

<https://doi.org/10.23913/ride.v16i32.2825>

Scientific articles

**La Inteligencia Artificial como Herramienta de Aprendizaje en
Carreras Administrativas y Financieras**

***Artificial Intelligence as a Learning Tool in Administrative and Financial
Careers***

***Inteligência Artificial como Ferramenta de Aprendizagem em Carreiras
Administrativas e Financeiras***

Patricia Delgadillo Gómez

Universidad Autónoma del Estado de México, México

pdelgadillo@uaemex.mx

<https://orcid.org/0000-0001-7871-4925>

Alejandra Cruz López Sánchez

Universidad Mexiquense del Bicentenario, México

alejandra-24200191@umb.edu.mx

<https://orcid.org/0009-0006-0347-4158>

Adriana Mercedes Ruiz Reynoso

Universidad Autónoma del Estado de México, México

amruizr@uaemex.mx

<https://orcid.org/0000-0003-4294-2912>

Edim Martínez Rodríguez

Universidad Autónoma del Estado de México, México

emartinezr@uaemex.mx

<https://orcid.org/0000-0003-4483-8780>

Resumen

Con la participación de los estudiantes en el Programa Delfin 2024 de la Universidad Mexiquense del Bicentenario, Unidad de Educación Superior de Ixtapaluca (UMB-UES Ixtapaluca).

La compañera Universitaria Alejandra Cruz López Sánchez de octavo semestre de la Licenciatura en Administración Financiera y conjunto las autoras de este artículo acordaron trabajar con esta propuesta de investigación, destinada a analizar cómo se maneja el uso de la Inteligencia Artificial (IA) en un sentido práctico en la educación superior de la Licenciatura en Información Administrativa Financiera en la UMB. El estudio se realizó sobre una muestra de 112 estudiantes de segundo, cuarto, sexto y octavo semestre.

Se hizo este estudio para comprobar si existe una relevancia percibida de las aplicaciones prácticas de la Inteligencia Artificial en los siguientes dominios: bases de datos, programación, ingeniería de software, comercio electrónico, los resultados obtenidos pueden proporcionar perspectivas sobre cómo promover la aceptación y la percepción de utilidad y, posteriormente, cómo incluir estas tecnologías en las asignaturas impartidas en la Licenciatura.

Palabras clave: percepción estudiantil, transformación digital, herramientas de aprendizaje, tecnología educativa, inteligencia artificial.

Abstract

With the participation of students in the Dolphin Program 2024 of the Universidad Mexiquense del Bicentenario, Higher Education Unit of Ixtapaluca (UMB-UES Ixtapaluca). University colleague Alejandra Cruz López Sánchez, an eighth-semester student of the Bachelor's Degree in Financial Administration and the authors of this article, agreed to work with this research proposal, aimed at analyzing how the use of Artificial Intelligence (AI) is handled in a practical sense in higher education of the Bachelor's Degree in Financial Administrative Information at UMB. The study was carried out on a sample of 112 students in the second, fourth, sixth and eighth semesters.

This study was done to check if there is a perceived relevance of the practical applications of Artificial Intelligence in the following domains: databases, programming, software engineering, e-commerce, the results obtained can provide insights into how to promote

acceptance and perceived usefulness and, subsequently, how to include these technologies in the subjects taught in the Bachelor's degree program.

Keywords: student perception, digital transformation, learning tools, educational technology, artificial intelligence.

Resumo

Com a participação de estudantes do Programa Delfin 2024 da Universidade Mexiquense do Bicentenário, Unidade de Ensino Superior de Ixtapaluca (UMB-UES Ixtapaluca).

