



Book Reviews

Chinn, Steve (2017). *More Trouble With Maths: A Complete Manual to Identifying and Diagnosing Mathematical Difficulties* (2nd ed.). Abingdon, United Kingdom: Routledge. 210 pp. ISBN 9781138187504.

Book Review of "More Trouble With Maths" (2017) by S. Chinn

Sarah R. Powell*a

[a] University of Texas at Austin, Austin, TX, USA.

Journal of Numerical Cognition, 2017, Vol. 3(3), 723–725, doi:10.5964/jnc.v3i3.145 Published (VoR): 2018-01-30.

*Corresponding author at: 1912 Speedway Stop D5300, Austin, TX 78712, USA.



This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International License, CC BY 4.0 (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Overview

More Trouble With Maths provides an easy-to-read primer for assessing and diagnosing mathematics difficulties. The author focuses on identifying mathematical strengths and weaknesses, and this information will help educators inform classroom instruction. Because there are many ready-to-use checklists and assessment activities, any educator could read this book and start applying some of the activities immediately. In other words, translating the text into practice is straightforward. In summary, this book is an excellent resource for educators or parents who need to learn more information about the complexities of mathematics difficulty for specific children.

Content

Chapter 1, like the entire book, is presented from a British perspective. Nonetheless, the author does a commendable job of incorporating literature from across the world. In particular, the percentages of students who have difficulty with different types of problems (described in pages 6-7) is very helpful to understand the profiles of students who have difficulty with mathematics. Chapter 2 provides a discussion about the overuse of norm-referenced assessments, and this is an important one for educators to reflect on, and so I'm happy to see it included here. This chapter is informative for determining which assessments might be used to understand student strengths and weaknesses. At the same time, it would be helpful to have a section on progress monitoring in mathematics and how educators can use progress-monitoring data to make instructional decisions about students.

I've never seen a dyscalculia checklist, so Chapter 3 was interesting in doing just that. I liked the checklist on pages 32-33. For many of the mathematical tasks, I would like to have seen a little more detail. For example, this chapter discusses math facts, and yet I was left wondering – what are the definitions of math facts? Not everyone agrees on the same definition and educators may include facts that are not exactly facts. In addition, the book does not go into much details about typical expectations by age or grade level. For example, while it might be the case that we would not expect seven-year-olds to make change, but we would have that expectation for 12-year-olds. Moreover, the chapter could have been enhanced by discussing, for example, improbable estimations and elaborating upon mental arithmetic. To what place value does the arithmetic need to be mental?

In Chapter 4, the author discussed the use of activity cards, and it is helpful to have the cards ready for printing. On the other hand, what are typical responses and scores from the assessment using these cards? It was not clear on my reading and educators would like to know that information.

Subsequent chapters focus on a variety of relevant background issues (such as the relevance of short-term and working memory for learning in Chapter 5, and the relationship between basic operations such as additional and subtraction, division and multiplication in Chapter 6) alongside assessment materials (Chapter 8 describes a 15-min normative referenced mathematics test). In discussing the test, I glad to see that the author included so much information about errors. Educators can use error patterns and common errors to inform instruction, so this seems particularly useful and informative. There is also a chapter focusing on learning styles (Chapter 10) and the utility this concept is being significantly challenged right now (Pashler et al., 2008). Consequently, this chapter is not as helpful as the others. My concern is also that educators can stereotype students based on the profiles, and miss important information.

The final chapter offers some sample reports, with teacher observations and parental pre-assessment. These are helpful for such groups in giving explicit guidance.

Conclusion

The real strength of this book is in its focus on diagnosing and identifying students with mathematics difficulty. It leaves me reflecting on the difficult question of "what to do next", maybe by providing resources that educators and parents could access. The identification of a mathematics difficulty is the easy part. The hard part is the instructional part!

Funding

The author has no funding to report.

Competing Interests

The author has declared that no competing interests exist.

Acknowledgments

The author has no support to report.



Powell 725

References

Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2008). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest*, 9, 105-119. doi:10.1111/j.1539-6053.2009.01038.x

