SHORT COMMUNICATION

Study on the impact of artificial intelligence tools in the development of university classes at the school of communication of the Universidad Nacional José Faustino Sánchez Carrión

Estudio sobre el impacto de las herramientas de inteligencia artificial en el desarrollo de las clases universitarias de la escuela de comunicación de la Universidad Nacional José Faustino Sánchez Carrión

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ABSTRACT

Technological progress has led to the development of computational elements applicable in various spheres of human activity. Artificial Intelligence (AI) stands out, whose growth is transforming, among other aspects, how students experience the educational process. In this context, this study aims to evaluate the impact of the use of AI tools in university classes of students at the Academic Professional School of Communication Sciences of the Universidad Nacional José Faustino Sánchez Carrión (Lima, Peru). Following a quantitative approach with experimental scope, three working days focused on the use of three AI tools applied to the subjects of Journalistic Writing, Advertising Writing and Audiovisual Communication. Eighty-four students from the fifth, seventh and ninth cycles of studies at the aforementioned school participated. The results indicate that students value the relevance of AI tools in their academic training and professional development. However, difficulties related to internet connectivity for optimal performance of AI platforms and full utilization of their benefits are highlighted. The study concludes by emphasizing the need for more spaces for the dissemination and socialization of experiences on the potential of AI, with a view to expanding and connecting the university academic community.

Keywords: Artificial Intelligence; Chatgpt; Chat Openai; Information And Communication Technologies; Communication Sciences; Communication; Social Communication; New Media.

RESUMEN

El avance tecnológico ha llevado al desarrollo de elementos computacionales aplicables en diversas esferas de la actividad humana. Destaca la Inteligencia Artificial (IA), cuyo crecimiento está transformando, entre otros aspectos, cómo los estudiantes experimentan el proceso educativo. En este contexto, este estudio tiene como objetivo evaluar el impacto del uso de herramientas de IA en las clases universitarias de los alumnos de la Escuela Académico Profesional de Ciencias de la Comunicación de la Universidad Nacional José Faustino Sánchez Carrión (Lima, Perú). Siguiendo un enfoque cuantitativo con alcance experimental, se llevaron a cabo tres jornadas de trabajo centradas en el uso de tres herramientas de IA aplicadas a las materias de Redacción Periodística, Redacción Publicitaria y Comunicación Audiovisual. Participaron 84 estudiantes del quinto, séptimo y noveno ciclo de estudios de la referida escuela. Los resultados indican que los estudiantes valoran la relevancia de las herramientas de IA en su formación académica y desarrollo profesional. Sin embargo, se resaltan dificultades relacionadas con la conectividad a internet para un rendimiento óptimo de

las plataformas de IA y la plena utilización de sus beneficios. El estudio concluye enfatizando la necesidad de más espacios para la difusión y socialización de experiencias sobre el potencial de la IA, con miras a expandir y conectar a la comunidad académica universitaria.

Palabras Clave: Inteligencia Artificial; Chatgpt; Chat Openai; Tecnologías De La Información Y La Comunicación; Ciencias De La Comunicación; Comunicación; Comunicación Social; Nuevos Medios.

INTRODUCTION

Technological advances always generate awe. The broad spectrum of action they encompass produces innovations that on the one hand replace existing processes and on the other create new ones. This peculiar evolution has led to the emergence of new concepts such as bytes, the internet, algorithms and, today, Artificial Intelligence (AI). Given this landscape, humans, as integral members of society, are not exempt from its effects and implications, regardless of the role they play within the social structure.

