 2020, p. 95).

In addition to the above, teachers should allocate time to develop students' socioemotional skills or soft skills, since these are directly related to learning, as suggested by Alarcón-Alvial et. al. (2020) in their results of subjective theories:

- 1. If students become distracted, the teacher should allocate instructional time to regain their attention.
- 2. If students come from vulnerable families, then time must be allocated to meet emotional needs, leaving less time for academic instruction.

- 3. If the students do not respect the teacher, then the teacher must spend time establishing the authority relationship in the classroom.
- 4. If students bring their personal and family problems into the classroom, then the teacher devotes time from academic instruction to emotional containment.
- 5. If the classroom climate is negative, the teacher will have to postpone instructional activities to solve problems, leaving less time for the class.
- 6. If you have many students in the classroom, then managing time will be more difficult.

From the above, it follows that teachers must plan their time in three important aspects:

1. Carry out work at home, such as planning presentations, preparing activities for students, preparing plans before the course begins, framing and programming. 2. During the session the subject should be developed with the best strategy for each learning style, carrying out the three moments that are beginning, development and closing. 3. After the classes, teachers must review the activities performed in the classroom and the activities that were left to be developed at home, and in case of delivery of projects or evidences, the teacher must review them in free time or at home.

All these mentioned activities absorb time from the teachers' family life, which leads to the reduction of hours with their closest circle of affinity, the realization of leisure actions or actions destined for the relaxation of body and mind. The above is done by a teacher in one job, but if the same teacher works in more than one institution with the aim of improving his personal income, then the workload increases according to the requests of each institution.

AI was created for all areas, in this case, it can be applied in teaching in order to opti-

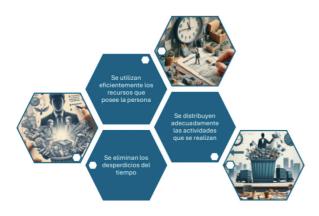
mize time in the performance of some tasks such as: class planning, exams, specialized educational programs, among others. Banegas et. al. (2023, p. 6-7) mention in their results that "teachers perceive artificial intelligence as a useful tool that can support and enrich their teaching" in addition to the personalization of learning, the use of intelligent tutoring systems, personalized feedback. Therefore, "effective teaching strategies supported by AI have a positive impact on student learning". In contrast, although they accept the positive influence, they express that "they require training for its use".

Some of the limitations that AI currently presents, according to Aparicio (2023, p. 225), are privacy and protection in the first instance, since it is essential to use the data in an ethical manner; on the other hand, the logarithmic biases, responsibility and accountability as a whole, since due to the analyses it performs it will have the freedom to make decisions that could sometimes harm the objective that gives rise to the use of AI, so it is important to establish legal frameworks that regulate the scope and limitations of AI in the environment in which it is located. Finally, the impact on employment, so it is necessary to minimize the negative effects, increase the positive ones and take a progressive line in the use of AI.

Díaz et. al. (2024, p. 58) stresses that AI optimizes educational processes, plans and develops digital competencies, improves learning and teaching, and poses some challenges such as "the need to balance the use of technology with the humanistic approach that adapts to new methodologies and teaching strategies, according to the demands and needs of educational scenarios". From the above it is perceived that AI, although it has a very broad application area, sometimes it may present limitations according to what is evaluated, for example privacy, protection, decision making, humanistic approach, among others.

EFFECTIVE TIME MANAGEMENT

Benjamin Franklin (1748 quoted in FoundersOnline n.d., p. 1) wrote in his essay Advice to a Young Tradesman the phrase "Time is money" or "time is money" referring to the fact that money and time must be well managed since they are a valuable resource. From Garcia's (2014) point of view "the fundamental objective of time management is to eliminate, as far as possible, the problems of wasting time" and the benefits he mentions when performing this action are those presented in Figure 3.





Eliminar Desperdicios

Identifica y reduce actividades improductivas.



