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A CAS project ten years on.

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Summary: Although research shows that Computer Algebra Systems offer pedagogical opportunities, more than a decade later some teachers are reluctant to change established practices. In 2002, the University of Melbourne in Australia launched a research project to investigate implementation of a senior mathematics course in which students could use a computer algebra system. The project was known as the Computer Algebra Systems (CAS) in Schools: Curriculum and Assessment Teaching project (CAS-CAT Project) and was detailed in *Mathematics Teacher*. The innovation began with a new senior secondary mathematics course, *Mathematical Methods (CAS)*, used at three schools. In the trial, the use of CAS was encouraged in teaching and assumed in all assessments, including the state-set examinations. Today, whereas CAS use is permitted for all students and assumed in most mathematics courses, students also encounter technology-free examinations. (Details of the new course and its assessment, together with details of all the senior mathematics study designs, are available from Victorian Curriculum and Assessment Authority.) So what has been the result of this project? How have teachers and students reacted, and what have we learned that can help others' thinking about the role of CAS in teaching mathematics? This article points to the opportunities that CAS offers teachers and students and the reflections of one teacher, coauthor Garner, who has taught using CAS since the beginning of the project. (ERIC)

Classification: U70

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<http://www.nctm.org/Publications/Mathematics-Teacher/2016/Vol109/Issue8/A-CAS-Project-Ten-Years-On/>