Abstract:
The mission of German special schools is to enhance the education of students with Special Educational Needs in the area of Learning (SEN-L). However, recent studies indicate that graduate students with SEN-L from special schools show difficulties in basic arithmetical operations, and the development of basic mathematical skills during secondary special school is not warranted. This study presents a newly developed test of basic arithmetical skills, based on already established tests. The test examines the arithmetical skills of students with SEN-L from fifth to ninth grade. The sample consisted of 110 students from three special schools in Munich. Testing took place in January and June 2013. The test shows to be an effective tool that reliably and precisely assesses students’ performance across different grades. The test items can be used without creating floor and ceiling effects among fifth to ninth grade students with SEN-L. The items’ conformity to the dichotomous Rasch model is demonstrated. The students’ skills turn out to be very heterogeneous, both overall and within grades. Many of the students do not even master basic arithmetical skills that are taught in primary school, although achievement improves in higher grades.