The impacts of AI technologies do not require a future to impact in various ways in this globalized world, since one of the consequences and dynamic axes of this process is based on these technologies that optimize many and various activities: in the world of real-time interactivity, the consequences of possible alterations that are the result of the application of AI will give rise to new and significant challenges;[1] making it clear that the impacts caused by industrial revolutions and others of the 20th century are minimal compared to what is being built based on AI, which raises enormous dilemmas and problems associated with the scope and speed of those possible impacts.[2,3]

In conclusion, technologies have been a significant part of the life of every human being. Castells (1998), argues that the dominant technologies of a society produce social consequences that determine people's lives, as technological innovations force humans to adopt a new way of life with new values.[4]

This implies that many human capacities are modified or eliminated, but others are extended, thanks to this it can be seen how technologies have moved over time and their influence on society in a kind of symbiotic relationship. Man's constant search to satisfy his communication needs more and more each day has been a driving force in the establishment of increasingly powerful and fast tools in the communicative process.[5]

Precisely, this communicative process has, in recent years, taken advantage of the benefits that AI has consolidated: the semantic web, digital consumption personalization, advanced advertising segmentation, among others. A scenario on which Renato Gómez Herrera reflected in his writings.

Apparently, artificial intelligence promises a fantastic world, but will it really be? What will happen, for example, with the enormous number of human beings who do not have access to education or technology? What will happen with human relations and the economy, with the huge gap between rich and poor, between development and underdevelopment? We do not know for sure what the future of humanity will be, but we do know that the relations of production and perhaps communication will undoubtedly change.[6]

As is evident, change is part of our evolution. Adapting to it is not a choice but a duty. And one of the fields that is constantly renewed thanks to technology is education, and more specifically higher education.

Within higher education, a professional career belonging to the Social and Humanities Sciences closely linked to the advancement of computer systems is Communication Sciences, a discipline that has different branches of study, such as Journalism, Advertising, Audiovisual Communication, among others. The irruption of Artificial Intelligence (AI) and technologies like Machine Learning or Deep Learning, is already transforming the way communicators perform their work in the media and/or in public or private organizations. If we take Journalism as an example, it can be seen that AI is significantly altering its oldest practices.

According to Gómez-Diago[7] (2022), journalistic activity is one of the activities that are being most affected by the introduction and expansion in the use of AI technologies in a context where journalism has undergone a quantitative shift[8] and uses algorithms to gather and analyze information,[9] to classify and group data, and news "feeds" that are personalized according to user behavior.[10]

There is talk of computational, algorithmic, robot journalism or augmented journalism, which requires skills such as arithmetic, the ability to work with numbers accurately, and the understanding of basic concepts of descriptive statistics,[10] and which it is necessary to differentiate from other activities in which data are used, as journalism is oriented towards the creation, verification and communication of knowledge from normative values such as honesty, investigation and fairness.[7,11]

In this context, the present study aimed to show the impact of the use of AI tools in the development of specific subjects within the university classes of the students of the Academic Professional School of Communication Sciences of the National University José Faustino Sánchez Carrión (Lima, Peru), who participated in 3 working days where the interaction, the degree of interest and level of apprehension about artificial intelligence tools could be observed.

METHODS

The research was conducted within a quantitative approach with an experimental scope. Three work sessions were held on the use of three artificial intelligence tools for the development of Journalism Writing, Advertising Writing, and Audiovisual Communication subjects, with the participation of 84 students from the fifth, seventh, and ninth study cycles of the aforementioned academic school.

The application of the methodology was conducted under the following specific objectives:

a) Understand the level of student satisfaction regarding their experience using AI tools in the development of their subjects.

b) Determine the level of relevance of using AI platforms for the students' professional field of application.

c) Identify the range of difficulty students have regarding the handling of AI tools in their classes.

d) Highlight the inherent difficulties in the learning process related to the use of AI platforms in solving proposed tasks within the class.

e) Show the magnitude of the university students' interest in taking future trainings on AI.

Data collection was performed as follows:

A. Selection of the sample group: it was established that the university population under study would be students from the Academic Professional School of Communication Sciences of the National University José Faustino Sánchez Carrión, in the city of Huacho, province of Lima (Peru), from the fifth, seventh, and ninth cycles.