Distribuir Actividades

Organiza tareas eficientemente según prioridades.



Optimizar Recursos

Aprovecha al máximo tus habilidades y herramientas.

Figure 3. Benefits of implementing time management.

Note: Topic proposed by the author to in AI Copilot, ChatOn, Microsoft Designer, PowerPoint Designer and Gamma (2024) elaborated based on Garcia (2014).

Time management in the teachers' operability must be planned during the realization of a programming and/or a teaching planning where the times to be used in the subjects corresponding to the subject are stipulated, Galdanes (2018) proposes actions to strengthen the management of teaching time such as: the identification of actions that interrupt the work to be done, after that, reflect on these and how to minimize and/or eliminate them. Step followed, time optimization in tasks with the objective of subtracting interruptions; thus creating a new constant work modality that can be monitored through achieved objectives to finally be projected to other institutions as seen in Figure 4, Actions to strengthen teaching time in schools.

Derived from the above, time management is important for the development of teachers' activities, where it should reduce interruptions that cause disorientation in the work, thus supporting the achievement of objectives per session, week, fortnight, month, etc.

PROPOSAL FOR TIME OPTIMIZATION THROUGH ARTIFICIAL INTELLIGENCE

By virtue of the multiple situations that a teacher goes through, it was considered to propose technologies such as AI that support different fields in terms of development and time optimization in the operation, in the particular case of teachers, thus revealing new ways of thinking and solving problems, transmitting knowledge and STEM skills for the formation of a future human capital of competitive companies in the labor market. Table 2 describes some of the AIs that improve times according to their creation objectives, as well as their limitations and the URL where they can be found.

In order to describe the functionalities of some of the AIs according to their creation objectives, Table 3 and Table 4 describe the



Evaluar la situación actual

actual
Es fundamental que
establezcas una línea base que
permita conocer y analizar el
uso det tiempo de tus docentes.
Una buena manera de
comenzar es identificando las
iniciativas que con mayor
intensidad interrumpen y
desorientan su trabajo



Reflexionar

la línea base que te permita identificar a los enemigos del tiempo en la escuela y en particular en la vida laborat de tus profesores, es importante, antes de implementar las transformaciones, preparar el cambio



Optimiza

Reducir las interrupciones y la sobrecarga laboral es solo la mitad de la batalla.



Implementación y Monitoreo

Una vez que hayas establecido acuerdos con los docentes y un plan de objetivos a lograr a nivel individual, es el momento de tomar decisiones e implementarlas



V. Proyección

La organización del tiempo también debe proyectarse hacia el trabajo con otras organizaciones.

Figure 4. Actions to strengthen teaching time in schools

Note: Prepared by the author, made through Microsoft PowerPoint Designer (2024) with information from Galdames (2018).

Artificial intelligence	Use in the operation of teachers	Limitations	Web site
Gamma	Build audiovisual presentations optimizing time and free of charge.	Pay subscription for 8 slides or more	https://gam- ma.app/
MagicSchool	Classroom planning, testing, specialized edu- cational programs, answering questions, clas- sroom ideas and content, pedagogical prac- tices, group management strategies, student support, communication, community tools, intellectual preparation, among others.		https://www. magics- chool.ai/
Take AI	Organize customized presentations with innovative design.	It requires a Gmail email to access and your data to request a demo.	https:// tome.app/
PopAi	Create presentations and images in a minute on any topic you need. Contains more than 200 languages.	Subscription required for prolonged use. The use of templates is premium.	https:// acortar. link/2MTupg
Diffit	Find specialized resources, saving time in the search for resources, as well as adapt materials, generate short narrative texts and elaborate summaries.		https://web. diffit.me/
PowerPoint Speaker Coach	Adjust the timing of the speech by rehearsing the delivery of the presentation, coordinating the pace, tone, use of euphemisms, circumlocution, etc.	Requires Microsoft email (hotmail.com, outlook.com, live.com, msn.com) or a Microsoft 365 work or education account (does not accept Google account). Is online or otherwise only works with Microsoft originals.	https://www. office.com/ launch/ powerpoin- t?auth=1
QuestionWell	Conducting tests and learning objects	For advanced options you must pay a subscription. Microsoft mail is not applicable, only Google mail.	https://ques- tionwell.org/
Plus AI	Generate AI presentations and edit slides with AI. Try the best AI presentation maker for Google Slides and PowerPoint for free.		plusdocs.
Gemini	Create text, code, images, videos, solve math problems, create creative content. Alternative	Does not make presentations, does not have an understanding of the world. It can be used for malicious purposes such as the creation of deepfakes. It presents a premium mode with cost.	https:// gemini. google.com/ app?hl=es
MegaProfe	It has spaces for teachers and certain activities such as: HistoriChat, Evaluation Test, Classroom Activities, Cross-Cutting Projects, Rainy Day Activities, Storytelling on Demand, Dynamic Dictation, Evaluation Rubric, Dine Forum, Verb Gap Generator and Kate & Tom chatting.	You must create an account where you enter your name, place of origin, name of the institute where you work. You get 200 megacoins per month for free.	

