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Editorial 

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## Editorial

With this issue, we open the third volume of the *Journal of Neuroeducation*, which is why we feel even more proud and proud to continue making visible the most relevant works of researchers from various countries that allow us to contribute to the construction of new knowledge about neuroeducation, build evidence, experiences and practices, and raise questions.

Universal Design for Learning (UDL) is a theoretical-practical framework that emerged in the 1990s in the United States. It is structured around three principles, with their respective guidelines and verification points. This model, which allows flexible environments, methods, materials, evaluation, objectives... to be designed, is closely associated with inclusive education. At present, all state and regional educational regulations contemplate the UDL in several of their articles. Due to this growing interest in the subject, this monograph arises that brings the reader closer to the UDL from different perspectives. Its different papers are presented in the Experiences and Perspectives section of this *journal*, except for two investigations, which are presented in the section related to them.

The first paper addresses the issue of accessibility as a key to educational inclusion. In this contribution, Villaescusa focuses on accessibility, offering various proposals that seek, through the implementation of the principles of universal design, to contribute to the identification and elimination of barriers generated by the permanent interaction of the school context with the diversity of the student body. This papers also helps to frame the model.

From a mind, brain and education science and narrative development perspective, Elizondo reviews the framework and reviews the need for further research, since while there is plenty of evidence for each of the guidelines and checkpoints, there is no research on the model, which may represent a limitation to the conceptual framework. It underlines the idea that UDL is not a methodology, but a conceptual framework that makes it possible to design proposals or flexible learning situations that minimize barriers.

Neuroeducational Research section – is closely related to the previous one. In it, Ferrer takes up the subject of neuronal variability and frames the UDL in neuroeducation, emphasizing the need for a paradigm shift and the objective of guaranteeing expert learners, committed to their learning, who accept their variability and who take responsibility for their objectives.

The fourth paper of the monograph relates active methodologies with universal design for learning. From the hand of García and Márquez, the idea that the UDL is not a methodology is insisted on again, but that the different guidelines and their verification points can be sources of inspiration for decision-making in the design

of active methodologies. These authors offer concrete examples to facilitate understanding.

In the following papers, focused on digital technologies at the service of universal design for learning, the author Rubio specifies technology for each of the networks of the UDL framework. It also reflects on the dark side of technology, such as the digital divide, hyperconnectivity, overinformation, threats and distractions from the network, inappropriate content, cyberbullying, techno-addictions or *fake news*, and emphasizes the need for a critical and ethical perspective that helps overcome discriminatory biases or algorithmic predictions based on standardized tasks that can limit their potential progress.

Neuroeducational Research section – deals with the effectiveness of teacher training in universal design for learning. Sánchez-Serrano makes a systematic review of the literature on this topic, which yields positive results regarding the effectiveness of teacher training in UDL, although he assures that more studies are needed to determine whether these results can be generalized to other experiences and training contexts.

In addition to the six papers mentioned that are part of the monograph on UDL, in the Neuroeducational Research section, Edjidjimo Madua presents us with a bibliographic review that provides findings based on neuroscience to help teachers facilitate the learning of foreign languages, to from which he produces a guide that exemplifies the incorporation of neuroscience principles within a standard English lesson.

It is followed by an investigation on metacognitive ability and its relationship with other related constructs, in which Goldstein and Calero end up providing possible implications and tools for teaching and developing the aforementioned ability in the school environment.

Finally, Nieves de la Vega presents us with an investigation based on the analysis and conceptualization of the pedagogical reflections of a group of teachers around the concepts of *evaluation*, *self-regulation* and *feedback* with a regulatory function.

On the other hand, the Experiences and Perspectives section is complemented by three experiences carried out by Subirats, Muchiut *et al.* and Lolumo.

In the first place, it reflects on how we can deal with the implications of education from the integral dimension of the learner in a multidimensional and multisystemic pedagogical model, the one proposed by *organized learning* (following his first paper published in the previous issue of the *journal*).

Secondly, an experience –to be explored in greater depth in future research– of the use of rubrics as a pedagogical practice for the assessment of executive functioning in high school students is presented.

And, thirdly, the following interesting question arises in the last paper, which brings us its didactic experience: if the brain is the director of operations that students

use in all their processes, shouldn't they know how to use it in the best possible way to learn?

To close the issue, in our appreciated Neuromads section, all the papers are collected to guarantee that adolescents have access to the latest advances in the field of neuroeducation. This section provides eight summaries corresponding to the papers that accompany each shipment. From this space we greatly appreciate the work of the young people who have accompanied us in recent months, also reviewing these works in a *peer review process*, forming part of the great family that we are, the people involved in this magazine, and we give them the thank you for your cooperation.

The *Journal of Neuroeducation team*, the journal sponsored by the UB-EDU1st Chair in Neuroeducation, wishes you happy reading. ■

*Dr. Laia Lluch, Coral Elizondo, Dr. Anna Forés, Dr. David Bueno*