

# TEACHERS' QUALITATIVE REPLICATION OF RESEARCH

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In preparation and professional development programs, teachers are often required to study academic educational research, whose findings purport to have implications for practice. However, teachers often do not appreciate the relevance of such studies for practice, and as a result may not see *how*, or even *why*, to “implement” their findings.

Labaree (2003) described cultural differences in the world-views of teachers and education researchers. We propose that these differences can frame the notion of *relevance* – for educational research to be perceived by teachers as relevant for practice, it must be situated in teachers' world views, which tend to be more normative than analytical, more personal than intellectual, more particular than universal and more experiential than theoretical (Labaree, 2003). We propose that qualitative replication of academic research by teachers can increase its relevance in this sense.

In a course on teaching and learning geometry, practicing teachers in a graduate program were required to design and conduct a small qualitative replication of research by Fischbein and Kedem (1982), who found that many high school students who accept the universal validity of a proof, still maintain an empirical attitude that relies on examples. The purpose of the replication activity was to encourage teachers to take an inquiry stance towards teaching, while shaping this inquiry in ways that are personally meaningful. Changes that teachers introduced at various stages of the research – preparation (mathematical problems used, selection and size of research population), data collection (emergent interview questions), analysis (what teachers noticed), conclusions, and perceived implications for practice – demonstrate how they culturally aligned the research along the four dimensions of Labaree's framework.

Evidence on how teachers, in their qualitative replications, can transform academic research into something personally relevant for their practice, and our theoretical framing of this relevance, contribute to an emerging line of research on replication and implementation of research findings in mathematics education (Jankvist et al., 2021).

## References

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