B. Identification of Communication subjects suitable for the use of AI tools: in accordance with the selection of the following AI tools: ChatGPT, Midjourney, and Leonardo, it was determined that the suitable academic courses for their application would be Journalism Writing, part of the fifth study cycle; Advertising Writing, taught in the seventh cycle; and Audiovisual Communication, tackled in the ninth cycle.

C. Preparation of experimental activities: due to the nature of the AI platform application, it was decided that the work sessions would consist of three virtual sessions of three hours each, one session for each academic course, respectively.

The sessions included: a) an introduction phase about the basics of AI and its benefits; b) a phase of explanation of the chosen AI tool for the course and the way it operates to enhance professional work; and c) a feedback and evaluation phase regarding the achieved results.

D. Definition of the indicators to be used in the study: the following were established as indicators: degree of satisfaction (from students about the use of AI tools), level of importance of using AI tools, range of student difficulty, difficulty of the learning process linked with AI, and interest in future AI training.

E. Determination of the study period: the work sessions were conducted in February 2023, coinciding with the regular development of the 2023-I academic cycle of the university.

F. Execution of the work sessions: the virtual sessions started with the Journalism Writing course, belonging to the fifth study cycle, where students were able to use the ChatGPT tool to optimize article writing, through style correction, information flipping, data validation, and analysis and choice of journalistic focus angles. The Advertising Writing course, taught in the seventh cycle, was the subject of the second virtual session. In it, students used ChatGPT and Midjourney to compose persuasive texts and images for commercial purposes, structured storytelling actions with validation of hook text lines, corroborated by AI. Finally, in the Audiovisual Communication course, covered in the ninth cycle, university students used ChatGPT to construct technical scripts and shooting guides, and Leonardo, to edit videos and perform animations for institutional and commercial communication purposes. At the end of each class, the students received surveys, monitoring instruments of the present study, to place their responses about the occurred experience.

G. Download and processing of the work session monitoring instruments.

H. Review and analysis of the obtained data in contrast to the proposed indicators.

I. Visualization and presentation of the results.

RESULTS

Prior knowledge. At the beginning of this study - applied to 84 Communication Sciences students - before the work sessions were held, a survey was conducted to measure students' prior knowledge about AI tools. It was observed that the majority of students (82 %) had not used any type of AI tool, while a minority (18 %) had used them during the development of their university subjects (figure 1).

Degree of satisfaction. After the work sessions were held, the degree of student satisfaction regarding their experience using Artificial Intelligence tools in the development of their classes was measured. It was observed (figure 2) that 81% in total showed a positive degree of satisfaction, while 19% expressed little or no satisfaction.
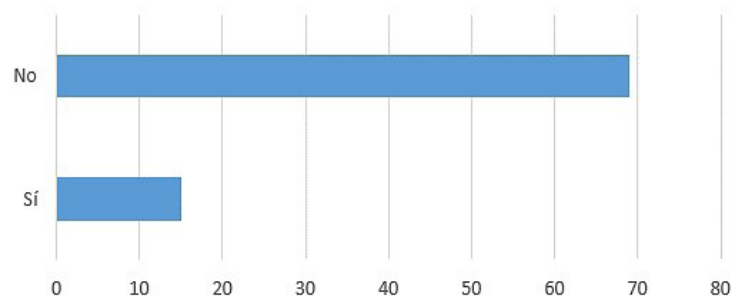
Figure 1. Have you interacted with any AI tools for your university assignments?
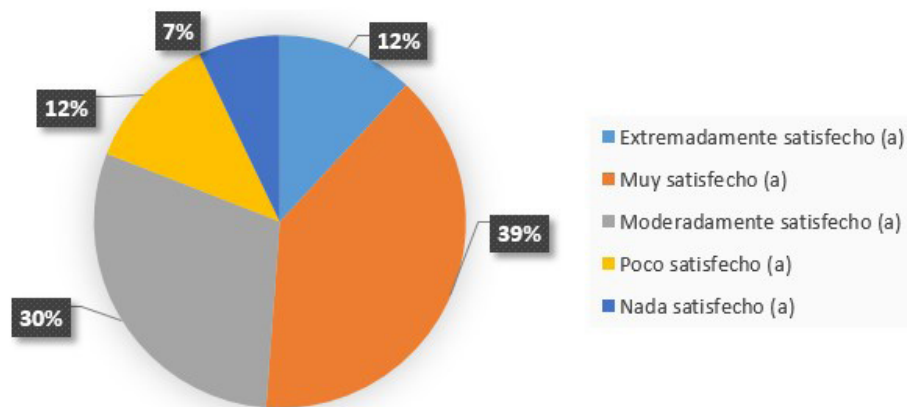
Figure 2. How satisfied are you with your AI experience in class?

