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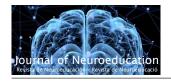
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Editorial

The objective of this journal is to build bridges between the scientific community and the educational community, in order to shape what has been called the science of learning; that is, base educational practice on scientific evidence. Its open access policy is therefore an exercise in coherence, because if it wants to be a tool for change, it must be accessible to all those interested in advancing their knowledge in the educational area.

On the other hand, this journal assumes as its own responsibility the preparation of people in a highly uncertain and changing present and future, where research will provide us with tools to deal with problems that we are still unaware of. It is true that we live in liquid times, in Zygmunt Bauman's terms, in which society has no references on how to act, since the problems are either completely new, or even unimaginable from the present. Issues such as transhumanism, artificial intelligence, virtual consciousness or the irruption of virtual reality, rather represent a paradigm shift in human reality. Hence the need, not just to look for solutions, since we still don't know the problems, but to equip ourselves with tools to know how to handle uncertainty.

For this reason, this monograph deals with the relationship between neuroeducation and ethics. In previous issues of the journal, aspects of great relevance for the neuroscientific training of educators have been collected in a rigorous, broad and solidly based sense. Following a line of moral coherence, the question of the role of ethics in neuroeducational advances is now addressed. From the ethics of professions -as applied ethics-, we are reminded that what legitimizes the existence of a profession is its end, which is identified with the internal goods that those who dedicate themselves to it must pursue. Thus, we situate ourselves within the framework of the ethics of the teaching profession. Among those traits that help define what a profession is, we find vocation and excellence. Excellence is a virtue that makes sense within a community, since it is excellent who is capable of offering the best of himself to others, putting his professional activity at the service of a more just society. For this, it is necessary to be technically competent and morally upright.

This monograph seeks that exercise in excellence, that commitment to the internal goods of the teaching profession, which is committed to rigorous research, but not as an end in itself, but as a basis for practical transformation. Ethics as a philosophical discipline does not make sense without its practical, transformative and critical aspect. According to Kant we need a compass to orient ourselves in the moral world. What society do we want? What society do we need? Let's think about it because the society we will have will be the result of the education we have given it.

Losing the north implies losing the way, because the north as a reference helps you to go where you want to go. But if we lose our way, we walk, as they say, disoriented, without knowing where our steps are taking us. Ethical reflection sets that direction for us so that the transformative power of education is not lost, because like any profession, education is meaningless if it does not contribute to a more just world where its people can act autonomously and based on solidarity.

The articles that make up this monograph are developed in this line. In the first place, Carlos Sanmartín addresses the relationship between values and emotions from a philosophical and neuroscientific perspective -framed in Zubiri and Damasio- that focuses on the study of epigenesis, which allows us to understand how the composition of habits and behaviors takes place. behaviors that are so important in the learning process. Education is not only a question of curriculum, but of holistic education, which, as the different educational laws of recent times remind us, must attend to the education of civic and democratic habits.

Orts delves into this subject from another perspective, who in her article on moral emotions focuses specifically on whether it is possible to educate in the virtue of compassion. Analyze this question from neuroscience, comparing different phenomena such as *theory of mind, action understanding* and empathy, which allows him to infer that these phenomena differ in terms of the neural substrates involved. He focuses his study on the comparison between empathy and compassion, to end up proposing education in what he calls ethical compassion, which he considers a key moral capacity.

These two articles address the question of moral education from the neuroeducational framework, focusing on the moral emotions that guide our conduct. They are, therefore, investigations aimed at knowing in depth how to favor the forging of character in an Aristotelian sense, the forging of êthos, that ethical character that drives us to want to act seeking justice within a framework of universalist civic solidarity. Given the uncertainty that we previously put on the table as a challenge for education, we can doubt what solutions we will obtain to problems yet to be imagined, but what we can be sure of as a society is that addressing these problems will always need that north morality and a citizenry that wants to act with ethical compassion seeking a just society.

Some of this uncertainty is addressed in the third article. From an ethical perspective, the consequences of including the metaverse in the educational field are analyzed. María José Codina carries out an investigation whose central nucleus is the promises that the metaverse seems to offer. These promises, still to be defined and de facto specified, are reviewed from the principles of neuroeducation to study their consistency with said principles. To later make a speculative analysis from moral philosophy on the ethical implications that this change in the educational paradigm could have. Towards what model of society does this inertia, pushed by the enthusiasm that these types of promises provoke, lead us? If we do not reflect on it, we will go blind without knowing where we are going.

Finally, the article presented by Ana Cecilia Franco lands squarely in educational practice, thus completing both the theoretical and practical dimensions of ethics

- without losing sight of the fact that ethics, as it has been addressed here, always has a practical dimension when dealing with applied ethics. Ana Cecilia Franco presents her research focused on how neuroeducation enhances ethical and civic competencies in students. This task focuses on the neuroeducational foundation of transversal subjects such as in the professional program, ethics and citizenship. The figure of the neuroeducator stands out, whose task would be to potentiate ethical and civic competences from significant psycho-pedagogical practices. To do this, he makes use of the concepts of moral innateness, proactive epigenesis and metacognition. In his research, he defends that neuroeducational practice turns ethical education into a real transformation of the civic character of students.

In addition, the number includes the work by Díaz-Cabrales and Gomes Fontoura who, independently of the monograph on ethics and neuroeducation, present, first of all, the design and validation of an instrument to measure the neuroeducational level of the practice teacher or didactic planning. While, secondly, the results of a neuroeducational intervention proposal are presented, based on (socio)emotional education with the ultimate objective of determining the abilities and difficulties of students with ASD in the municipality of Vinhais (Portugal).

This issue is headed, in the Editorial section, by the works by David Bueno entitled "Science and humanities during childhood and adolescence" and by Donna Coch, "Building a brain that can read"; and it is closed with the section Neuromads. This last section contains a summary version of all the articles so that they are accessible to the adolescent population. Fostering curiosity for knowledge, a taste for research and encouraging the use of reliable information sources is also an ethical task of great need today, in a society where the amount of information of dubious quality encourages misinformation -infoxication- and social polarization. Therefore, we value the work that this section carries out helping to educate from the love of knowledge, rigor and innate curiosity in human beings.

Education unites - must unite - science and ethics, if it wants to be education in a human sense. Let us continue walking the path together, since there are many of us who feel committed to the mission of this profession. As the German philosopher Axel Honneth would say, being optimistic is a moral obligation.

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

María José Codina Felip Laia Lluch Molins

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