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Abstract

A total of 266 Finnish students participated in a flexible equation solving test. By flexibility we understand the knowledge of multiple strategies and ability to choose the most mathematically appropriate strategy for a given task. Here we focus on the first aspect, namely knowledge of appropriate alternative, so-called innovative strategies. The test measured students' capacity and inclination for producing innovative strategies. We consider the relationship between these measures and students' speed and accuracy in solving equations. We find that students with high capacity for innovation have high speed and accuracy. On the other hand, some low capacity students had high speed or accuracy whereas others had low. Inclination for innovation is not related to speed or accuracy.

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