

ZMATH 2005d.01539

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Undergraduate mathematics curricula - a new angle.

N. Z. J. Math. 32, Suppl., 155-161 (2003).

Stepping back and viewing the tertiary mathematics curriculum from a new angle can have benefits for both students and staff. This paper will describe new thematic mathematics units, designed for a cohort dominated by pre-service teachers. The content and assessment of three of these new units will be discussed along with details of the incorporation of current technology, utilisation of realistic problems, engagement of students in mathematical thinking, writing and discussion, and the use of portfolios and projects as assessment tools. Progress towards meeting the goals of this new curriculum has been monitored. Results to date indicate an increase in both initial enrolments and retention rates, increasing awareness of the relevance of mathematics for other disciplines and every day life, reduction in mathematics anxiety, increasing interest in mathematical thinking and an improved understanding of mathematics. (orig.)

Classification: D35