



## EDITORIAL

It is an honor for the **Revista Cátedra** to present volume nine, number one in its electronic version. The topics covered are grounded in the theoretical foundations of Educational Sciences across its various specializations and educational levels. The journal presents some of the most relevant and noteworthy aspects of each academic work, addressing areas such as educational psychology, resources, and educational innovation.

The content presented in this new issue is characterized by its adherence to established research methodology. Furthermore, it is developed with academic rigor through blind peer review and grounded in teaching practice and theory.

This issue comprises eight accepted articles:

The first article, entitled "Comparison of two teaching methods in immunology for medical students: a quasiexperimental study with nonequivalent control group," is authored by Washington Paz-Cevallos, Marcos Jiménez-Córdova, Mary Ordóñez-Asanza, and Teresa Haro-Blacio. The main objective was to compare the effectiveness of chalk talk and slide presentation teaching methods in the short and medium term. The main results of this research show that the chalk talk group improved from a pre-intervention average score of  $5.07 \pm 2.76$  to  $12.92 \pm 3.86$  post-intervention and achieved a score of  $8.33 \pm 3.68$  one week later ( $p < 0.05$ ). The slide presentation group improved from  $6.06 \pm 3.29$  to  $8.76 \pm 3.19$  post-intervention, with a score of  $6.93 \pm 3.57$  in the assessment one week later ( $p < 0.05$ ). The authors conclude that the chalk talk method is more effective than slide presentation in the short and medium term for teaching medical students, regardless of IQ or gender.

The second article, titled "Artificial Intelligence and the Teaching Process for Economics Students," was authored by Santiago Vinuela-Vinueza and Alejandra Fonseca-Factos. The central objective of this work was to analyze how the integration of AI influences pedagogical strategies and the construction of knowledge among future professionals in the field of economics. The main findings highlight that, although students demonstrate a moderate level of ethical awareness, gaps persist in their comprehensive understanding of some theoretical constructs related to the ethical use of AI. The study concludes that it is necessary to incorporate specific content into training programs aimed at strengthening ethical awareness in the use of these technologies.

The third article, titled *Emotional Exhaustion and Teaching Performance: An Approach to Burnout Syndrome in University Professors*, was authored by Esteban Bozano-Rivadeneira, Johanna Bustamante-Torres, Brittanny Arrobo-Guayllas, and Heydi Hugo-López. The main objective of this research was to analyze the influence of burnout syndrome on the performance of university teachers. The main findings reveal significant associations between the dimensions of burnout syndrome (BS) and teaching performance, highlighting personal accomplishment as a key protective factor: moderate negative ratings with emotional exhaustion ( $r=-0.317$ ,  $p=0.001$ ) and depersonalization ( $r=-0.353$ ,  $p<0.001$ ), and



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weak positive ratings with performance ( $r=0.248$ ,  $p=0.009$ ). The authors conclude that BS depends on multicausal factors, with personal accomplishment as the main preventative, enhanced by vocation and experience, which improve emotional regulation, performance, and interactions with students.

The fourth article, *Incidence of GeoGebra software in the teaching-learning process on the derivative in the Second Year of Unified General Baccalaureate*, authored by José Luis Gallo-Calero, Andrés Almeida-Flores, Diego Zavala-Urquiza, and Edwin Vinicio Lozano. The main objective of this article is to demonstrate the impact of educational software on the teaching-learning process of students, since in Ecuador there is a traditional methodology that is minimally oriented towards the digital field within education. The main results show that the use of GeoGebra enhances student learning, as evidenced by higher grades among those who used the software. The study concludes that the application of this free software benefits institutions by improving learning outcomes.

The fifth article, *Use of the Educaplay Educational Platform in the Literacy Process of Primary Education Students (ISCED Level 1)*, authored by Elizabeth Pesántez-Carmona and Diana Cevallos-Benavides, addresses a literacy problem. To this end, a pedagogical intervention based on the Technological Knowledge model was designed. Pedagogical Content and Learning Framework (TPACK) focused on constructivism. The main results are that the interactive activities designed in Educaplay significantly increased aspects such as attention, motivation, and academic performance of students, especially in phonological and syllabic skills and reading comprehension. The authors conclude that the pedagogical intervention, based on the global-analytical approach and the development of linguistic awareness and reading comprehension in early stages, combined with the appropriate use of interactive activities on the Educaplay platform, promotes meaningful learning.

The sixth article, titled *Artificial Intelligence (AI) and its use in creative writing*, is authored by Manuel Villavicencio-Quinde, Alison Fajardo-Martínez, and Alejandra Suárez-Rivas. This research aims to analyze the ability of this tool to produce short fictional texts compared to the creative process of students. The main findings are that AI consistently replicates traditional writing styles at both the structural and content levels; in contrast, the stories created by students demonstrate greater richness and diversity in their construction. The authors conclude that classroom experiences, not only those related to writing, should be transformed into opportunities to learn and rekindle students' creative drive, so that the overwhelming presence of AI becomes not a threat, but an ally in the collaborative learning process.

The seventh article, titled *The quantitative and qualitative rubric in algebraic operations learning assessment in students of eighth year of general basic education*, is authored by Diego Tipán-Renjifo, Edgar Cazares-Fuentes, and Edgar Freire-LLive. This research addresses how the use of comprehensive assessment instruments improves the learning process and the accuracy of algebraic problem-solving. The main findings indicate shortcomings in the use of rubrics due to a lack of information and descriptors to guide the assessment process. The aim is to achieve a detailed understanding of learning outcomes, shift the focus from simply evaluating to truly valuing, and foster changes in motivation and



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participation. The authors conclude that assessment processes in algebraic operations are mechanical, based on solving exercises in anticipation of a good grade, neglecting the purpose of a comprehensive evaluation that involves student participation.

Finally, the eighth article *Integration of gamification into the andragogical process of the physics area for intensive evening high school students*, by Diana Pinos-Maldonado and Diana Cevallos-Benavides, is presented. This study aims to analyze the low academic performance, lack of motivation, and limited participation of adult and senior citizens with incomplete schooling in the Physics course within the intensive evening high school program. The results showed a significant improvement in motivation, conceptual understanding, active participation in the classroom, collaborative work, and the development of critical thinking. The authors conclude that contextualized and accessible gamification proved capable of transforming the teaching-learning process, fostering meaningful and resilient knowledge.

**Revista Cátedra** thanks all the authors and reviewers who made the publication of this issue possible. It also invites the national and international academic community to submit their research related to Educational Sciences in its various specializations and educational levels.

Directors/Editors-in chief