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Integrating technology, pedagogy and content in mathematics education.

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Summary: The need for appraising the effective integration of technologies into teaching and learning within a disciplinary context is crucial for upholding quality teaching standards in schools and formulating professional development programs. This paper describes the development and validation of an instrument aimed at characterising the integration of technological knowledge in secondary school mathematics teachers. The technological pedagogical content knowledge (TPACK) framework is used to underpin the development and validation of the questionnaire. The questionnaire consisting of three 10-item scales was administered to a sample of 280 teachers across the state of New South Wales, Australia. The factor analysis undertaken confirms the structurally soundness of the instrument in terms of validity and reliability.

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