Importance of AI. Figure 3 shows that 49 % of the students under study considered the application of AI relevant to their professional work, a figure that surpasses the 24 % that claimed that the use of AI is of little or no importance for their communicational work.
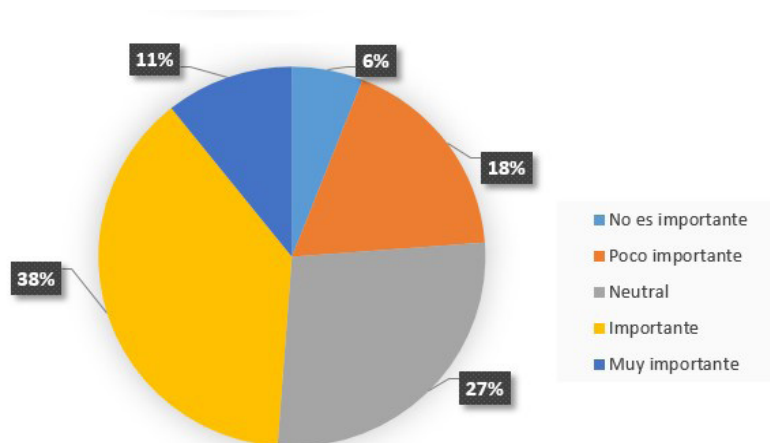
Figure 3. How important do you consider the use of AI for your professional career?

Level of difficulty of AI. When analyzing the level of difficulty represented by the use of AI tools in class for the students, only 21% of the participants affirmed that they found it difficult or very difficult to use them, in contrast to 58 % who considered them easy to apply (figure 4).

Contextual difficulty for using AI. Figure 5 recorded the students' perceptions regarding the additional difficulties to the AI platforms themselves. From the data, it was highlighted that 14 % cataloged the AI tools themselves as complex. On the other hand, 35 % claimed to have had problems with the internet, which was evidenced during the development of the sessions by the facilitator, as a group of students revealed that the platform did not load and took time to connect or execute a command.
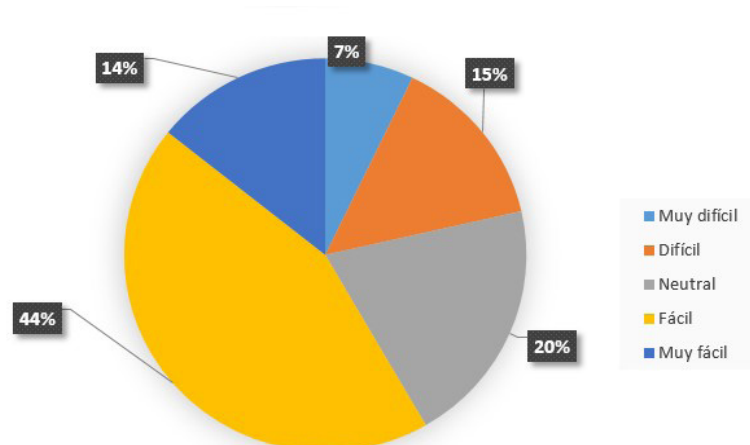
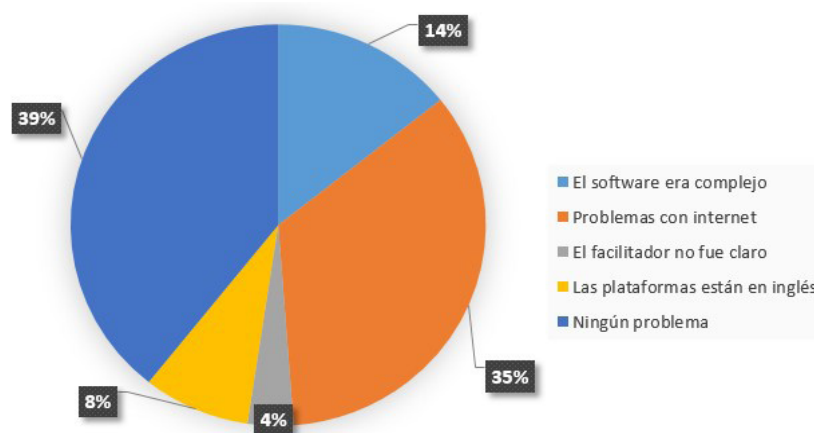**Figure 4.** How difficult was it for you to use the AI tools in class?