A estudante universitária Alejandra Cruz López Sánchez, do oitavo semestre do curso de Administração Financeira, e os autores deste artigo concordaram em trabalhar nesta proposta de pesquisa, cujo objetivo é analisar como a Inteligência Artificial (IA) é utilizada na prática no ensino superior, no âmbito do curso de Administração Financeira da UMB. O estudo foi realizado com uma amostra de 112 estudantes do segundo, quarto, sexto e oitavo semestres. Este estudo teve como objetivo determinar se existe uma percepção de relevância das aplicações práticas da Inteligência Artificial nos seguintes domínios: bancos de dados, programação, engenharia de software e comércio eletrônico. Os resultados obtidos podem fornecer informações sobre como promover a aceitação e a percepção de utilidade e, conseqüentemente, como incluir essas tecnologias nas disciplinas do curso de graduação.

Palavras-chave: percepção do aluno, transformação digital, ferramentas de aprendizagem, tecnologia educacional, inteligência artificial.

Date Received: September 2025

Date Accepted: January 2026

Introduction

By incorporating advanced technologies into educational settings, not only is the source of knowledge transformed, but also how it is processed and applied. In this context, AI has been deemed efficient in assisting learning, particularly in disciplines that integrate business administration, financial analysis, and software development. Therefore, wherever there is a postgraduate course involving similar subjects, these powerful computer systems offer significant support in teaching practical classes.

AI is an essential resource for business administrators today. It can perform tasks that most people used to do themselves, such as managing accounts and personalizing materials for users. The combination of its ability to identify and search for actions means it's a very

useful tool in university courses aimed at preparing accountants or managers for companies that are more financially focused than commercially oriented, thanks to the contributions of others (Luckin Rose, 2016) (Holmes, 2021).

This paper presents an empirical investigation into the role of artificial intelligence in supporting learning within the Bachelor's Degree in Administrative and Financial Information at the Universidad Mexiquense del Bicentenario, located in Mexico. We analyzed the perceptions and authentic experiences of a representative group of 112 students in their second, fourth, sixth, and eighth semesters. These perceptions and experiences relate to essential aspects of their curriculum, such as software engineering, e-commerce, and database programming languages. Participants were selected using simple random sampling, ensuring equitable distribution across different academic levels (Holmes, 2021) (Luckin Rose, 2016). The authors gain a comprehensive perspective on how traditional educational methods are being transformed by the impact of powerful computing technology.

The purpose of this research is to examine how artificial intelligence is being incorporated into university learning, what practical results and advantages are anticipated with this resource, and what opportunities exist to consolidate its application in the academic field. Therefore, it is hoped that this research will contribute to guiding university programs in the financial and administrative fields in an increasingly digital world (Zawacki Richter O., 2019).

The emergence of new technologies in education has brought about a profound transformation in how individuals acquire, structure, and use knowledge. In this context, Artificial Intelligence (AI) has become a strategic tool for enhancing learning, especially in subjects that include components of administrative management, operations research, and computer support (Holmes et al., 2021), thanks to its ability to automate processes, provide personalized course content, and search for actions in all their forms.

Artificial intelligence has the ability to optimize the effectiveness of the educational process; this is achieved by providing immediate feedback, adapting course content to individual student profiles, and advising school administration on how to improve management (Zepeda, 2024).

As a result, artificial intelligence has acquired a pedagogical focus in higher education and has contributed to aspects such as the development of digital skills, critical thinking, and computer literacy.

In order to ensure equitable representation for each grade and to obtain comprehensive information about the impact of AI at different educational levels, participants were chosen through simple random sampling.

From the students' perspective, the aim is to discover in practice what advantages they perceive in its application. Based on this, it is hoped that further steps can be taken to promote the use of AI in schools and universities.

Methodology

The research is of a mixed type (Hernández Sampieri, Fernández Collado, & Pilar, 2006): It is defined as a systematic process of collecting, analyzing and integrating quantitative and qualitative data for a better understanding of the phenomenon, which allowed us to combine quantitative and qualitative data to obtain the perception of students regarding Artificial Intelligence within the classroom and the importance for the acquisition of tools in their university stage.