Table 2. Description of AI as an alternative proposal to optimize teachers' times

Note: Prepared by the author (2024), based on Guerra (2023) and Aha Slides (2024).

Name IA Procedure for the use of AI

- A. Three ways to create:
 - 1. Create from the introduction of a note, an outline or existing content.
 - a. By entering the text you can create: presentations, website or document.
 - b. To create what you are looking for, adjust the text content and amount of text.
 - 2. Generate from an online message in a few seconds.
 - 3. Generate from document enhancement, presentations or web pages.
- B. Choose the content of the text:
 - 1. General: Realize ideas with the introduced text further describing the topic.
 - 2. Condensed: Write a short text of the main idea introduced.
 - 3. Preserved: Places on the slides only what has been entered
- C. Choose the amount of text:
 - 1. Brief.
 - 2. Medium,
 - 3. Detailed.
- D. You write down the audience that will read what you have done, for example: People who are looking for meaning and purpose in life.
- E. You write the purpose of the document made, e.g., reflective, inspirational, poetic.
- F. You choose the language in which it is required, the AI has more than 65 of these.
- G. Choose the source of the images that will be presented in the document, there are three options:

1 Gamma

- 1. Auto
- 2. Web: They are taken from the web,
- 3. Realized images: if you choose this format it opens the space to describe some characteristics you want in the images such as colors, style or mood to use. In addition, it has ten Image shapes in 3 Fast (four of the options only work for a fee as they are part of the "pro" rights)
- H. Choose the format which can be presentation, website or document, this controls the types of blocks and layouts the AI will use.
- I. Selecting the card height, Gamma has seven: Default Fluid, 16:9, 4;3, A4, Letter, Square and 4;5. Note: Normally the "Default" is used.
- J. Card width:
 - 1. The standard makes text-heavy documents more readable.
 - 2. The width is ideal for visual presentations.
- K. In addition, at the end there is a space to enter additional instructions. And you select how many cards (slides or sheets) are required.
- L. When you move to the next screen you choose the theme or template of your choice. Gamma has over 70 options and you can choose between dark, colorful (eye-catching) and professional tones.
- M. When you click on it, the requested document is created and you can view it, and if you wish to change the template, you can do so. In the same way, there is a "Presentation" space where you can choose between presenter view, full screen or you can share a link for follow-up.
- M. If last minute changes are chosen, the structure of the cards can be made or changed. In the same way, graphics can be appended if necessary.

Table 3. Description of the use of Gamma AI

Note: Procedure performed by authors (2024) for the effective use of Gamma AI.

development of Gamma as a support for the creation of slide presentations and MegaProfe as a means for the elaboration of rubrics, respectively. In the same way, Figure 5, Figure 6 and Figure 7 exemplify the quality of the results that can be obtained when considering AI as a support for teaching tasks.