Figure 5. What difficulties did you have when using the AI tools in class?

Interest in continuing to train on AI. 85 % of the participants of the academic work day showed a favorable degree of interest in continuing to train in the use of AI tools to improve their professional performance, while 16 % claimed to have little or no interest in continuing with this practice.
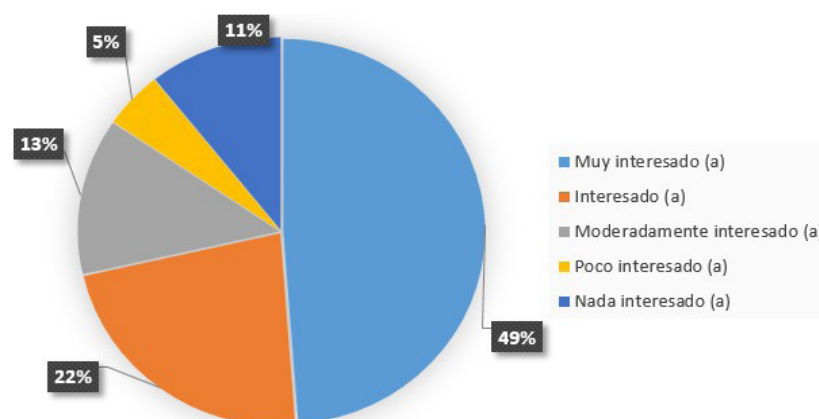

Figure 6. How interested are you in continuing to train on AI?

CONCLUSIONS

The study highlights the growing interest and importance of university students from the School of Communication Sciences in relation to the application of Artificial Intelligence tools for their professional performance.

Observation of the participants' behavior during the development of the session, as well as their performance

in classes, further reinforces their desire to continue training in issues related to the use of AI.

The application of Artificial Intelligence tools in various fields of human activity evidences the evolution that this discipline of computer science has achieved to date and sets a constant and growing line of development for the coming years.

The study also emphasizes, as a difficulty for acquiring knowledge related to AI, the connectivity problems of students, difficulties in loading the platform due to internet problems inherent to service providers, situations known in the Peruvian market.

Considering that this study is configured as a first approach to future studies related to the application of AI in educational scenarios, from CICSTEP it is proposed to develop similar research with teachers and educational training agents related to the subject, as possible lines of research.

As part of the training and academic extension activities of CICSTEP and in line with the interest of our allies, clients and educational community, it is proposed to continue with more training sessions and awareness about the potential that AI tools can represent for society.

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CONFLICT OF INTEREST
None.

AUTHOR'S CONTRIBUTION
Conceptualization: Gonzalo Junior Junco Luna.
Methodology: Gonzalo Junior Junco Luna.
Research: Gonzalo Junior Junco Luna.
Original writing: Gonzalo Junior Junco Luna.
Writing-revision and editing: Gonzalo Junior Junco Luna.