

Series Preface

The series *Advances in Mathematics Education* aims mainly to produce monographs based on important issues from ZDM – The International Journal on Mathematics Education from the past; however, “the series is open to proposals from the community on other topics of interest to the field.” Probability has, more recently, become a mainstream strand within worldwide mathematics curriculum and, further, is a continual burgeoning area of research in mathematics education. Given the former and latter points, the seventh volume in the series *Advances in Mathematics Education* deals with probabilistic thinking.

This seventh volume exemplifies that *Advances in Mathematics Education* accepts proposals from the community on topics of interest to the field while preserving many of the characteristics of ZDM (since its inception in 1969). As mentioned in the Series Preface to the first book in the series on *Theories of Mathematics Education*, the publication of themed issues as characteristic of ZDM aims to bring the state-of-the-art on central sub-domains within mathematics education. Similarly, this volume is thematic; in that it is based on four different, yet interrelated “perspectives” or central sub-domains within probability: Mathematics and Philosophy, Psychology, Stochastics, and Mathematics Education. Further, this volume continues “the usage of the ancient scholarly Chinese and Indian traditions of commentaries” (Kaiser and Sriraman 2010, p. vi) and solicits “commentaries from experts and novices (ibid.)” As is also the case in past volumes, “prefaces to chapters set the stage for the motivation, purpose and background of a given [perspective]” (ibid.). Lastly, although not directly based on previously published themed issues of ZDM, this volume relies on the work of many authors who were also involved in a recently themed issue of ZDM, “Probability and Reasoning about Data and Risk,” which was guest edited by Rolf Biehler and Dave Pratt. Ultimately, this volume demonstrates that the first book in this series *Theories of Mathematics Education* did provide a prototype of the books series, which can be applied to monographs based on important ZDM issues of the past and proposals from the community on other topics of interest to the field.

In what has turned out to be an implicit feature of the *Advances in Mathematics Education* series, the scope of this volume is substantial: 28 chapters, from (in total)

56 authors (including luminaries from the fields of mathematics, psychology and mathematics education) from across the globe. While research has strayed more towards the realm of statistical thinking and reasoning, this book deliberately takes the path less chosen, that is, explores the roots and different facets of probabilistic thinking and, in the forward looking spirit of the series, fertile directions in which the research can be pushed. *Probabilistic Thinking* is both anthological and future-oriented, with the explicit purpose of becoming a reference book for mathematics education.

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Probabilistic Thinking

Presenting Plural Perspectives

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