

COPING WITH A WIDE RANGE OF QUANTITATIVE SKILLS IN FIRST YEAR CHEMISTRY – OUR FIRST YEAR EXPERIENCE

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ABSTRACT

A University of Wollongong (UOW) project on maths resources for first year students has been ongoing for three years, supported by internal and ALTC funding. As well as development of learning objects and teaching resources based around the use of tablet technology, the project included aims to share resources, methodologies, and other outcomes outside the firewall (Creative Commons). The ALTC part of the project targeted the leadership development component, leading and spreading such development. This leadership has taken on many forms not just covering the technical methodologies and resource issues, but also links to the issues of quantitative skills in first year university students.

In this paper the UOW first year chemistry experience is discussed especially in the context of the bigger picture: increased class size, more students accepted into first year chemistry without "required" skills, varied motivations within the student body, casual sessional teaching staff and the First Year Experience findings that the assumptions of particular skills and knowledge is no longer possible. We find students were unaware of the best subjects to take in senior high school to support tertiary study particularly in applied degree programmes, or students received poor advice, or both and they enter the first year with no senior school chemistry and no higher level mathematics.

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