

## Exploring Secondary Mathematics Teachers' Motivation to Attend Voluntary Professional Learning

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The significance of this study rests upon the belief that the effect of quality teaching impacts upon student learning (Hattie, 2009). In recognition of this claim, schools and school systems have increasingly focused on the implementation of quality teaching practices and professional learning (PL) that support these practices (Labone & Long, 2016). There appears to be limited research and literature published on Australian secondary school teachers' motivation for participating in PL. Most current research appears to have explored professional development of Australian mathematics teachers (Goos et al., 2018), pre-service teachers (Hine, 2016), and out-of-field teachers (Goos et al., 2019). Furthermore, summaries of research have explored theoretical and evaluative approaches to PL, the nature of teacher capabilities, and characteristics of effective PL programs (Beswick et al., 2016).

The overarching guiding question to be explored is: What are the reasons secondary school mathematics teachers (SSMTs) participate in voluntary PL? A secondary question to be explored is: What are the type(s) of professional knowledge underpinning SSMTs' stated motivation to participate in voluntary PL courses. Over three years, as many as 73 SSMTs participated in pre-course surveys, post-course surveys, and individual interviews. Situated within a conceptual framework (Ball et al., 2008), qualitative responses were analysed *a posteriori* via open coding. While participants reported their motivations primarily as developing knowledge in mathematics content and pedagogy, there were claims of growing in confidence in these knowledge domains. Such claims in interviews were largely connected to the identification of topics requiring practice and consolidation prior to teaching.

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