

**ZMATH 2015c.00855**

**English, Lyn D.**

**Surviving an avalanche of data.**

Teach. Child. Math. 19, No. 6, 364-372 (2013).

From the text: The National Council of Teachers of Mathematics (NCTM) continues to emphasize the importance of early statistical learning; data analysis and probability was the Council's professional development "Focus of the year" for 2007–2008. Such a focus is needed, especially given the results of the statistics items from the 2003 NAEP. As *M. Shaughnessy* ["Research on statistics learning and reasoning", in: F. K. Lester jun. (ed.), Second handbook of research on mathematics teaching and learning. A project of the National Council of Teachers of Mathematics. Charlotte, NC: Information Age Publishing (IAP) (2007)] noted, students' performance was weak on more complex items involving interpretation or application of items of information in graphs and tables. Furthermore, little or no gains were made between the 2000 NAEP and the 2003 NAEP studies. One approach the author has taken to promote young children's statistical reasoning is through data modeling. Having implemented in grades 3–9 a number of model-eliciting activities involving working with data, she observed how competently children could create their own mathematical ideas and representations – before being instructed how to do so. She thus wished to introduce data-modeling activities to younger children, confident that they would likewise generate their own mathematics. The author recently implemented data-modeling activities in a cohort of three first-grade classrooms of six-year-olds. In this article, she reports on some of the children's responses and discusses the components of data modeling the children engaged in.

*Classification:* K42 K52

*Keywords:* probability; statistics; data analysis; classrooms; elementary school mathematics

<http://www.nctm.org/publications/article.aspx?id=35402>