Mathematics and Mathematics Education
Academic Group

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USING PICTURE BOOKS TO SUPPORT KINDERGARTNERS' MATHEMATICAL DEVELOPMENT

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Time: 3 pm to 4.15 pm
Venue: Journal Room (NIE7-03-16)

Abstract

In this lecture I will address a research project carried out in the Netherlands about the use of picture books to support kindergartners' learning of mathematical concepts. The project started with investigating the power of picture books by examining the spontaneous mathematics-related utterances of children when they are reading a picture book. Then we worked on the development of a framework to identify learning-supportive characteristics of picture books. This study was based on a literature review and a Delphi study. Finally, a field experiment was carried out to investigate the effect of a book reading program on kindergartners' mathematics performance.

About the speaker

Prof. Dr. Marja van den Heuvel-Panhuizen is a Full Professor of Mathematics Education at Utrecht University. She holds a chair at the Freudenthal Institute of Mathematics and Science Education of the Science Faculty and at the Department of Pedagogical and Educational Sciences of the Faculty of Social and Behavioural Sciences. She works as a researcher at the Freudenthal Institute since 1987 and was and is involved in many national and international projects. Among other things, in the winter semester 2004/2005, she had a guest professorship at Dortmund University and during 2005-2009 she was a visiting professor at IQB of Humboldt University Berlin, where she was involved in a national project on the evaluation and implementation of the standards for primary school mathematics in Germany. In 2012 she received the Svend Pedersen Lecture Award from the Department of Mathematics and Science Education of Stockholm University. Her research interests lie with instruction theory for mathematics education and the further development of the didactics of mathematics as a scientific discipline. Her special interest is assessment. Her focus is on mathematics education in primary school, special education, and early childhood. She is currently involved in research projects on picture books, ICT in mathematics education, STEM talents of young children, students' early algebraic thinking, identifying special education students' mathematical potential, disclosing student's difficulties in solving context problems, textbook analysis and improving classroom assessment.

All are Welcome!

For more information, please contact Dr Jaguthsing Dindyal, at jaguthsing.dindyal@nie.edu.sg