

Teacher Collaboration in Continuous Professional Development (CPD) Interventions – A Systematic Review

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Rationale and Theoretical Framework

International large-scale surveys have demonstrated that in-service teachers – as lifelong learners – have massively sought and participated in continuous professional development (CPD), which, as a less formalized learning environment, helps teachers learn and develop new skills (OECD, 2019). Thus, it is essential to uncover the mechanisms under which such learning environments can help teachers learn. Collaborative learning was one CPD learning environment indicator teachers in TALIS 2018 identified as the most impactful (OECD, 2019). Despite its straightforward appeal and the fact that several papers consistently frame it as integral to CPD effectiveness (see Darling-Hammond et al., 2017; Desimone, 2009 for more), collaborative teacher learning in CPD still lacks evidential warrant (Sims & Fletcher-Wood, 2021). Additionally, teacher collaboration is often ill-defined in research, with varying terms lacking clear distinctions (Vangrieken et al., 2015).

When we look at younger learners (as opposed to teachers as adult learners), meta-analyses have demonstrated that collaborative learning environments are effective for student knowledge and performance (among other variables). At the same time, evidence suggests that the mechanisms that undergird such learning environments are derived from (social) constructivist principles, which emphasize that learning occurs when learners engage in meaningful interactions and collaborate through joint problem-solving and reflective discussions (Fosnot, 2013; Jeong et al., 2019; Kyndt et al., 2013). While the same principles can inform the mechanisms of less formalized adult learning environments (Chuang, 2021; Huang, 2002), previous systematic reviews (De Jong et al., 2022; Vangrieken et al., 2015) which proposed frameworks outlining the terminology of teacher collaboration and its structural characteristics (e.g., depth), and types of relevant learning activities, implicitly demonstrated that the factors that benefited teacher collaborative learning in professional settings could be traced back to the same (social) constructivist principles (De Jong et al., 2022). However, whether collaborative learning environments have a systematic effect on teachers remains an important open question. In our systematic review, we build on the existing reviews and, by including only effectiveness (quantitative) studies, we aim to a) understand how collaborative learning is operationalized in CPD learning environments, b) identify investigated teacher outcomes of collaborative learning, and eventually, c) to meta-analytically aggregate the effects of collaborative learning on the identified teacher outcomes.

Research Design

After implementing the typical systematic review processes based on the PRISMA guidelines (Page et al., 2021) and pre-registering at the Open Science Framework (OSF), we identified and (partially) double-screened N = 1,126 abstracts from the ERIC, PsycINFO, and Web of Science databases. In total, n = 73 studies are included in our systematic review and are currently in the data extraction phase.

Preliminary Conclusion

We aim to identify the various operationalizations of CPD collaborative learning, examine the teacher outcomes associated with each, and conduct a meta-analysis (given the adequacy of quantitative information). We aim to determine whether collaborative learning is a relevant indicator of effective learning environments for teachers and uncover the mechanisms that make these environments particularly influential.