Teaching Mathematics Vocabulary with an Interactive Signing Math Dictionary

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Summary

The research described in this article examined the use of a Signing Math Dictionary (SMD) to help middle school students who are deaf and hard of hearing access the vocabulary required to master the mathematics content that underlies the topics they are studying.

The study included eight separate classes and a total of 39 participants—8 teachers and 31 students—representing grades 4–8. The research design incorporated a descriptive case study methodology that involved observing (a) teaching mathematics without the SMD, (b) preparing students to use the SMD, (c) teaching mathematics with the SMD. The results suggest that, when used in actual classroom settings, the SMD may be a resource that supplements effective teaching and learning of the vocabulary of mathematics. However, further research is needed to study its use by both experienced and inexperienced teachers working with students in schools for the deaf and in inclusion settings, across math topics and grades.

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