What does it take to achieve lasting improvement in student numeracy achievement? Our view is that the combination of high-quality teachers of mathematics and highly capable educational leaders working in close collaboration is the key foundational element. Yet in researching the background for *Leading improvements in student numeracy*, we found that there is a significant gap in the educational leadership and mathematics education research and practice literature. While there are many books about the links between educational leadership and learning, and on mathematics teaching, curriculum, assessment and student achievement, there are few that link these two domains. *Leading improvements in student numeracy* is designed to make that link. Moreover, it includes a systemic dimension, dealing with the issues, factors and strategies involved in supporting numeracy development at classroom and school level.

*Leading improvements in student numeracy* honours the contributions of teachers, principals and system officers to the Leading Aligned Numeracy Development (LAND) project. The LAND project was funded by the Australian Government as a National Literacy and Numeracy Pilot initiative to investigate how to develop and sustain higher levels of student numeracy achievement in low socioeconomic communities. The educators involved in the LAND project at school and central office level were a rich source of professional expertise and insight about ways to improve student numeracy achievement. The research and development work that we undertook with these colleagues through the LAND project forms the basis of the themes, ideas, principles and guidelines explored in this book. Our aim is to provide practical and strategic advice for those charged with the responsibility of leading numeracy improvement at school and system level.

*Leading improvements in student numeracy* is a book for teachers, principals and other school executives, teacher educators, education authority officers and policy advisers with the desire and responsibility for student numeracy achievement. It comprises four sections. The first section sets out the context and challenge for improving student numeracy achievement. It introduces a framework for numeracy development that highlights the value of combining educational leadership with quality teaching, and the need to appreciate and build links between what happens in classrooms, schools, and education authority offices and government to bring about sustained systemic improvement in student learning.

The second section focuses on the core areas of professional knowledge, attributes and practices necessary to support students’ numeracy development. It
Preface

draws upon research into characteristics of effective mathematics teaching and the associated leadership capabilities required of principals and teachers at school level to encourage such teaching.

Aligning the efforts of teachers and principals and others, and encouraging coherence in perspectives, policies and programs is the theme of the third section. The importance of networking is highlighted. The use of digital technology is investigated as a means of supporting collaboration within and among school communities and education authorities, and with university and government partners. The distinctive and complementary roles of university researchers, education authority project officers, and government personnel are explored.

The final section of the book is devoted to defining the key principles to sustain numeracy development. These are based on the characteristics of effective teaching and educational leadership, and how these should be brought together within and across schools in planning, monitoring and evaluating numeracy programs to realise sustained development in individual schools and across the system.

We trust that you will find the insights, research findings and advice in this book helpful, and wish you every success in leading numeracy improvement in your schools and education systems!

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