

Teacher Professional Learning: The Interplay of External Stimuli, Social Dynamics, and Institutional Dimensions

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The complex nature of onsite teacher professional learning has been well documented (e.g., Goldsmith et al., 2014). Fundamental to recent perspectives is the idea of schools as learning communities (Clarke & Hollingsworth, 2002). Studies draw attention to the critical role external experts or researchers play within professional learning communities, in particular how they interact with teachers to afford opportunities for learning (Arzarello et al., 2014; Timperley et al., 2007).

Developing a model to theorise the complexity of learning processes presents challenges. Various studies have adopted the Interconnected Model of Professional Growth (IMPG) developed by Clarke and Hollingsworth (2002) to guide research in mathematics. While analysis of change sequences is recognised as a strength of the model, some studies have suggested modifications to support analysis of their data (e.g., Lomas, 2018). Others suggest drawing upon more than one model to analyse onsite learning processes (e.g., Wilkie, 2017).

In this short communication, I draw upon one aspect of the third cycle of a designed-based research study with Year 3 teachers in which the IMPG was used to analyse change pathways for individual teachers in a collaborative project. Retrospective analysis of the data indicated influences on learning within two of the domains of the IMPG, which could not be explained by mediating processes of reflection and enactment within the model. Building on the work of Wilkie (2017), I will illustrate how a second complementary model, the Meta-Didactical Transposition model (MDT) developed by Arzarello et al. (2014), provided a lens to analyse changes in teacher knowledge, practice and dispositions during professional learning. The findings highlight the interplay between key variables, namely the researcher, teachers, and the institutional dimensions as critical to the development of teacher practice. The study contributes to empirical research on professional learning and suggests a theoretical framing that combines two models may be necessary to capture the complexity of teacher learning.

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