The interplay of micro- and macro-scaffolding: an empirical reconstruction for the case of an intervention on percentages.

Summary: Micro-scaffolding is an important local phenomenon on a micro-scale of teacher-student-interactions. However, the idea of supporting students to move forward in their zones of proximal developments requires a sound global conceptualization of the intended learning trajectories. This article focuses on the trajectories towards percentages, and investigate how micro-scaffolding depends on aligning students’ learning pathways to these intended learning trajectories (designed in macro-scaffolding). A qualitative study was conducted in a series of design experiments. In the process of analyzing 590 min of rich video data with respect to the interplay between micro-and macro-scaffolding, a new analytic procedure, trace analysis, is developed and applied to the analysis. One central outcome of this study is the relevance of a key characteristic of effective micro-scaffolding, namely reference to a hypothetical learning trajectory as macro-orientation.

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