

SCIENTIFIC INQUIRY IN THE UNDERGRADUATE CURRICULUM: CHALLENGES AND BENEFITS IN THE NEW AGE STANDARDS

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ABSTRACT

"Traditional 'chalk-and-talk' teaching, copying notes and 'cookbook' practical lessons have offered little challenge or excitement" - from Health of Australian Science, May 2012.

This view, expressed in the 'Health of Australian Science' report by Australia's Chief Scientist, finds oblique affirmation in the Australian Curriculum: Science[1][1] and the recently published Science Threshold Learning Outcomes[2][2]. These documents bring particular emphasis to the processes of scientific inquiry, leading naturally to the instructional strategies described in the Chief Scientist's report being eschewed. This presentation explores the benefits to student learning of developing and embedding scientific inquiry into the science curriculum and brings a focus to the challenges of assessing the attendant learning outcomes.

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