Figure 5. Example of Gamma AI

Ofrecer

comprensión y

el regalo más

valioso para

alguien que

atraviesa

momentos difíciles.

empatía puede ser

Transmitir

habilidades puede

empoderar a otros

impacto duradero.

y generar un

nuestros conocimientos y

Dedicar nuestro

importantes o a

necesitadas es una

forma invaluable

de generosidad.

personas

Compartir nuestros tiempo a causas

recursos

aliviar el

sufrimiento

materiales puede

inmediato y crear

oportunidades para

Note: Example made through AI with the theme of Happiness placing Generosity as a subtitle. Theme introduced by authors in the Gamma (2024)

This rubric is designed to evaluate the activity of creating a presentation on historical figures using MegaProfe tools, focusing on understanding of the topic, use of the tools,

creativity, clarity and organization, and interaction with the audience. The numerical scale from 1 to 5 allows for a detailed evaluation of each criterion, adapted to 12-13 year old students in the area of social sciences, geography and history.

RESULTS

Derived from the research conducted and the use by the authors themselves to verify the ease and optimization of time with the use of the AI proposed in the present extension, it is observed that teachers should rely on emerging technologies to minimize the time spent in the development of activities that are performed every day, such is the case of the rubrics which are useful for evaluations that are performed weekly, biweekly, monthly or bimonthly (according to the extension of the school level) and the example of the slides that should be taken to each class.

It is important to point out that some of the intelligences proposed in this section can support teachers 100% and for others in which more detailed research is required, these cannot be used because they present some areas of opportunity, such as in cases of exclusive information on technical topics. For this reason, they advise users to make a preliminary diagnosis of the information before using it for delivery and/or projection to students.

The teacher who uses the AI must first define its objective (what is going to create), and based on this choose the space that best suits and facilitates, it is important to mention that all platforms are made for a user-friendly use, but in case of complexity, you should only use another that suits the needs. Example: in the case that the generation of slides is required, the teacher can use: Gamma, Tome AI, PopAI, Plus AI. If the creation of rubrics is required: MegaProfe. If the teacher wants to create activities, he/she can use MagicSchool, Diffit, QuestionWell and Megaprofe, just to mention a few AI.

From the above, it is perceived that the use of AI allows optimizing the time spent in the operation or activities of teachers, thus achieving the minimization of periods dedicated to the development of assessment instruments or teaching materials. With the use of AI, teachers will be able to streamline their schedules in various activities such as research, more quality classroom time, review of activities, creation of more activity promoting other links with students, development of online activities thereby causing the use of ICT's for learning, among others.

Teachers must be at the forefront in the 21st century by demonstrating and verifying the benefit of AI for the daily work of the teacher both inside and outside the classroom in terms of the management and presentation of the subjects entrusted to the teachers and also as a recurrent tool that will facilitate the daily operation of the same and the assimilation and understanding of the contents by the student.

CONCLUSIONS

Nowadays, the teaching work is a range of activities, resulting in class time, but before this happens, different activities must be carried out such as: programming of the educational cycle, planning with periods equal to the programming, class activities, home activities, support of presentations, didactic research, technical research, development of evaluation instruments that allow measuring the performance of a student (rubrics, checklists, among others) for each evidence, designing the best way to evaluate a topic, among other things.

As described in the preceding paragraph, in order to optimize teaching time, the use of information and communication technologies (ICTs) and AI is proposed, thus achieving educational objectives in an efficient and effective manner, since in the 21st century they are part of the basic, fundamental and essential tools in the learning management process in terms of the substantive work of the teacher.

The optimization of time is essential both in private and governmental companies in the areas, to mention a few: health sciences, pedagogical sciences and even economic-administrative sciences, so that an adequate time management supported by the use of technological tools that allow perfecting and making time more flexible will result, in this object of study, in teachers having time to perform activities of greater impact and as tasks or actions aimed at offering a quality service inside and outside the classroom space.

