

The effectiveness of the Interleaving Method in Mathematics Learning in terms of Problem Solving Ability and Cognitive Load

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ABSTRACT

The block learning method occurs when all activities related to learning skill A are presented before moving on to all activities for learning skill B, for example AAABBB. Alternatively, the interleaving learning method occurs when each skill A learning activity is alternated with skill B learning, for example ABABAB. Not many studies have discussed the positive effects of interleaving methods on cognitive skills, including mathematics learning, but study results consistently show that interleaving methods improve subsequent test performance. The interleaving learning method juxtaposes problems that target different concepts or procedures, so this method is believed to encourage students to notice the similarities and differences between problem categories and improve their ability to choose the most appropriate problem-solving strategy.

The aim of this research is to describe the potential of the interleaving method in mathematics learning in terms of Cognitive Load Theory. The results of this research are used as a preliminary study for the dissertation, which is planned to design the principles of learning using the interleaving method and what factors influence the effectiveness of the interleaving method in learning mathematics. The type of research used is a narrative literature review. The stages carried out are defining the scope of the topic to be reviewed, identifying relevant sources, reading and analyzing the literature, writing a review, and applying the literature to the study to be conducted.

Kata Kunci: interleaving method, mathematics learning, Cognitive Load Theory