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Challenges and opportunities for second language learners in undergraduate mathematics.

Barwell, Richard (ed.) et al., Mathematics education and language diversity. The 21st ICMI study. Cham: Springer (ISBN 978-3-319-14510-5/hbk; 978-3-319-14511-2/ebook). New ICMI Study Series, 85-101 (2016).

Summary: In this chapter, we describe challenges and opportunities that second language learners face in undergraduate mathematics programs. The presence of such students is nowadays common in many undergraduate courses due to migration, student mobility, and other factors. We provide examples of various multilingual contexts at the university level, summarize insights from international research on this topic, and present emergent proposals for helping students to overcome these challenges. This chapter highlights the importance of continuing research on the topic of second language learners in undergraduate mathematics courses so that we can offer research-based approaches to improve undergraduate mathematics teaching in multilingual contexts. This chapter will support the mathematics education research community involved in advanced mathematics, as well as instructors and policy makers, to develop awareness of the issues involved in undergraduate mathematics learning and teaching for second language learners.

Classification: C55 D75

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