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The model of instructional quality in COACTIV: a multicriteria analysis.

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Summary: This chapter describes the concept of instruction on which the COACTIV approach is based and presents empirical findings obtained using the measurement instruments developed in the COACTIV framework. The chapter starts by describing the understanding of instruction that guided research in COACTIV, namely, as an opportunity for insightful learning. It then outlines empirical results from the COACTIV study, distinguishing between sight structures and deep structures of instructional quality. Descriptive findings on sight structures show that teacher-led discussion, seatwork, and work with a partner continued to predominate, while individualized approaches were rare. A multicriteria approach was taken to deep structures, with analyses considering three core dimensions of high-quality instruction: classroom management, cognitive activation, and teacher support for a variety of student outcomes. Latent two-level structural equation models showed that students' mathematics achievement was substantially fostered by efficient classroom management and a high level of cognitive activation, that their enjoyment of mathematics was promoted by efficient classroom management and individual learning support, and that their anxiety was reduced by individual learning support. Teachers varied substantially in their instructional quality, in terms of both sight and deep structures.

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Keywords: instructional quality; instructional practice; instructional quality; learning process; cognitive activation; learning support; classroom management; teaching methods

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