

REVIEW OF FACTORS OF INFLUENCE FOR IMPLEMENTING LARGE SCALE DEVELOPMENT PROJECTS

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Mathematics education as a research field is approximately 50 years of age. Since its beginning, studies of practice contribute to the development of theoretical constructs, which then come to live their “own life” within the scientific domain and as a consequence often fail to inform practice. While expanding their explanatory power, these constructs grow in complexity. Since teachers may have trouble adopting complex theoretical constructs, this may unintentionally increase the distance between research and practice, which imposes a dilemma between the theoretical constructs for explaining elements of the teaching and learning of mathematics, and the implementation of these constructs into the actual teaching practice. The purpose of this project is to identify factors of influence for successful implementation through the perspective of implementation research (Century & Cassata, 2016).

To get an overview of what is already known about the factors of influence (Jankvist et al., 2021) for successful implementation, we conducted a systematic literature review. We searched for manuscripts with implement* in the title and/or abstract, in the top 20 ranked journals in the field of mathematics education. We found 1,093 peer-reviewed articles. After the full-text screening, 95 papers remained.

Results show that unless the innovation is adapted to the cultural context and presumably to the system of beliefs and manifested practices of the context of implementation, change is unlikely to occur. Given the results, we urge that it be needed studies where old lessons are used for an a priori approach specifically designed to shed light on the factors of influence for belief change and organizational support, as well as explicated ways of evaluating these mechanisms.

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References

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