

Mathematics Learning in Early Childhood, National Research Council (2009). Washington, DC: The National Academic Press

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The most distinguished researchers in the USA in the area of early mathematics have been involved in this research overview about evidence based discussion about what makes the difference for young children's learning of basic mathematics. The book is divided into four parts with research about: young children's learning of mathematics, teaching–learning paths of children, context for teaching and learning, and future directions for policy, practice, and research.

In the first part the foundational mathematics content is developed to be basically: (1) number (which include whole number, operations, and relations), and (2) geometry, spatial relations, and measurement. These are the two aspects early years' education should be focused upon. Also this part lays out the cognitive foundations for early mathematics learning related to the content suggested, and how children's experiences in socio-economic status, race and ethnicity, gender, language, and learning diversity influence their understanding.

In part 2 the different steps towards developing different mathematical notions and principles are described, which can be viewed as progression in children's learning related to the content suggested above. These steps are based on research, but also illustrated by examples from practice. For teachers in practice this part is a goldmine for how they can work and challenge children's understanding and concepts of meaning.

Part 3 is all about assessment and evaluation. Although it begins with the American notion of standards, which may not be familiar to other countries, it then problematizes the notions of assessment and teaching as two sides of the same coin. Specifically formative assessment is developed in relation to early years' education, but also what curriculum and pedagogy mean for this age group. The early childhood workforce and their need for professional development are also discussed. Although

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the teacher education may differ across countries and where maybe USA have a very low level of University educated teachers, one can also recognise similar problems in countries where teachers have a higher degree of competence in general, but not necessary in early mathematics.

The book ends in recommendations built on the research from the earlier chapters about policy, practice and research.

I am very happy to have got the opportunity to read this book, which is probably the best we can find today, since it is totally based on research, but also adapted to early childhood education practice. At the same time it is based in the American context, which we have to bear in mind for those in other cultures. All the research references make the book useful for doctoral and masters students. It also works well as a book for developing the teachers professionally in the field of early mathematics in early years' education. If teachers really grasp and utilize the content of this book we may get very skilful children in the future.