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Pfister, Mirjam; Moser Opitz, Elisabeth; Pauli, Christine

Scaffolding for mathematics teaching in inclusive primary classrooms: a video study.

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Summary: Scaffolding is an important tool for meeting the challenging needs of heterogeneous groups of students in inclusive classrooms. It is especially useful when supporting low achievers. A video study of 36 inclusive classes, (3rd grade, aged 9 years), was conducted to examine how classroom teachers and special education teachers implemented a remedial mathematics program in a classroom setting. The program focused on the following facets of scaffolding: cognitive activation, stimulating discourse, handling errors productively, target orientation, and using manipulatives. The results show that 54 % of the teachers achieved a high competency for using manipulatives and target orientation, facets for which the program provided more detailed instructions. The teachers attained lower values for stimulating discourse, cognitive activation, and handling errors productively, where the program offered more general guidance. The special education teachers had lower rating scores than the classroom teachers, although the same scoring pattern as the teachers. This study shows that it is possible to encourage the use of scaffolding in inclusive classrooms. However, the disparate results for the different facets imply that scaffolding in classroom situations is a competency that cannot simply be adopted from a “program”, and more intensive teacher training programs seem to be necessary.

Classification: D42 C72 C62 C42

Keywords: scaffolding; low achievers in mathematics; inclusive classrooms; video study

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