On the other hand, the use of these technologies will allow the development of competencies in the teachers that will be transmitted to the students and that as a whole will contribute to the creation and/ or improvement of knowledge that will allow offering alternative solutions to the requirements and demands of a globalized environment as it is nowadays. Therefore, it is concluded that, although the IA exists, it is necessary the revision of the professors to verify that the information is correct (in the case of audiovisual presentations). But there are future questions such as how real (thinking) AI will be in ten years or if it will replace some jobs such as customer service.

Name IA Procedure for the use of AI

2 MegaProfe

Option: Rubric

- 1. Select the school stage which is divided into: 6-7 years, 7-8 years, 8-9 years ...17-18 years.
- 2. Choose the area or subject, you will find 17 options in the IA
- 3. Choose a scale of 1-5 or 1-3
- 4. Choose the language, there are nine, including Spanish and English (in case the subject is English).
- 5. Describe the activity to be evaluated, for example: Creation of a power point presentation on the history of Egypt. The activity should provide information about Ancient Egyptian society and culture. In addition, it will be accompanied by a 5 minute total presentation.

When the AI creates the rubric, it generates a summary of the rubric creation.

In case you wish to make a change, just click on "Edit".

Finally, click on download to get it in PDF, DOC or copy to clipboard.

Table 4. Description of the use of IA Mega profe Note: Note: Procedure carried out by authors (2024)

Criterio de Evaluación	1 (Bajo)	2 (Medio)	3 (Alto)
Identidad Visual	El póster no incluye el logotipo de CONALEP ni el nombre de la institución de manera correcta.	El póster incluye el logotipo de CONALEP y el nombre de la institución, pero no están bien ubicados o son poco visibles.	El póster incluye correctamente el logotipo de CONALEP en la parte superior izquierda y el nombre de la institución en la parte central superior de manera clara y visible.
Título	El título está ausente o es poco relevante.	El título es visible pero no refleja claramente el contenido del póster.	El título es claramente visible y refleja de manera precisa el contenido del póster.
Uso de Imágenes	El póster contiene pocas imágenes o las imágenes utilizadas no son relevantes para el tema.	El póster tiene un número adecuado de imágenes, pero algunas pueden no ser completamente relevantes o no están bien integradas.	El póster maximiza el uso de imágenes relevantes y bien integradas, las cuales complementan y mejoran la comprensión del contenido.
Cantidad de Texto	El póster contiene exceso de texto, lo que dificulta su comprensión visual.	El póster tiene una cantidad moderada de texto, pero aún podría reducirse para mejorar la claridad visual.	El póster utiliza eficazmente el mínimo texto necesario, destacando las imágenes como medio principal de comunicación.
Presentación y Explicación	La presentación es desorganizada y no se ajusta al tiempo asignado de 10 minutos.	La presentación es algo clara, pero tiene problemas de organización o excede ligeramente el tiempo asignado.	La presentación es clara, bien organizada y se ajusta perfectamente al tiempo de 10 minutos.
Entrega del Trabajo	El trabajo no fue traído en una USB o tuvo problemas de acceso.	El trabajo fue traído en una USB, pero hubo dificultades menores al acceder al archivo.	El trabajo fue traído en una USB y se accedió al archivo sin problemas.

Esta rúbrica proporciona una guía clara para evaluar la calidad de la presentación del póster, teniendo en cuenta criterios específicos que reflejan los objetivos del proyecto y el nivel educativo de los estudiantes de 17-18 años.

