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Professional development: Mathematical content versus pedagogy.

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Recent teacher professional development in California tends to focus on increasing teachers' mathematical knowledge. In Australia, pedagogically focused programs are preferred. The two approaches are contrasted by comparing a Californian professional development model based on improving mathematical knowledge in number and algebra with a New South Wales school-based model involving the teaching of angle concepts. In both approaches, strengths and weaknesses are identified in terms of appropriate mathematical content, research-based pedagogy, and accreditation. Examples of courses incorporating all these components are given, and difficulties associated with implementing such courses are identified. Two important criteria for success, perceived relevance and teacher enthusiasm, are seen to be dependent on cultural factors in the education systems involved. (orig.)

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