One objective is to determine the impact of artificial intelligence on higher education and its practical application. This was based on subjects studied during the degree program, such as introduction to computers, computer science, databases, computer organization, programming languages, systems, software engineering, interoperability, and e-commerce, since Artificial Intelligence presents an opportunity for learning because it provides the essential theoretical and practical foundations (programming, algorithms, data handling, and specialized hardware) necessary to develop and apply AI technology.

The study was conducted with a sample of 112 students enrolled in the Bachelor's Degree in Administrative and Financial Information at the Mexiquense University of the Bicentennial (UMB) with 14 multiple-choice questions for students in the second, fourth, sixth, and eighth semesters.

Results

The 112 selected students were determined using attendance lists that included the names of all students. The questionnaires were based on the student's perspective, as perception is characterized as subjective, selective, temporal, and inferential. The perception process includes three stages: stimulus selection, information organization, and interpretation. This includes the interpretation of the responses to the most relevant questions.

Table 1. Age Distribution of Participants

Age	Answers
17 to 21	60.1%
22 to 25	11.6%
26 to 30	28.3%

Note: n:112 Source: Own elaboration (2024)

Table 1 shows the age distribution of the 112 study participants. The majority (60.1%) are in the 17-21 age range, followed by the 26-30 age group (28.3%) and the 22-25 age group (11.6%).

Table 2. Semester taken

Semester	Answers
2	27.7%
4	34.8%
6	24.1%
8	13.4%

Note: n:112 Source: Own elaboration (2024)

Table 2 shows the distribution by academic level. 34.8% of the surveyed students were in their fourth semester. They were followed by second-semester students, who represented 27.7% of the sample. Next were sixth-semester students with 24.1%, and finally eighth-semester students, who made up 13.4% of the participants.

Table 3. Student Perception of Artificial Intelligence

AI Perception	Answers
Nothing familiar at all	39.3%
Unfamiliar	20.5%
Neutral	31.3%
Acquainted	6.9%
Very familiar	2.0%

Note: n:112 Source: Own elaboration (2024).

According to the data presented in Table 3, 39.3% of respondents showed little familiarity with the concept of AI. This indicates an opportunity to improve students' knowledge and understanding of this technology.

Furthermore, 31.3% of participants have knowledge about AI. This group could be leveraged to promote the use of AI tools in educational processes.

Furthermore, 20.5% are relatively unfamiliar with AI. This segment presents an additional opportunity to educate and raise awareness among students about AI applications in both academic and professional settings.

Table 4. Participation in courses or training on Artificial Intelligence

AI courses or training	Answers
Yeah	78.6%
No	21.4%

Note: n:112 Source: Own elaboration (2024).

Table 4 shows a notable 21.4% who stated they had not participated in any AI-related training or courses. This indicates a clear need to promote and facilitate access to training and skills development opportunities in this technology among computer science and engineering students.

In contrast, 78.6% of participants reported having taken part in some AI-related training or course. This group could serve as a basis for identifying best practices and lessons learned that can be replicated and expanded at an institutional level.

These results highlight the importance of establishing strategies that encourage greater student participation in training activities related to artificial intelligence. This could include organizing workshops, seminars, or elective courses that address AI applications in business and administrative contexts.

Table 5. Readiness to take a course on Artificial Intelligence

Willingness to use AI	Answers
Yeah	63.4%
No	2.7%
Likely	33.9%

Note: n:112 Source: Own elaboration (2024)

Table 5 shows that 63.4% of respondents expressed their willingness to participate in courses or training on the use of AI. This result indicates a favorable and open attitude among business administration students toward strengthening their skills in this technological area.

In contrast, 2.7% of participants expressed no interest in receiving this type of training. This figure presents an opportunity to explore and address potential barriers or negative perceptions that may be affecting this group's willingness to engage in AI training.

Finally, 33.9% of respondents were undecided, indicating they might be willing to attend courses or training related to artificial intelligence. This segment could benefit from initiatives aimed at raising awareness and promoting AI, highlighting its advantages and applications in the administrative field.

