

# EMBEDDING SOCIAL RESPONSIBILITY IN UNDERGRADUATE STEM CURRICULA

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**KEYWORDS:** social responsibility, undergraduate, survey

**SUBTHEME:** Equity, diversity, and inclusion

## INTRODUCTION

Along with professionalism and disciplinary knowledge, social responsibility is commonly a component of graduate attribute/capability frameworks that inform curricula design, including those for undergraduate science, mathematics, and statistics degrees. Such an inclusion makes it critical to undertake any embedding of social responsibility with the same rigour and best practices as is expected with the curricular embedding of disciplinary or research-informed teaching and learning. This embedding would be underpinned with a sound grasp of how we as practitioners currently, or would want to, engage with embedding social responsibility both at a subject and degree level.

## AIMS

To evaluate the experiences and perceptions of academics responsible for teaching in undergraduate science, mathematics and statistics degree programs regarding initiatives for curricular embedding of social responsibility.

## DESIGN AND METHODS

The investigators emailed requests to distribute invitations to participate in an anonymous online survey to relevant faculties, schools, and departments. DVR and WH also emailed members of their respective professional networks. The survey ran between mid-November 2023 and March 12<sup>th</sup>, 2024. Results were downloaded and processed as Microsoft Excel spreadsheets.

## RESULTS

We collected 109 completed surveys from respondents from a broad range of disciplines. From a checklist of possible items that could be part of teaching social responsibility, the top choice was "Professional Ethics". Items around social and environmental issues garnered support from more than half of respondents. Support for embedding social responsibility into science, mathematics and statistics curricula was not uniform. However, more than half of respondents considered social responsibility relevant to their subjects, and this increased to three-quarters of respondents when considering its relevance to the degrees in which they teach. Respondents commonly chose time constraints and lack of support or resources from a checklist of potential challenges and issues to any such embedding process. Sixty per cent of respondents indicated they would likely participate in professional development events regarding embedding social responsibility. Responses to open-ended questions revealed genuine and well-founded concerns as to aspects of any embedding procedure.

## CONCLUSIONS

Broad support was expressed among the respondents for embedding social responsibility into science, mathematics, and statistics curricula, but concerns remained about how such a process would be enacted.

Proceedings of the Australian Conference on Science and Mathematics Education, The University of Canberra, 18 – 20 September 2024, page 91, ISSN 2652-0481.