

ZMATH 2013b.00940

Bouck, Emily C.; Joshi, Gauri S.

Assistive technology and mathematics education: reports from the field.

J. Comput. Math. Sci. Teach. 31, No. 2, 115-138 (2012).

Summary: Mathematics is a critical content area and assistive technology can benefit students with high incidence disabilities in accessing and achieving in this domain. Yet, the field lacks awareness of how often teachers use assistive technology in mathematics and what types of technology they are using. This study sought to understand teachers' self reported use and perceived effectiveness of assistive technology in mathematics as well as factors hindering and encouraging use of assistive technology in teaching mathematics to students with high incidence disabilities. Middle school special education teachers in two states were surveyed. Three main results were found: (a) relatively little technology is reported being used to teach mathematics to this population, (b) teachers generally perceived the technology for mathematics to be effective, and (c) teachers reported not being effectively prepared to teach with technology and felt knowledge and training served as both a barrier and a support to its implementation.

Classification: U56 C76 D46 U66

Keywords: teaching-learning processes; calculators; educational software; media technology; teacher role; effectiveness