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Designing and using professional development resources for inquiry-based learning.

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Summary: This paper describes an attempt to design, analyse and refine professional development (PD) resources that encourage the implementation of inquiry-based learning (IBL). We describe the iterative development of the resources in England with over 100 mathematics teachers from secondary, tertiary and adult education and then analyse the impact these resources had on teachers' beliefs and practices and the issues arising. This evaluation revealed that teachers had moved away from transmission-based orientations, encouraged by the use of less structured tasks and sample lesson plans, but some found it difficult to adopt IBL pedagogies. The most significant issues for teachers may be summarised as: confusing IBL with 'discovery' learning; developing and managing collaborative cultures within the classroom; and planning lessons that adapt to the emerging needs of learners.

Classification: D39 B50 D40 C29

Keywords: professional development; inquiry-based learning; teachers' beliefs; teachers' practice

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