

EMERGING METHODOLOGIES AND TECHNOLOGIES APPLIED TO UNIVERSITY EDUCATION

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Education, in general, is part of a changing and liquid society (Bauman & Donskis, 2019) that has to evolve in tune with the changes occurring in the educational ecosystem. In this context, technologies appear that are gradually being incorporated into the educational environment and, consequently, new forms of teaching appear, i.e., the so-called emerging methodologies (Cabero-Almenara, Valencia-Ortiz & Llorente-Cejudo, 2022; Villamarin-Reinoso, Lalao-Achachi, Guerrero-Semanate & Lozada-Arias, 2022). The incorporation of these require a reflection based on experimentation, research and, therefore, on evidence that can support new educational models in teacher training to meet social challenges and the formation of citizens in the interpretation of reality and their realization as people. These methodologies cause the students to play an active role in the whole teaching-learning process and require teachers to undergo ongoing training in order to incorporate them and work in the classroom from a pedagogical, didactic and technological approach (augmented reality, flipped classroom, design thinking, gamification, m-learning...). Hence, talking about emerging methodologies goes beyond talking about technological renovation and integration, which are key aspects in these approaches, but also means thinking about the inclusion of participating voices in the educational processes from the interaction and democratization of the classroom (educational diversity and inclusion). In this sense, university education is not left behind, since "it must innovate in its teaching-learning processes and provide different means that help students to generate new ideas creatively, acquire skills adapted to the needs of the labor market and learn to respond appropriately to the demands of the environment". (Fernández-Piqueras, Guerrero-Valverde, Cebrián-Cifuentes & Ros-Ros, 2020, p.185). Therefore, the incorporation of these methodologies can favor the teaching-learning process in all areas of knowledge, but first the following questions should be rethought: how are we currently teaching, for whom are we teaching, what are we teaching for, etc.? Ultimately, the aim of this special issue is to answer these questions and to reflect on the teaching of the future and the changes we need to make to make it truly effective and efficient, so that students learn and adapt to the demands of the future.

In this regard, 16 articles have been published with authors from different institutions and countries:

From a more general perspective, Santiago Alonso García, Juan José Victoria Maldonado, Jose Antonio Martínez Domingo, Blanca Berral Ortiz with their article "Analysis of self-perceived digital competences in future educators: A study at the university of Granada" analyze the digital competences of future teachers of the Faculty of Education of the University of Granada.

Next, María José Ibáñez Ayuso, María Helena Damiao "Language as a hermeneutic approach to emerging methodologies and technologies in higher education" through a theoretical study want to analyze the educational

meaning of certain concepts necessary to think about emerging technologies and methodologies in Higher Education.

Thirdly, Oscar-Yecid Aparicio-Gómez, Olga-Lucía Ostos-Ortiz and Constanza Abadía-García through their contribution "Convergence between emerging technologies and active methodologies in the university" makes a theoretical review on emerging technologies and how they are combined with active methodologies.

Hugo Heredia Ponce, Manuel Francisco Romero Oliva and Ester Trigo Ibáñez in their article "Towards digital competence from the conception of students in language instruction: A study within the master's degree in teaching in Andalusia" analyze the perceptions that students of the MAES specialties of Spanish language and literature and foreign languages have about social networks and telephones in language teaching.

Fifthly, Diego Mendes and Victor Amar with their article "Media and information literacy (MIL) and emerging methodologies in early childhood education and primary education degrees in Andalusia" analyze the curricula and teaching guides for Early Childhood Education and Primary Education in Andalucía in relation to Media and Information Literacy.

Also, Belén Mateos Blanco, Eva Álvarez Ramos, Leyre Alejaldre Biel, Milagrosa Parrado Collantes with the article "Vademecum of artificial intelligence tools applied to the teaching of languages" make a review to determine how Artificial Intelligence can be used with respect to communicative competence.

In seventh place is the article "Microcreativity with chat generative pre-trained transformer: Learnings in virtual space" developed by Lia Machado Fiuza Fialho, Vanusa Nascimento Sabino Neve and Karla Angélica Silva do Nascimento. It focuses on ChatGPT to analyze how it can contribute to the development of micro-narratives.

Ernesto Colomo Magaña, Alejandro Colomo Magaña, Andrea Cívico Ariza, Lauren Basgal with article "Pre-service primary teachers' perceptions of gamification as a methodology" analyze, through a quantitative study, the perceptions that future Primary Education teachers in initial training have about gamification.

In ninth place is the article by Irene Acevedo de la Peña and Daniel Cassany entitled "Student podcasting for foreign teaching-learning at university", which analyzes how podcasting has an impact on foreign language teaching.

Next, the article "Unlocking English proficiency: Youtube's impact on speaking skills among Indonesian university students" by Akhmad Habibi, Mailizar Mailizar, Lalu Nurul Yaqin, Turki Mesfer Alqahtani, Mukhlash Abrar, Budianto Hamuddin and Failasofah Failasofah appears to analyze the factors affecting in the use of YouTube in the development of English-speaking skills in Indonesia.

Then, María Pilar Molina-Torres with the article "Flipped classroom to teach digital skills during Covid-19" focuses on the impact of the Flipped classroom as a didactic method and its use through Moodle.

In twelfth place, Ernesto Pacheco-Velazquez, Virginia Rodés, David Salinas-Navarro with the article "Developing learning skills through game-based learning in complex scenarios: A case in undergraduate logistics education" to analyze through an implementation the impact of game-based learning.

Thirteenth is the article "Prospective narratives on global issues: An AI-based pedagogical model for assessing complex thinking" presented by Jorge Carlos Sanabria-Zepeda, Pamela Geraldine Olivo-Montañó, Inna Artemova, Amadeo José Argüelles-Cruz and that propose a pedagogical model for the creation and development of case studies, following a narrative scheme, which allows to address the challenges and challenges around the megatrends of the 4th Industrial Revolution, specifically with the megatrend "People and the Internet".

Muhammad Turmuzi, I Gusti Putu Suharta, I Wayan Puja Astawa, I Nengah Suparta with their article "Misconceptions of mathematics in higher education universities when learning with Google classroom based on learning styles and gender differences" want to describe the results of the analysis of concept understanding ability and misconceptions as a function of differences in learning styles.

In fifteenth place are Rosa Taberero Sala, Iris Orosia Campos Bandrés, María Jesús Colón Castillo, Daniel Laliena Cantero with the article "Learning how to read children's books in the digital society: Book trailers as an educational tool in higher education" in which they focus on how the book-trailer can become a tool to promote critical reflection.

And this special issue is closed by María Soledad Ramírez Montoya, Sandra Martínez Pérez, Laura Patricia Zepeda Orantes with the article "Horizons architecture with virtual reality for complexity environments: Mixed methods" to analyze the innovations perceived by graduate students in environments that use horizons architecture to integrate virtual reality.

We hope that this special issue will make sense in the educational community and serve to create a debate on the subject.

Keywords - Emerging methodology, emerging technology, university education, special issue.

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