Table 6. Use of AI for learning

I use AI for learning	Answers
Yeah	65.2%
No	8%
Sometimes	26.8%

Note: n:112 Source: Own elaboration (2024).

Table 6 shows that 65.2% of respondents stated they have used AI for educational purposes. This result indicates that a majority of students in administrative programs have experimented with AI technologies in their teaching and learning processes.

On the other hand, 8% of participants indicated that they have not used AI for learning. This group represents a significant opportunity to investigate the reasons behind their lack of integration of these tools into their academic activities.

Finally, 26.8% of respondents indicated that they use AI "Sometimes" in their learning. This segment could benefit from developing strategies that encourage more frequent and effective use of AI tools within the administrative field.

The results suggest that students have a willingness and prior experience using artificial intelligence as an educational resource. However, they also highlight the urgent need to implement initiatives that facilitate a broader and more systematic adoption of AI in educational processes.

Table 7. Tools used by AI

AI tools used in class	Answers
ChatGPT	49.1%
Canva	39.3%
Gemini	2.5%
CreateText	2.5%
Leonardo	2.0%
CapCut	1.5%
EditorpH	1.5%
I haven't used any	1.5%

Note: n:112 Source: Own elaboration (2024)

Table 7 shows that the most popular artificial intelligence tool among students is ChatGPT , which received 49.1% of mentions. This indicates that virtual assistants based on natural language processing have been widely integrated into the educational field of business administration. In second place, the Canva platform was reported to be used by 39.3% of respondents. This suggests that students have also incorporated AI-powered design and creativity tools into their academic activities. Other applications mentioned, although to a lesser extent, include Gemini, CreaText , LeonardoIA , CapCut, and EditorpH . It is relevant to note that 10% of participants indicated having used some AI tool in the school environment.

These results indicate that business administration students are beginning to familiarize themselves with and integrate various artificial intelligence applications as part of their learning methods. However, they also reflect significant potential for greater adoption and dissemination of these technologies in education.

Table 8. Main contribution of AI academically

AI's main contribution academically	Answers
Improve the quality of education	19.6%
Make the classes more dynamic	13.4%
Having access to the information	29.5%
All of the above	37.5%

Note: n:112 Source: Own elaboration (2024).

In Table 8, regarding student perceptions, 19.6% of respondents believe that the main contribution of artificial intelligence (AI) is "to improve the quality of education." This

finding indicates that students believe that incorporating AI-based technologies can raise the quality of educational processes in higher education.

Secondly, with 13.4% of mentions, the option "Making classes more dynamic" stands out. This suggests that participants also recognize the potential of AI to enrich and energize educational experiences within the classroom.

Other contributions identified include "Having access to information" 29.5% and "All of the above" 37.5%, which reflects a comprehensive perspective on the benefits that AI can offer in the higher education context.

We are told that students in administrative programs see Artificial Intelligence as a tool capable of improving not only the quality of education, but also making learning activities more dynamic and accessible. This represents a significant opportunity for higher education institutions to develop strategies aimed at maximizing the potential of AI in the administrative field.

Table 9. AI can be used permanently in the classroom

AI can be used permanently in the classroom	Answers
Yeah	46.4%
No	2.7%
Most of the time	40.2%
Very little	10.7%

Note: n:112 Source: Own elaboration (2024).

According to the data collected, 46.4% of survey participants responded affirmatively, indicating that artificial intelligence (AI) can be used continuously in the school environment. This data suggests that a significant majority of students recognize the potential of incorporating AI as an essential component in educational processes.

In contrast, 2.7% of respondents expressed disagreement, believing that AI is not suitable for constant use in classrooms. This figure reveals an opportunity to explore and address the concerns or barriers these students have regarding the sustained implementation of AI in education.

Furthermore, 40.2% of respondents stated that AI could be used "most of the time" during classes, while 10.7% felt that it could only be used "very little".

