



REVISTA

# CÁTEDRA

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## EDITORIAL

It is a pleasure for the *Cátedra* Journal to present volume seven, number two in the electronic version. The thematic developed has its theoretical bases in the Educational Sciences in its different specialties and educational levels; thus, some relevant and outstanding aspects of each academic work such as education, hospital pedagogy, informatics and gender are exposed.

The contents presented in this new issue are characterized for being elaborated under the parameters of research methodology. In addition, they are elaborated with academic rigor under blind peer review and are based on teaching practice and theorization.

The issue consists of eight approved articles:

The first article entitled *The knowledge of learning strategies as an alternative for the strengthening of heutagogical competences in university students in virtual mode*, authored by Floralba del Rocío Aguilar-Gordón. This manuscript identifies as a central problem the lack of development of heutagogical competencies, that is, the necessary skills and abilities that allow university students to learn in an autonomous and self-directed manner. Faced with this problem, the author theorizes some questions about the philosophical, sociological, psychological and pedagogical foundations of learning strategies. This research has an exploratory qualitative approach, supported by theoretical methods such as the analytical-synthetic and inductive-deductive, as well as empirical methods such as the direct experience of the researcher, content analysis, documentary analysis and literature review. Among the most relevant findings is the need to propose diverse learning strategies that are intentional, autonomous, metacognitive, contextualized, active and adequately evaluated, with the aim of supporting the development of heutagogical competencies and facilitating the adaptation of students to social changes.

The second manuscript entitled *Relevance and prospective study of the chemical professional in the national, regional and current world scenario*, authored by Dennys Almachi-Villalba, Myrian Yépez-Padilla, Elithsine Espinel-Armas and Christian Alcívar-León. The objective of this research was to highlight the importance of chemical professionals at the national, regional and global levels. To this end, a systematic review was carried out to demonstrate the capabilities of these professionals, linked to regulations of the Ecuadorian Institute of Standardization (INEN), Codex Alimentarius, among others. In addition, surveys were conducted to representatives of companies in the industrial sector related to chemistry, consulting on cleaner production activities in the framework of the SDGs, where waste recycling stood out with 30.43%. The findings of this manuscript evidenced the need to strengthen collaboration between industry and academia to improve the implementation



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of sustainable practices in companies, where chemical professionals play a crucial role in solving environmental challenges and promoting sustainable practices in various economic sectors.

In the same thematic line is the third article entitled *Measurement of the appropriation of learning achievements in physics in virtual and blended modalities*, authored by Jonathan Castro-Terán. The purpose of this study was to evaluate the impact of the covid 19 pandemic on the acquisition of learning achievements in Physics among students of the Lev Vygotsky Educational Unit in Quito. An evaluation matrix was designed to record learning achievements, along with their identification codes, levels and types of achievement. The instrument included 20 multiple-choice questions with four options each. The assessments were cumulative, covering all content for the first quarter of the 2021-2022 school year. Data were collected through assessments validated by the institution's mediators and analyzed to identify significant differences between virtual and blended learning methods. The results of the t-test indicated that there are no significant differences in the acquisition of learning achievements between students who attended blended classes and those who attended virtual classes.

The fourth article entitled *Pedagogic practice in a hospital environment*, authored by Ximena Pinos-Benavides. This academic work analyzes the importance of pedagogical actions in hospital contexts, where spaces are generated for the educational inclusion of children and young people facing illness and hospitalization. The problem of analysis is the scarce attention of educational and health administrations, and the lack of knowledge of processes that provide continuity of the school curriculum. The research approach is qualitative exploratory; it considers the inductive-deductive method and the empirical method as the immediate experience of undergraduate students of the Pedagogy of Experimental Sciences, Mathematics and Physics. The results of this article indicate that emotional support adapted to the special educational needs derived from illness and hospitalization should be provided through playful and didactic activities.

