

‘INSPIRING SCIENCE’ – SUPPORTING SECONDARY SCHOOL SCIENCE TEACHERS

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KEYWORDS: secondary school, teacher support, learning support

ABSTRACT

An established trend in Australian schools is that teachers in subjects such as chemistry and physics have not majored in that discipline at university, leaving many of them relatively under prepared to teach in those subjects at the secondary school level. Indeed, Professor Ian Chubb, Australia's Chief Scientist, urged university science academics to become more involved in professional development activities for science teachers in his keynote address to the 2013 Australian Conference on Science and Mathematics Education (ACSME). One such initiative that will offer support in this space is the "Inspiring Science" project, led by the University of Technology, Sydney.

The objectives of the project include the development of partnerships between UTS academic staff in Science and Education with science teachers in low socioeconomic status (SES) schools, with a view to sharing knowledge and skills regarding new developments in science and scientific experimentation and in pedagogical approaches that will inspire and support students' academic attainment in the sciences. This is being realised through the delivery of a five day on-campus workshop.

The formation of an advisory group involving school principals, head teachers of science and industry representatives (ACARA, BOSTES) has been a significant element of the project design. Together with UTS science academics and the advisory group, considerable progress has been made to date. The workshop program will include sessions on topics such as active learning, assessment, feedback, use of ICT and how to deal with difficult pedagogical content knowledge. The workshop will also be complemented by an extensive laboratory program.

The first workshop will be delivered in October 2014, with a further session scheduled for January 2015. This presentation will outline the development phase of the project.

Proceedings of the Australian Conference on Science and Mathematics Education, University of Sydney, Sept 29th to Sept 30th, 2014, page 9, ISBN Number 978-0-9871834-3-9.