These findings indicate a predominantly positive perception among business administration students regarding the continued use of artificial intelligence as an educational

tool. However, they also underscore the importance of addressing the concerns and expectations of those who are skeptical about its long-term adoption.

Table 10. AI is integrated into current courses

AI is being integrated into current courses	Answers
Yeah	85.7%
No	14.3%

Note: n:112 Source: Own elaboration (2024).

Regarding the integration of AI into courses, 85.7% of respondents expressed a desire for artificial intelligence (AI) tools to be more integrated into their courses. This result indicates a highly positive and receptive attitude among students in administrative programs toward greater inclusion of AI technologies in their educational process.

14.3% of respondents stated they would not like to see greater implementation of AI tools in their current courses. This relatively small figure suggests considerable acceptance and willingness among students for artificial intelligence to play a more significant role in their academic training.

These findings support the notion that students in administrative fields view the expanded use of artificial intelligence as an educational resource favorably. This opens a path for educational institutions to develop strategies aimed at capitalizing on this student interest and enthusiasm, with the goal of enriching the quality and relevance of learning in the administrative field.

Table 11. AI should be part of the academic curriculum

AI should be part of the academic curriculum	Answers
Yeah	72.3%
No	27.7%

Note: n:112 Source: Own elaboration (2024).

Table 11 shows that 72.3% of respondents stated that Artificial Intelligence (AI) should be included in the academic curriculum. This result indicates that a majority of students in management programs consider the incorporation of AI essential as a key element in their training.

On the other hand, 27.7% of participants expressed their disagreement, suggesting they do not believe AI should be part of the academic curriculum. This figure presents an opportunity to investigate the reasons and concerns that might underlie this opinion.

These findings reinforce the notion that students in administrative fields recognize the value and educational potential of Artificial Intelligence. This presents an opportunity for educational institutions to develop and implement strategies that systematically and coherently integrate AI into their curricula.

Table 12. AI has an impact on the labor field

AI has an impact on the job market	Answers
Very negative	3%
Negative	3.3%
Neutral	34.8%
Positive	47.3%
Very positive	11.6%

Note: n:112 Source: Own elaboration (2024).

Regarding student perceptions of AI, 47.3% of respondents believe that the influence of artificial intelligence (AI) is "positive" in relation to their preparation for the job market. This result indicates that a significant majority of students in administrative fields perceive AI as a tool that could have a very beneficial impact on their professional development.

On the other hand, 34.8% of participants stated that they consider the effect of AI to be "neutral" on their job readiness. This figure represents an opportunity to investigate the concerns or unfavorable perceptions that may be influencing this opinion.

Table 13. AI can enrich academic life

AI can enrich academic life	Answers
Through courses	33.9%
Interaction in the virtual classroom	37.5%
Optimizing study time management	21.4%
None of the above	7.1%

Note: n:112 Source: Own elaboration (2024).

In Table 13, 33.9% of respondents believe that Artificial Intelligence (AI) can enrich their academic lives through specific courses on this technology. This finding indicates that students recognize the importance of receiving formal training in AI and its applications.

On another note, 37.5% of participants indicated that AI can improve academic life by enhancing interaction in virtual environments. This highlights a perception of AI as a resource for optimizing teaching and learning processes on digital platforms.

Additionally, other ways in which students believe AI could enrich their academic experience include: "Optimizing study time management" 21.4% and "None of the above" 7.1%.

These results suggest that students in management programs recognize the transformative potential of Artificial Intelligence to improve various aspects of their academic journey, whether through specific training, strengthening virtual interactions, or improving time management.

Table 14. Teacher Training for the Application of Artificial Intelligence

Teacher Training for the Application of Artificial Intelligence	Answers
All teachers and administrators	80.4%
Only those in the IT department	13.4%
Only the authorities	6.2%

Note: n:112 Source: Own elaboration (2024).

According to Table 14, 80.4% of respondents believe that "All teachers and administrators" should receive training to implement artificial intelligence (AI) effectively. This result indicates that students recognize the importance of comprehensive training for all teaching staff, not just those specializing in computer science.

