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Abstract

Mathematics textbooks are teaching tools used by most students studying mathematics worldwide. In this descriptive textbook analysis, all Swedish mathematics textbooks for year 1, both digital and printed, were mapped out according to the resources used for communication. For delimitation, a focus on subtraction as an arithmetic operation was chosen. The result shows large differences between the 17 textbook series, concerning both the type of subtraction exercises offered and the use of different resources for communication and learning, such as writing, images, and mathematical symbols. Digital textbooks were largely similar to the printed textbooks, except for one tablet-based textbook. Altogether, the study shows that the choice of mathematics textbooks affects how subtraction is presented to students and, by extension, the learning situations students encounter when working with mathematics textbooks.

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Malin Norberg is a senior lecturer in education at Mid Sweden University and earned her PhD in the spring of 2020 with the thesis *From design to meaning creation – a multimodal study of students' work with mathematics textbooks in year 1.* Her research interest mainly concerns communication and multimodality in mathematics education. She has previously worked as a teacher educator and primary school teacher.