

ZMATH 2015f.00326

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Challenges in conducting large-scale studies of curricular effectiveness: data collection and analyses in the COSMIC project.

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, 75-91 (2015).

Summary: We discuss several challenges encountered during data collection and analyses in the Comparing Options in Secondary Mathematics: Investigating Curricula (COSMIC) project, a 3-year longitudinal comparative study of integrated and subject-specific curricula. Previously reported findings obscure the complexities associated with conducting well-designed studies of curricular effectiveness. In this chapter, we highlight key issues in our analyses of student and teacher data, and the construction of multilevel models of student learning outcomes. We discuss how these challenges were addressed, justify our decisions, and offer implications for conducting large-scale curriculum research in mathematics education.

Classification: D30 B70 D20

Keywords: curricular effectiveness; curriculum; cross-sectional analysis; integrated curriculum; longitudinal analysis; model reduction; secondary mathematics

doi:10.1007/978-3-319-07716-1_5