Preface

The idea for this book emerged from discussions at the Research Study Conference 15 organised by the International Commission for Mathematical Instruction. The study focused on professional education and development of teachers of mathematics and brought together invited participants from around the world. The authors in this book are a selection of presenters at that study conference, who subsequently contributed chapters with examples and elaborations of tasks used in primary mathematics teacher education. The authors first provided outlines that were subsequently reviewed by the editorial group and then after a second review process revised to produce the chapters you will find here.

This book is organised in three sections. The first section presents chapters with tasks for teachers and teacher educators that indicate the cyclic character of the work. The second section concerns tasks as a tool for developing mathematical knowledge for teaching. The third section is related to tasks as a tool for developing knowledge through and for practice. These three categories are of course overlapping but help to focus key aspects of the purpose of the tasks. Each section begins with an overview and the book ends with a concluding chapter.

The chapters in this book describe tasks that have been used successfully in mathematics teacher education for primary teachers in a range of contexts and countries. These tasks are often exemplars of broader categories of tasks or illustrative of techniques for developing particular understandings. While the tasks have a practical and experiential focus, a theoretical or research-based justification is included for each of them.

We do not see this as a book about how mathematics teacher education is conducted in a particular country or institution or about the policy for that but rather as a book about research-driven practices. The primary audience for this book will be mathematics teacher educators who focus on the preparation of elementary/primary teachers. The tasks are applicable across a range of contexts. While the tasks themselves are a useful resource, the rationales and discussions of the nature and purpose of such tasks can provide richer understanding of the role of tasks in primary mathematics teacher education – tasks as the meta-level focus.
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