In the same line of hospital pedagogy, we have the fifth article entitled *Impact evaluation of the teaching and research process of the General Teaching Hospital of Calderón Quito-Ecuador*, authored by Luis Fernando Olmedo-Pérez, Patricia Benavides-Vera and Fernando Durán-Lucio. The manuscript evaluates the impact of the teaching and research process of the Calderón General Teaching Hospital-HGDC in the period 2016-2022 and aims to measure the impact of the Teaching and Research process regarding (1) academic process and resources, (2) evaluation and research, (3) learning, training and knowledge transfer and (4) clinical-surgical practice and performance; through the design and application of the impact evaluation methodology with orientation to measurable results, Balanced Scorecard-BSC. The target group was identified as undergraduate students, rotating interns, postgraduate students, teachers and health care personnel of the Higher Education Institutions (HEI) that perform their health care and academic activities at the HGDC. It was developed in three phases: the first phase comprises the period 2016-2020, with a total population of 949 participants; the second phase of 2021 has 382 participants; the third



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phase of the period 2022, has a total population of 344. The BSC monitoring matrix showed that the average Global Effective Impact Evaluation of the Teaching and Research process of the HGDC in the period 2016-2022 reached 87.39% effectiveness, reflecting that the assistance and teaching activities are adequately fulfilled. The research contributes to improve the care and teaching processes of the hospital, and allows it to be a model to be replicated by other institutions.

The sixth manuscript, entitled *Kahoot in formative evaluation: teaching experience in Higher Basic General Education*, was written by Juan Carlos Cárdenas-Rogel, Grethy Quezada-Lozano and Reinaldo Guerrero-Chirinos. The main objective of this research was to evaluate the impact of the application of Kahoot as a didactic strategy to assess knowledge in Natural Sciences. The research question was: Does the application of Kahoot have an impact on the learning of Natural Sciences? The methodology used was quantitative, quasi-experimental, cross-sectional and descriptive. Two learning scenarios were considered: a traditional class (control group) and another in which Kahoot was used as an evaluation tool (experimental group). To collect data, a survey was applied to students through Google Forms. Among the main findings of this study, it is highlighted that the use of Kahoot as a didactic strategy for assessment significantly influences the levels of student participation in the learning of Natural Sciences.

In the line of Technology applied in education is the seventh article entitled *Digital competence in teaching: a case study from a sociocultural perspective*, authored by Yuliedys Ruiz-Aday, Elsa Montenegro-Moracén and Andrea Pacheco-Lemus. The objective of this research is to analyze the sociocultural influence on the digital competence of teachers of the first year of the General Unified High School (BGU) of the Fiscal Educational Unit (UEF) 24 de Mayo during the first quarter of the 2023-2024 school year. The importance of considering the cultural and social context of teachers in the integration of digital competencies within the didactic planning is emphasized. For this purpose, a mixed methodological approach was used and participants were selected through purposive sampling. The results show that the sociocultural perspective influences the integration of digital competencies, highlighting the need to overcome technological limitations and change perceptions rooted in the educational culture. It is concluded that addressing these challenges from a sociocultural perspective can improve the integration of technology in Language and Literature teaching.

The eighth article entitled *Gender and education In África: the case choice of the choice of baccalaureate studies in Ecuatoguinean educational centers*, authored by Pedro Bayeme Bituga-Nchama, Bonifacio Nguema Obiang-Mikue and Rebeca Nsuru Ondo-Mibuy. This research focuses on the study of the gender approach and education in Africa, highlighting the difficulties of access to education, where the training of boys is prioritized over girls. To better understand this situation, the analysis focused on the choice of baccalaureate studies in schools in Equatorial Guinea. Methodologically, a descriptive research based on the quantitative method was used. The population studied was Equatorial Guinea, with a



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representative sample of schools. One of the main conclusions is that girls tend to choose the letter branch, since it is associated with feminine stereotypes and is perceived as easier.

*Cátedra Journal* thanks all the authors and article reviewers who have made the publication of this issue possible. In addition, it invites the national and international academic community to submit their research papers related to Educational Sciences in its various specialties and educational levels.

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Managing Editor



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