Figure 6. Example of IA MegaProfe Rubric scale 1-3

1 (Muy bajo)	2 (Bajo)	3 (Medio)	4 (Alto)	5 (Muy alto)
La presentación muestra un conocimiento limitado de los personajes históricos.	La presentación proporciona información básica sobre los personajes históricos, pero carece de profundidad.	La presentación cubre adecuadamente los aspectos principales de los personajes históricos.	La presentación ofrece una comprensión detallada y relevante de los personajes históricos.	La presentación demuestra un conocimiento profundo y completo de los personajes históricos.
No utiliza las herramientas de MegaProfe de manera efectiva.	Utiliza algunas herramientas de MegaProfe, pero de manera limitada.	Utiliza las herramientas de MegaProfe con cierta efectividad, pero sin aprovechar todas sus funcionalidades.	Utiliza la mayoría de las herramientas de MegaProfe de manera efectiva y relevante para la presentación.	Usa extensivamente las herramientas de MegaProfe, integrándolas de manera eficaz para mejorar la presentación.
La presentación carece de creatividad y originalidad.	La presentación muestra escasa creatividad y originalidad.	La presentación es algo creativa y original.	La presentación es creativa y muestra originalidad en su enfoque.	La presentación es altamente creativa y original, destacándose en su enfoque único.
La presentación es confusa y carece de organización.	La presentación es algo clara pero tiene problemas de organización.	La presentación es clara y está organizada de manera lógica.	La presentación es muy clara y está bien organizada, facilitando la comprensión.	La presentación es extremadamente clara y organizada, haciendo que la información sea fácil de seguir.
No interactúa con el público durante la presentación.	Interactúa poco con el público y de manera no efectiva.	Interactúa de manera básica con el público.	Interactúa bien con el público, respondiendo a preguntas de manera adecuada.	Interactúa de manera excelente con el público, fomentando la participación y respondiendo efectivamente.
	La presentación muestra un conocimiento limitado de los personajes históricos. No utiliza las herramientas de MegaProfe de manera efectiva. La presentación carece de creatividad y originalidad. La presentación es confusa y carece de organización.	La presentación proporciona conocimiento información básica sobre los personajes históricos, pero carece de profundidad. No utiliza las herramientas de MegaProfe de manera efectiva. La presentación La presentación carece de creatividad y originalidad. La presentación es confusa y carece de organización. No interactúa con el público durante la proportorio proportional de consultado por la presentación es algo clara pero tiene problemas de organización.	La presentación muestra un proporciona adecuadamente los aspectos principales de los personajes históricos, pero carece históricos. No utiliza las herramientas de herramientas de MegaProfe de manera efectiva. La presentación La presentación muestra escasa creatividad y originalidad. La presentación es confusa y carece de organización. La presentación es confusa y carece de organización. No interactúa con el público y de manera no básica con el público.	La presentación proporciona decudamente los aspectos principales de los personajes históricos. de profundidad. No utiliza las herramientas de herramientas de MegaProfe de manera limitada. La presentación cubre adecudamente los cuna comprensión detallada y relevante de los personajes históricos. Utiliza algunas herramientas de MegaProfe de manera limitada. La presentación La presentación carece de muestra escasa creatividad y originalidad. La presentación es confusa y carece de organización. La presentación el público durante la presentación. No interactúa con el público durante la presentación. La presentación efectiva. La presentación es de organización. La presentación es de organización. La presentación es confusa y carece de organización. La presentación el público durante la presentación el público y de manera no efectiva. La presentación el público y de manera no efectiva. La presentación el público y de manera no efectiva. La presentación es proporciona aspectos principales de detallada y relevante de los personajes históricos. La presentación de los personajes históricos. Utiliza las herramientas de MegaProfe con cierta efectivada pero sin aprovechar todas sus funcionalidades. La presentación es algo creativa y original. La presentación es creativa y muestra originalidad en su enfoque. La presentación es clara y está bien organizada de manera logica. No interactúa con el público, respondiendo a preguntas de manera

Figure 7. Example IA MegaProfe Rubric Scale 1-5

REFERENCES

Alarcón-Alvial, M. A., Oyanadel, C. R., Castro-Carrasco, P. J., & González, I. N. (2020). *Teachers' subjective theories of instructional time management and classroom climate*. Retrieved from Scielo: https://www.scielo.cl/pdf/infotec/v31n5/0718-0764-infotec-31-05-173.pdf

