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Concrete Elaboration During Knowledge Acquisition

Herman Jonker



Herman Jonker Concrete Elaboration During Knowledge Acquisition

The aim of this research project was to explore the concept of concrete elaboration in order to find new solutions for the learning paradox, the problem that knowledge is necessary to acquire knowledge.

On the basis of the four experiments described in this book, a model was proposed of the process of knowledge acquisition by elaborating expository texts, in which inductive elaborations were embedded in the internal information processing component which produces new concepts. According to this model, students with a high score on the scale of concrete elaboration utilize three pathways to elaborate concepts and example in an expository text: abstract to abstract, abstract to concrete, concrete to concrete. Low scoring students are confined to two pathways: abstract to abstract, and concrete to concrete, with a strong preference for the latter type of elaboration. Low scoring students run the risk of accumulating concepts and examples, instead of constructing new knowledge.

The findings have clear implications for education: students should be engaged in concrete experiences which are the basis for inductive knowledge construction. But they should also become familiar with concepts and theories which help them to focus the process of concrete elaboration, and, in this way, enhance the chances of meaningful induction.

