

The Metaloop Paradigm in Education

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Abstract

Among living species Sapiens may be characterized by her/his ability to learn and teach through sophisticated interactions. Consequently, human beings could be considered in a perpetual learning-and-adapting mode frequently called ‘continuous learning. In [Cha et al. 21], the role of metacognition in learning interactions has been emphasized; in the present paper we develop the concept of adaptive interactive devices so as to allow all categories of humans to be helped or taught. A pragmatic aim is to design a human continuum from PWD to valid persons within a dynamic model. Indeed, disabilities are often considered: 1) as discrete features, 2) as everlasting impairments, thus a valuable objective is to offer a frame allowing to consider PWD and valid persons along a continuous scale.

Considering any interaction situation as a learning process, especially in the PWD cases, we proposed a MetaLoop paradigm based on learning experiment in high sophisticated environment such as piloting in order to offer a multi agent dynamic approach: - the person (pwd or valid) is said to be the student characterized by her/his ‘experimental density, - another agent (machine or instructor) is the professor, and the interaction by itself is considered as a meta-agent that allows a continuous loop of progress and empowerment of the experimental densities to be stated for all the agents: students (valid or PWD), teachers, and mediators.

Within this formal frame, any PWD whatever her/his impairment is, is a valuable dynamic cognitive agent whose praxis evolves through a continuous interactive process.

Keywords: continuous learning, experiential density, continuum, PWD