

EXPLORING STUDENTS' AND EMPLOYERS' PERSPECTIVES OF CREATIVITY IN STEM

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Creativity is known to have an impact on innovation and advancements in new technology with the goal to benefit society. Creativity allows exploration of new ideas and inventions which is present in great findings within Science, Technology, Engineering and Mathematics (STEM). To inspire new generations of brilliant and innovative scientists, this study aims to further the research conducted into the relationship creativity has with STEM education and employment.

This presentation will describe students' and employers' perceptions of creativity. Self-reflective, introspective surveys were distributed to first-, second- and third-year undergraduate chemistry, mathematics and engineering students, as well as pre-service teachers and employers. Semi-structured interviews were also conducted with undergraduate students. Likert scale survey questions were analysed using *Remark Office* and *SPSS*. Short answer survey questions and interview questions were analysed using content analysis to identify common themes.

Some commonly identified themes for students' definition of creativity include novelty of ideas, unique ideas, innovation, thinking outside the box and imagination. Students believe that links exist between creativity and job retention, promotion and attainment. They also believe that employers view creativity as important, but not as important as other skills. Some mismatches between student perceptions and employer perspectives were also found.

By inspecting trends in students' perceptions and comparing these to employers' perspectives, it is possible to identify what changes (if any) need to be made to the education system to meet employers' expectations. This may allow creative students to be prominent when transitioning into the workforce, encouraging future advancements in STEM as an industry.

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