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Learning to compute without counting in first grade: a matter of patterns.

Summary: In the German-language literature on mathematics education it is widely held that children should have overcome the use of counting-based strategies to add or subtract by the end of first grade. However, there is empirical evidence that currently (at least in Austria) a notable part of children is missing that target by far. In this paper I refer to an ongoing design study conducted with Austrian first-graders whose teachers took part in an in-service training programme. The teachers tried to convey derivation based on the recognition and use of arithmetical patterns from the very beginning of the first school year on a systematic basis. First results of interviews conducted at the end of first grade are presented.

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