Aparicio Gómez, W. O. (2023). Artificial Intelligence and its Impact on Education: Transforming Learning for the 21st Century. *International Journal of Pedagogy and Educational Innovation*, *3*(2), 225. Retrieved from https://editic.net/journals/index.php/ripie/article/view/156/143

Banegas Ullaur, R. H., Guachun Guachun, B. F., & Sarmiento Ing, J. H. (2023). Optimizing artificial intelligence in education through effective teaching strategies. 2, 6-7. Retrieved from INVECOM MAGAZINE "Transdisciplinary studies in communication and society": https://revistainvecom.org/index.php/invecom/article/view/1883/170.

Boden, M. A. (October 2017). *Artificial Intelligence*. Retrieved from Turner Publications S.L.: https://books.google.es/books?h l=es&lr=&id=LCnYDwAAQBAJ&oi=fnd&pg=PT3&dq=inteligencia+artificial&ots=dsRrzX8Hkb&sig=rQpV3XQN2qMObpJ ZmgPs-N4w5wg#v=onepage&q=inteligencia%20artificial&f=false

Center for Public Policy Research. (March 13, 2015) *How much time do teachers spend teaching and in non-teaching activities? Via OECD*. Retrieved from IMCO: https://imco.org.mx/cuanto-tiempo-pasan-los-maestros-ensenando-y-en-actividades-de-no-ensenanza-via-ocde/

Diaz Ancco, F., Rodríguez Gonzales, K., & Estrada Chacón, L. H. (June 30, 2024). Impact of Artificial Intelligence in the training of higher education students. *Revista YACHAY*, 58. Retrieved from https://www.semanticscholar.org/reader/2a245a3e52cef4b2e6f4cc67ac31ca7e512bce92

El Colegio de México (2024). *Before the class. Planeación*. Retrieved from Herramientas de Enseñanza y Aprendizaje a Distancia de El Colegio de México: https://head.colmex.mx/antes-de-la-clase

Founders Online (n.d.). Benjamin Franklin "Advice to a Young Tradesman" (1748). 1. Retrieved from https://minio.la.utexas.edu/webeditor-files/coretexts/pdf/174820franklin20advice.pdf

Galdames, S. (2018). *Leading and managing teaching time*. Leading and managing teaching time. Retrieved from https://www.lidereseducativos.cl/wp-content/uploads/2018/12/PL4_S.G._LIDERANDO-YGESTIONANDO-EL-TD_06-12-18.pdf

García Martínez, R. C. (2014). Effective use of time.

OECD (2020). Teachers and School Leaders as Valued Professionals, TALIS. Retrieved from OECD Publishing: https://www.oecd.org/en/publications/talis-2018-results-volume-ii_19cf08df-en.html

Ponce Gallegos, J. C., Torres Soto, A., Quezada Aguilera, F. S., Silva Sprock, A., Martinez Flor, E. U., Casali, A., Pedreño, O. (March 2014). *Artificial Intelligence*. Retrieved from Iniciativa Latinoamericanade Libros de Textos Abiertos (LATIn): https://rephip.unr.edu.ar/server/api/core/bitstreams/bb5e5b0c-01b6-482c-a3a4-a469f994c92b/content.

Rouhiainen, L. (2018). *Artificial Intelligence. 101 things you must know today about our future*, First edition. Retrieved from Editorial Planeta S.A.: https://planetadelibrosec0.cdnstatics.com/libros_contenido_extra/40/39308_Inteligencia_artificial.pdf

Souzza Moreira, C. L., Zambrano López, Y. L., Santana Holguín, B. M., Arcentales Mero, E. A., Rodríguez Vélez, Y. P., & Muñoz Macias, N. L. (July 12, 2024). *Artificial intelligence and its incidence in education: an analysis from a transformative role.* doi:10.46932/sfjdv5n7-031.