

ARTIFICIAL INTELLIGENCE IN EARLY CHILDHOOD EDUCATION

Carolina Sausen; carolinasausen@hotmail.com; Federal University of Santa Maria

Technology has been observed to have significant potential to transform social practices, and, in education, artificial intelligence has been used as a tool capable of personalizing learning and enhancing its efficiency. However, a central question arises: is such efficiency valid if essential dimensions of child development, such as creativity, are neglected in the process? Papert (2008) contributes to this discussion by asserting that digital technologies, when used within a constructionist approach, can enhance creative learning processes, enabling children to learn by doing, creating, and exploring. Understood as the ability to break patterns, explore the unpredictable, and produce original solutions, creativity is a fundamental element of human development, particularly in childhood. In municipal schools in Ijuí, Rio Grande do Sul, the use of technological resources aims to challenge children to become familiar with digital technologies, demonstrating that these can serve as pedagogical tools that enhance, rather than replace, educational experiences. The method adopted is based on promoting active interactions with different devices in a planned and intentional manner, seeking to stimulate imagination, autonomy, and knowledge construction. This paper shares selected experiences developed in early childhood education classes in 2025. These include practices that connect the physical world with virtual environments through interactive digital books and audiobooks, facilitating access to literature for children who have not yet learned to read and write and broadening their exposure to different narratives. Digital books available on educational websites are used, as well as original works organized on the Canva platform, featuring stories and illustrations created by the children themselves. These strategies sparked greater interest and engagement, while also encouraging families to explore digital environments focused on reading and interactivity, replacing use limited to short videos or randomly selected games. In the area of language and expression, lullabies were explored in an innovative way. The children were invited to draw the “bogeyman” as they imagined it would look if it were real. Subsequently, during a play-based activity, it was announced that, through “magic,” the characters would come to life and be able to talk to them. Artificial intelligence was used as a pedagogical resource, transforming the drawings into three-dimensional characters with movement and voice. The children provided the narration, giving the characters identity and expressiveness. To conclude, a short film was produced, bringing together artistic creation, imagination, and technology. Digital games were also explored as play-based resources, supporting the development of cognitive, social, and motor skills. The use of the

Chromebook provided initial contact with the computer, familiarizing children with the digital environment and promoting learning through challenges and problem-solving. These experiences demonstrate that the mindful use of technology and artificial intelligence can contribute to children's holistic development, provided that it serves creativity, curiosity, and expression, with technologies understood as pedagogical mediators rather than ends in themselves (MORAN, 2015; LUCKIN et al., 2016). Thus, it is reaffirmed that the aim of education is not to develop merely efficient individuals, but critical, creative, and sensitive human beings (FREIRE, 1996).

Keywords: Artificial intelligence. Early childhood education. Creativity. Educational technologies. Meaningful learning.