Good teaching starts with getting to know what students know. Although this applies for all students, it is particularly true for weak learners (here, one may think of students who are one to two years behind their peers). The problem with these weak learners is that they have low scores in standardized mathematics tests, which may automatically lead to conclusions about their inability to solve demanding mathematics problems and their failure in coming up with own solution methods. Unmasking such preconceived ideas is of vital importance for these students. Therefore, it is time to assess what special needs students can do, rather than what they cannot. Such an approach to assessing weak students may open new opportunities for their learning of mathematics. In this lecture I will discuss a number of small-scale studies that reflect this new approach to assessment. The results of these studies give evidence that special needs students have more possibilities to learn mathematics than we think they have. The crucial issue, however, is how we can reveal their mathematical potential.
15.00 – 16.30 **Paper session 2**

19.00 – **Conference dinner Quality Hotel Grand**

**Friday November 20th**

08.30 – 09.30 **Plenary talk 3**  
*Numbers in context: Numerical ambiguity in function and meaning*  
Michèle Mazzocco, University of Minnesota, Minneapolis, USA

Number skills and knowledge are important foundations for early mathematics learning, and they are presumed to be mastered by late primary school. But in children with mathematics difficulties, whole number concepts may be weak, even in late elementary school. Our recent work focuses on how we may better differentiate young children's awareness and attention to number in visual and linguistic contexts. The findings have implications for assessing early number concepts in primary school years and for developing early number activities designed to promote number awareness.

09.30 – 10.00 Coffee break

10.00 – 11.30 **Paper session 3**

11.30 – 12.30 **Lunch**

12.30 – 14.00 **Plenary talk 4**  
*What cognitive factors influence the development of mathematical difficulties?*  
Ulf Träff, University of Linköping, Sweden

The presentation will address the following three issues regarding mathematical difficulties in children:
1. Different terms or constructs related to low performance in mathematics (mathematical difficulties, mathematical learning disability/disorder, dyscalculia).
2. Cognitive factors that support children’s learning of basic arithmetic.
3. Different hypotheses regarding mathematical difficulties, and mathematical learning disability/developmental dyscalculia in children.

14.00 – 14.30 **Closing session**, coffee is served.