Self-Tests Improve Judgment Accuracy for Application

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Prior research has shown that self-testing improves judgment accuracy for initially tested facts and comprehension (e.g., Nelson & Dunlosky, 1991; Maki, 1998). This study investigates the effects of self-testing versus rereading on judgment accuracy for application of knowledge. We expect to find that self-testing also improves judgment accuracy for application of knowledge because students can use more valid cues for their judgments when they make a test before judging how much they learned (see Koriat, 1997).

The results show that students who made an initial test provide significantly more accurate judgments, both for repeated application questions (i.e., included in the initial test) and transfer questions (i.e., application of the same principle/procedure in a different context). Additionally, participants who were tested, performed better on the repeated question, but not on the transfer questions.

Thus far, only very few studies looked at judgment accuracy for application although application and accurate judgment of learning are important learning goals in mathematics and science education.

References

