

One of a Kind

Nunes, T. (2004). *Teaching mathematics to deaf children*. London: Whurr. 177 pages. Paperback. £19.50 (\$36.59).

The disparity in mathematical performance between deaf and hearing students is well documented in educational literature. The 50th percentile deaf and hard-of-hearing high school graduates have computational skills comparable to 6th-grade hearing students and have problem-solving skills comparable to 5th-grade hearing students (Traxler, 2000). Deaf children lag mathematically behind hearing children by about 3 years, despite normal nonverbal IQs (Wood, Wood, & Howarth, 1983). Some contend that mathematical ability influences future employment and earnings to a greater extent than the influence of reading ability (Kelly, 2003).

Terezinha Nunes seems to have written this book with the intention of reaching several audiences simultaneously. In a clear and understandable format, Nunes presents a perspective informed by research. The research is presented in a linear progression through the early stages of mathematical development from knowledge of the counting string up to multiplicative reasoning. Nunes sets the stage with an account of the statistics relating to deaf students' progress in mathematics education. She then offers an explanation, backed by correlational data, why deafness is not the cause of the difficulties experienced by deaf children in math education. Throughout the progression, Nunes illuminates where and why deaf students may be experiencing difficulties in key developmental periods and how said difficulties may cause further delays in subsequent mathematical development. Each chapter contains possible intervention techniques that have been implemented by Nunes through various research projects in the United Kingdom. In the end, Nunes presents and assesses a comprehensive intervention

program designed to address the aforementioned critical delays or gaps in deaf children's mathematical learning.

Given the disparity experienced by deaf students and the well-documented advantages of students' success in mathematical education, the insufficiency of research in this area is cause for concern. Therefore, this book is a monumental contribution given that this is practically the only work of its kind. Although the research presented here primarily focuses on the development of mathematical concepts in deaf children, the findings illuminate possible causes for some of the difficulties experienced by deaf students and witnessed by parents and teachers through postsecondary mathematics education. For researchers, this book offers a concise review of Nunes's work as well as the findings of other researchers in relation to her work in this area. More important, it highlights the need for further study.

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References

- Kelly, L. (2003). *The development of the mental representation of number magnitude in children with hearing-impairment*. Unpublished master's thesis, University of Aberdeen, Scotland.
- Traxler, C.B. (2000). The Stanford Achievement Test, 9th edition: National norming and performance standards for deaf and hard of hearing students. *Journal of Deaf Studies and Deaf Education*, 5, 337-348.
- Wood, D., Wood, H., & Howarth, P. (1983). Mathematical abilities of deaf school-leavers. *British Journal of Developmental Psychology*, 54, 254-264.