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A Reference Model for Artificial Intelligence Techniques in Stimulating Reasoning, and Cognitive and Motor Development

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Abstract

Artificial Intelligence is increasingly being discussed as something essential and pressing in all aspects and areas of society. Its potential use in education is no exception. Artificial Intelligence, in particular, and technologies, in general, are unavoidable elements to be considered in the teaching-learning process at all levels of education and training.
There are many initiatives, essentially exploratory in nature, for the application of Artificial Intelligence in this process. Therefore, it is imperative to understand how they can be used for this purpose and how they relate to pedagogical methods.
In the present study, and within this context, we address how Artificial Intelligence can be used in software to support cognitive and motor development and stimulate reasoning. We propose a reference model for techniques for this purpose. Concrete cases of existing applications are presented to better illustrate the potential of Artificial Intelligence in education.

Keywords: Artificial Intelligence, Teaching, Cognitive Development, Motor Development.

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