



Resource Materials as Structured Guidance in Practice Change

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Professional learning (PL) is a critical component in enhancing quality teaching and learning of mathematics, which impacts upon student learning outcomes (Guskey, 2002). Curriculum resources are frequently used as instruments to support or drive PL and teachers' change in practice (Rezat et al., 2021). However, research on the impact of mathematical resource materials typically focuses on textbook use and student outcomes rather than changes in teachers' practice (Pepin, 2018).

We report a study of an early career Year 2 teacher's reflections of enacting specifically structured resource materials and her practice change when participating in a mathematics PL project, *Exploring Mathematical Sequences of Connected, Cumulative and Challenging Tasks* (EMC³). The project explored "ways to support both teacher and student learning [through]... an approach to resource development and teacher professional learning that uses the notion of relentless consistency to encourage innovative practices" (Sullivan et al., 2020, p. 11).

A qualitative case study was designed to investigate our research question: *How do resource materials support the experiences of an early career Year 2 teacher to change her practice when participating in mathematics professional learning?* The participant, Andy (pseudonym) was selected from seven Victorian Catholic primary schools that took part in the 2020-2021 project. Data collection instruments included a timeline graphing tool and a semi-structured interview to capture and communicate her reflections. A thematic analysis (Braun & Clarke, 2006) and the *Interconnected Model of Teacher Professional Growth* (Clarke & Hollingsworth, 2002) were used to analyse the data.

The main finding from the results was that the provision of structured resource materials combined with PL increased the teacher's confidence to teach mathematics and to implement an innovative pedagogical approach. A subsidiary finding was the benefit of using the timeline graphing tool to capture a teacher's reflections over time.

References

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