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Problem solving, exercises, and explorations in mathematics textbooks: a historical perspective.

Silver, Edward (ed.) et al., Pursuing excellence in mathematics education. Essays in honor of Jeremy Kilpatrick. Cham: Springer (ISBN 978-3-319-11951-9/hbk; 978-3-319-11952-6/ebook). Mathematics Education Library, 71-84 (2015).

Summary: This paper analyzes the tasks proposed in several Portuguese mathematics textbooks from the nineteenth to the twenty-first century. A look at the nature and intended purpose of these tasks raises interesting issues about school mathematics teaching and learning. Has the meaning of terms such as “problem” and “exercise” been always the same? What other terms have been used in textbooks to designate mathematics tasks? What were the reasons for the changes? The analysis of the evolution that occurred in the terminology as well as in the nature of the tasks proposed to the students provides elements to reflect about what are the changes that have occurred in mathematics teaching and learning and how some changes are more apparent than real.

Classification: U20 D50 A30 H30

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