

CREATIVITY IN STEM: STUDENTS' AND EMPLOYERS' PERSPECTIVES

Alexandra Yeung, Jesse Mullen

Presenting Author: Alexandra Yeung (alexandra.yeung@curtin.edu.au)
Department of Chemistry, School of Molecular and Life Sciences, Curtin University, Perth WA 6102, Australia

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BACKGROUND

Creativity plays an integral role in advancement of technology in society. This has led to employers recognising the need for skilled and creative graduates, particularly those working across all fields of science, technology, engineering and mathematics (STEM).

AIMS

To help educators develop STEM students' creativity and prepare them for the workforce, an understanding of student and employer perceptions of creativity is required. This study aims to explore and identify trends in perceptions of creativity, particularly student views of creativity in employment, and compare them to employer perspectives.

DESIGN AND METHODS

An introspective, self-reporting survey was developed for both online and hardcopy distribution. Surveys were distributed to first, second and third year undergraduate chemistry, mathematics and engineering students, as well as employers. Semi-structured interviews were also conducted with undergraduate students.

PRELIMINARY FINDINGS

A total of 423 responses were collected for the study, with 414 from undergraduate students and 9 employers. Additionally, 14 interviews were conducted. Some commonly identified themes for students' definition of creativity include novelty of ideas, innovation, and imagination. Students believed that links exist between creativity and job retention, promotion and attainment. However, some mismatches between student perceptions and employer perspectives were also found.

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