In contrast, 13.4% of participants maintain that only "those in the field of computer science" should be trained in the use of AI. This more restricted view opens the door to investigating the reasons why this group does not consider broader training necessary.

Finally, 6.2% of respondents believe that only "university authorities" should be trained in relation to AI.

These results reinforce the perception among students in administrative programs about the need for comprehensive training for both teaching and administrative staff, in order to ensure the effective implementation of AI in educational settings.

Discussion

The findings of this study offer relevant information about how students in administrative programs view and are willing to use artificial intelligence (AI) as an educational tool.

Over 8.9% of respondents are "familiar" or "very familiar" with the concept of artificial intelligence. This result can help us contribute to incorporating and implementing artificial intelligence applications in their learning process.

When a student is provided with or obtains a tool that facilitates the handling of accurate information, it can improve the understanding and retention of the material, as it works from their strengths and weaknesses, which can increase their confidence and autonomy in the learning process. (Martínez Comesaña Miguel, 2023)

AI can also improve the efficiency and productivity of teachers by automating administrative and repetitive tasks, using tools such as chatbots, and creating learning activities where students can manage queries and administrative tasks, allowing teachers to focus on teaching and professional development. (Kroff Francisco Jose, 2024)

Online learning platforms, virtual environments, and educational tools have facilitated the adaptation of learning, adjusting it to the specific needs of each student. This personalization is crucial for addressing the diversity of learning styles and paces, thus facilitating a more inclusive and equitable education. (Ulises, 2025)

Regarding the integration of AI into the curriculum, 46.4% of participants consider its inclusion in classrooms essential. This aligns with the indications that (Giannini Stefania, 2024) incorporating AI skills into subjects is crucial for preparing future professionals to meet the challenges of digital transformation.

However, this study has certain limitations. First, the sample is limited to a single university center, which prevents the results from being applicable to other educational settings.

Furthermore, the study of the data is based on expressed perceptions and not on longitudinal observations on the specific application of artificial intelligence in the classroom, which limits the conclusions about its effectiveness and impact.

However, this current research proposes an advance, as it provides empirical evidence about the attitudes and needs of administrative students in relation to AI, highlighting both its transformative potential and the areas that still need institutional intervention and can guide us towards a curriculum design updated to the needs of the generations, teacher

training, educational policies that focus on digital literacy and the ethical use of artificial intelligence in higher education.

There are both positive and negative perspectives on the influence of artificial intelligence on career preparation. This presents an opportunity to address the fears and expectations of this population and to increase confidence in AI applications in a professional setting.

Conclusions

The mixed-methods research gave us the flexibility to obtain the perception of university students regarding Artificial Intelligence, its usefulness in their school environment, to obtain updates, facilitate learning, and make dynamic classes focused on each formative field.

This study provides us with evidence of a positive perspective of students in the Bachelor's Degree in Financial Administrative Information on the application of artificial intelligence as a learning tool.

The first is the high level of understanding of the concept of artificial intelligence, which is a foundation for improving the effectiveness of introducing this technology into the field of education. Most participants also expressed interest in integrating artificial intelligence tools into their existing courses, recognizing these tools as something that can be useful for their academic lives.

Regarding the contribution of artificial intelligence to their education, students specifically reported on the opportunity to take courses, improve interaction in virtual environments, and optimize self-management of study time.

Training in the use of artificial intelligence should be directed to all teaching staff, not just IT specialists. This underscores the importance of developing institutional capacity to adopt these new tools.

Future lines of research

The point where students selected the option that teaching staff need training in the use of AI technology, beyond just staff who teach Information Technology subjects and be able to implement it in their classes in other fields of training.

Responses regarding the impact of AI on undergraduate degree preparation are generally positive, although a segment of students feels it is negative. This presents an opportunity to clarify, on the one hand, the expectations that may exist among this target group and, on the other hand, to build confidence and security regarding future applications within their professional field.

