

HOW DO YOU DEFINE CREATIVITY? A QUALITATIVE STUDY OF UNDERGRADUATE CHEMISTRY STUDENTS' PERSPECTIVES.

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As technology continues to become more sophisticated, human thought in a professional setting will become more dependent on creativity. Employers around Australia identify creativity as a highly sought after attribute of recent graduate.

To better understand how universities can develop STEM students' creativity, an open-ended questionnaire was administered to first, second and third year undergraduate chemistry students at Monash University in semester one of 2019. Over 900 students completed the questionnaire which was processed through via NVivo.

When asked to define creativity, students commonly identified themes of "originality and innovation" which aligned with the existing literature. Additional themes uncommon to the literature, such as "expression" and "problem solving" were also expressed. Within their studies, students identified self-directed activities such as the laboratories, assignments, and "teamwork activities" where opinions and thoughts are discussed most developed their creativity. Finally, students most commonly associated creativity with performing or creative arts in their extracurricular activities and suggested that these activities helped develop their problem solving, team work and experimentation within a STEM context.

Once this data is triangulated with educators and employer perspectives, we anticipate an undergraduate teaching intervention can be designed to improve STEM students' learning outcomes in creativity.

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