

## The Impact of Neuroscience Knowledge on the Field of Education

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**Abstract :** Research on how the brain learns has a transcendental application in the educational context. It is crucial for teacher training to understand the nature of brain changes and their direct influence on learning processes. This communication is based on a literature review focused on neuroscience, neuroeducation, and the impact of digital technology on the human brain. Information was gathered from both English and Spanish language sources, using online journals, books and reports. The general objective was to analyze the role of neuroscience knowledge in enriching our understanding of the learning process. In fact, the authors have focused on the impact of digital technology on the human brain as well as its influence in the field of education. Neuroscience knowledge can contribute significantly to improving the training of educators and therefore educational practices. Education as an instrument of change and school as an agent of socialization, it is necessary to understand what it aims to transform: the human brain. Understanding the functioning of the human brain has important repercussions on education: this elucidates cognitive skills, psychological processes and elements that influence the learning process (memory, executive functions, emotions and the circadian cycle); helps identify psychological and neurological deficits that can impede learning processes (dyslexia, autism, hyperactivity); It allows creating environments that promote brain development and contribute to the advancement of brain capabilities in alignment with the stages of neurobiological development. The digital age presents diverse opportunities to every social environment. The frequent use of digital technology (DT) has had a significant and abrupt impact on both the cognitive abilities and physico-chemical properties of the brain, significantly influencing educational processes. Hence, educational community, with the insights from advances in neuroscience, aspire to identify the positive and negative effects of digital technology on the human brain. This knowledge helps ensure the alignment of teacher training and practices with these findings. The knowledge of neuroscience enables teachers to develop teaching methods that are aligned with the way the brain works. For example, neuroscience research has shown that digital technology is having a significant impact on the human brain (addiction, anxiety, high levels of dopamine, circadian cycle disorder, decrease in attention, memory, concentration, problems with their social relationships). Therefore, it is important to understand the nature of these changes, their impact on the learning process, and how educators should effectively adapt their approaches based on these brain's changes.

**Keywords :** digital technology, learn process, neuroscience knowledge, neuroeducation, training professors

**Conference Title :** ICEN 2023 : International Conference on Educational Neuroscience

**Conference Location :** Sydney, Australia

**Conference Dates :** December 04-05, 2023