

### **Journal Article Summary:**

#### Teachers of Students with Visual Impairments Share Experiences and Advice for Supporting Students in Understanding Graphics

Rosenblum, L. P., Cheng, L., & Beal, C. R. (2018). Teachers of students with visual impairments share experiences and advice for supporting students in understanding graphics. *Journal of Visual Impairment & Blindness*, 112(5), 475–487.  
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Penny Rosenblum and her team of researchers at the University of Arizona conducted an inquiry into the methods that educators use to support visually impaired students in learning how to graph. Students with visual disabilities need visual support starting from their earliest days in school, and numerous studies have been done on how teachers support their visually impaired students with reading and writing. However, there has been little research done to date on the degree to which students with visual impairments need mathematical support. The researchers noted that it has been widely acknowledged that students with visual impairment are at a disadvantage in acquiring graphing skills due their disability. In conducting their study, Dr. Rosenblum's team wanted to determine what, if any, mathematical support was being provided to visually impaired students.

To conduct the study, Dr. Rosenblum and her team set up focus groups with eleven teachers who worked with visually impaired students. Each of the focus groups were recorded, transcribed and evaluated by the team. The teachers in each group were asked what mathematical support they provided to visually impaired students, and if the support included specific assistive technology and instructional methods.

The research results showed that teachers in each group reported the importance of providing visually impaired students with detailed and clear instructions in how to graph and perform mathematical calculations. The teachers also shared that they used a variety of assistive technological tools to help their students, including magnifying screens and physical and digital math manipulatives. Finally, the researchers found that all of the teachers in the focus groups felt it was crucial to provide visually impaired students with individualized, differentiated instruction in mathematics. The teachers in the study also expressed a desire for the development of specialized standards and curriculum to meet the needs of visually impaired students in learning mathematics.

### **References**

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