

IMPLEMENTATION AND REPLICATION STUDIES IN MATHEMATICS EDUCATION 1 (2021) 1–2



Impact Sheet

Misfeldt, M., Tamborg, A., Fougt, S.S., Allsopp, B.B. & Herfort, J.D. (2021). Emerging organizations when implementing a collaborative professional development program. *Implementation and Replication Studies in Mathematics Education*, 1(2), 257–283. DOI: 10.1163/26670127-01010010

Problem Addressed

The context of the paper is a large-scale municipal effort of launching subject specific competency development targeting 3500 teachers of Danish mother tongue and mathematics. This program used a collegial approach entitled "Action Learning" (Plauborg et al., 2007), and the paper focuses on how this work has influenced the school organization, specifically the local supervisors working with organizing and running the program. The authors acted as evaluators of the project, and the paper is based on a qualitative case study of two of the involved schools. The authors processed and analyzed this data by means of a two dimensional notational technique. Using this technique the authors represent roles and relations among the local supervisors and various other stakeholders involved in the project (teachers, management and the project itself). They identify and discuss a counter-pressure on local supervisors, since various stakeholders' expectations and framing of the supervisor role are mutually exclusive.

Firstly, the analysis shows that the local supervisors are expected to develop the school and work with their colleagues from an equal position, and to structure, initiate and support competency development rather than managing it. Secondly, the mathematics teachers see the local supervisors as academic beacons that are more mathematically knowledgeable. Thirdly, school managers see the local supervisors as part of the line management at the workplace, where the main priority is to successfully complete the project within the given time frame. As the project met some resistance among the teaching staff, this required the supervisor to "persuade" a group of teachers to participate, who previously had shown very little attention in doing so.

The key problem addressed is that the simultaneous presence of these sometimes mutually exclusive roles led to an uncertainty about the priorities, mandate and intentions of the local supervisor, all of which were a 2 IMPACT SHEET

barrier to establish safe collegial relations focused on developing the teachers' competencies.

What is Implemented?

The specific implementation studied is the approach to in-service training called "Action Learning" – a practice-based, collaborative approach to professional development of teachers, with many similarities to lesson studies. In this in-service format, local supervisors play a critical role in driving and anchoring the process and act as the link between school management, the teachers enrolled in the program and the professional development project. The study focuses on identifying the expectations and implied roles these local supervisors are confronted with.

Implications and Significance

It is well known that it is difficult to obtain sustainable change. Such change requires careful attention to choosing content and formats, and that it is key to establish active collegial relations, which all are characteristics that are accommodated by the Action Learning format. Implementing in-service training formats often imply that existing staff are assigned new roles and areas of responsibility, and that little attention in implementation research has been given to study this aspect. In relation to the emergence of implementation research in mathematics education, this paper contributes by giving specific attention to the organizational interplay between various stakeholders involved in the execution and attempts of anchoring in-service training initiatives. The analysis pinpoints two important aspects of how implementation processes put pressure on the involved staff: (1) implementation of innovations in mathematics education happen in a constant interplay with the organization; and (2) evaluating the success and effect of such a program can be viewed as highly situated in the local organization.

Reference

Plauborg, H., Andersen, J. V., & Bayer, M. (2007). *Aktionslæring. Læring i og af praksis* [Action learning. Learning in and from practice]. Hans Reitzels Forlag.