72.3% of participants chose that AI should be an essential part of the academic curriculum for computer science and administration degrees; with this, we can carry out systematic initiatives to review, plan, organize, and include AI-related content and activities in university study programs.

That fellow teachers, in addition to implementing technological tools in their classes, motivate their students to use them, and provide training, diplomas, and certifications.

To evaluate the impact of incorporating AI-related content and activities into curricula, as well as the effectiveness of teacher training in creating innovative learning environments with advanced technologies (Giannini Stefania, 2024).

References

- Giannini Stefania. (17 de Mayo de 2024). UNESCO. Obtenido de <https://www.unesco.org/es/articles/el-uso-de-la-ia-en-la-educacion-decidir-el-futuro-que-queremos>
- Hernández Sampieri, R., Fernández Collado, C., & Pilar, B. L. (2006). Metodología de la Investigación. Mc Graw- Hill.
- Holmes, W. B. (2021). Artificial intelligence in education: Promises and implications for teaching and learning. Boston, MA, EE. UU.: Centro para el Rediseño Curricular.
- Kroff Francisco Jose, F. C. (2024). Inteligencia Artificial en la educación universitaria: Innovaciones, desafíos y oportunidades. Espacios, 120-135. Obtenido de Revista Espacios: https://ve.scielo.org/scielo.php?script=sci_arttext&pid=S0798-10152024000500120
- Luckin Rose, H. W. (2016). Intelligence Unleashed: An Argument for AI in Education. Mountain View, USA.: Pearson.
- Martínez Comesaña Miguel, R. D. (2023). Impacto de la inteligencia artificial en los métodos de evaluación en la educación primaria y secundaria: revisión sistemática de la literatura. Revista de Psicodidáctica, 93-103. Obtenido de Revista de Psicodidáctica: <https://doi.org/10.1016/j.psicod.2023.06.001>

- Redacción. (5 de Febrero de 2025). Cómo implementar la inteligencia artificial en la educación. Obtenido de Think Universidad Anahuac: <https://merida.anahuac.mx/think/implementar-inteligencia-artificial-educacion>
- Ulises, S. E. (2025). La inteligencia artificial en la educación: ¿transformación o infoxicación? Un análisis crítico de la nueva frontera educativa. *Sintaxis Online*, 69-88. Obtenido de Sintaxis: https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S2594-16822025000100069
- Universidades, Santander. (12 de Octubre de 2021). Universidades, Santander. Obtenido de Santander: <https://www.santanderopenacademy.com/es/blog/cualitativa-y-cuantitativa.html>
- Zawacki Richter O., M. V. (2019). Systematic Review of Research on Artificial Intelligence Applications in Higher Education—Where Are the Educators? *International Journal of Educational Technology in Higher Education*, 1-27.
- Zepeda Hurtado María Elena, C. E. (12 de Junio de 2023). Influencia de la inteligencia artificial en la educación media y superior. Obtenido de RIDE. *Revista Iberoamericana para la Investigación y el Desarrollo Educativo*: <https://doi.org/10.23913/ride.v14i28.1949>

Contribution Role	Author(s)
Conceptualization	Patricia Delgadillo Gómez
Methodology	Adriana Mercedes Ruiz Reynoso
Software	Adriana Mercedes Ruiz Reynoso
Validation	Adriana Mercedes Ruiz Reynoso
Formal Analysis	Patricia Delgadillo Gómez
Investigation	Alejandra Cruz López Sánchez
Resources	Alejandra Cruz López Sánchez
Data curation	Alejandra Cruz López Sánchez
Writing - Preparing the original draft	Edim Martínez Rodriguez
Writing - Reviewing and Editing	Edim Martínez Rodriguez
Display	Edim Martínez Rodriguez
Supervision	Patricia Delgadillo Gómez
Project Management	Alejandra Cruz López Sánchez
Acquisition of funds	Patricia Delgadillo Gómez