

Bundle 1 Articles and Refs Quicklist

TIAN Bundle 1 Articles and References (For Teachers) about Strengthening Number Sense Flexibility and Fluency

- Burns, M. (March/April 2007). **Mental Math** from *Instructor*. Suggestions for teaching students to do math mentally.
 - Carroll, W.M. (1996). **Mental Computation of Students in a Reform-based Mathematics Curriculum** Describes results of mental math study with two classes of fifth graders.
 - Curry, D. (Spring 2007). **Integrating Arithmetic and Algebra**. *The Math Practitioner*, Vol.13(1), p. 5-7.
 - Menon, R. (Spring 2004). **Preservice Teachers' Number Sense**. *Focus on Learning Problems in Mathematics*, Vol. 26(2). This article includes a ten-item assessment used with teachers to learn more about their own sense of numbers. Try it yourself!
 - Seeley, C. (2005). **Do the Math in Your Head** Ex-president of NCTM talks about the need for mental math.
 - **Ten Research Findings from "Adding It Up"** Short research findings based on the book *Adding It Up: Helping Children Learn Math* from the National Research Council.
 - **What Is Computational Fluency?** This brief piece provides an overview of NCTM's stance on computational fluency and flexibility.
 - Fennell, F. (2008). **Number Sense - Right Now!** from *NCTM News Bulletin* Former NCTM President defines number sense with concrete examples.
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General Background Readings

- Bransford, J., Brown, A. & Cocking, R. (Eds.) (1999). How Experts Differ from Novices (pp. 19-38) in *How People Learn: Brain, Mind, Experience, and School*. National Academy Press Washington, DC.
Research notes how people move from novice to expert, including how flexibility and fluency help move people along the continuum. To access this article, please click on the following link or cut and paste it into your browser window: http://www.nap.edu/catalog.php?record_id=9853. Below the book information are Option tabs. Choose the second option "Contents", and you will be taken to a Table of Contents for the book. Select *Chapter 2: How Experts Differ from Novices*.