

Chapter 3

Summary and Looking Ahead

This topical survey, with its sketch of the history and evolution of the field of early algebra, has highlighted research related to the nature of early algebra, its learning, and its teaching. We have noted, in particular, that early algebraic thinking does not develop on its own without appropriate instructional support. And so, as we look ahead to the future, we recommend that further research be carried out in the following areas:

- The nature of classroom culture and the role of the teacher in fostering early algebraic reasoning.
- The forms of curricular activity that support early algebraic thinking.
- The nature of professional development that supports teachers' capacity to foster early algebraic thinking in the classroom.
- Theorizing about the study of number, operations, and properties in the context of early algebra.
- The use of neuroimaging techniques to inform the learning and teaching of early algebra.
- The development and use of digital tools to facilitate the teaching and learning of early algebra.
- The impact of early algebraic thinking on students' later study of algebra.

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