Design research with a focus on learning processes: an overview on achievements and challenges.

Summary: Design research continues to gain prominence as a significant methodology in the mathematics education research community. This overview summarizes the origins and the current state of design research practices focusing on methodological requirements and processes of theorizing. While recognizing the rich variations in the foci and scale of design research, it also emphasizes the fundamental core of understanding and investigating learning processes. That is why the article distinguishes two archetypes of design research, one being focused on curriculum innovations, one being focused on developing theories on the learning processes, which is the main focus of the thematic issue. For deepening the methodological discussion on design research, it is worth to distinguish aims and quality criteria along the archetypes and elaborate achievement and challenges for the future.

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