

The Evolution of the Teaching and Learning of Physics in Australian Universities

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In 2004 the Australian Universities Teaching Commission funded a team of physicists and educators from thirteen Universities to obtain a snapshot of the learning and teaching of physics in Australia. The focus was on the evolving nature of learning and teaching practices within the changing context presented in the higher education sector.

The study method was specifically designed to capture the full range of issues. Thirty-four institutions that have an identifiable "physics department" completed open-ended questionnaires that covered areas ranging from industry involvement in curriculum design to support for innovative teaching and learning practices and challenges faced by departments. Nine institutions were selected for in-depth study, comprising interviews with heads of department, interviews with chairs of academic programs/ education committees and focus groups with first year mainstream, first year service, third year and postgraduate students. Strategies that foster change in learning and teaching and provide new directions are being explored in 2005.

In this presentation we will discuss how the culture of physics is evolving to meet the challenges presented by student diversity and expectations of research, and the changing context of teaching and learning in an enabling discipline.