

ZMATH 2015f.00289

Middleton, James A.; Cai, Jinfa; Hwang, Stephen

Why mathematics education needs large-scale research.

Middleton, James A. (ed.) et al., Large-scale studies in mathematics education. Cham: Springer (ISBN 978-3-319-07715-4/hbk; 978-3-319-07716-1/ebook). Research in Mathematics Education, 1-13 (2015).

Summary: Over the years our community has benefitted greatly from the application of survey methods to the discernment of patterns in student mathematics performance, attitudes, and to some degree, policies and practices. In particular, such research has helped us discover differential patterns in socioeconomic, gender, and ethnic groups and point out that, as a system, mathematics curriculum and instruction has hardly been equitable to all students. From the National Center on Education Statistics (in the US), large scale studies such as High School and Beyond, the Longitudinal Study of American Youth, and the National Assessment of Educational Progress came important calls to focus attention on improving instruction for marginalized populations and to increase emphasis on more complex problem solving than had typically been the norm.

Classification: D20

Keywords: large-scale studies

doi:10.1007/978-3-319-07716-1_1