

THE WORKPLACE: WHAT DOES EMPLOYABILITY MEAN FOR SCIENCE AND MATHEMATICS GRADUATES?

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BACKGROUND

It is imperative that science and mathematics graduates are prepared for work and employment by having the appropriate skills and knowledge for the sector in which they find work. This encompasses both discipline specific skills and generic skills. Many employers place significant emphasis on the latter, whereas the focus of universities is arguably the inverse. As a consequence there are significant gaps between what employers expect graduates to know and to be able to do, and their actual graduate attributes. For the growing number of graduates who create their own work and juggle multiple roles to make it sustainable, the gaps are even more pronounced. These issues are magnified in science and mathematics as the graduate destinations are highly diverse, often with a lack of obvious career paths and intense competition for work.

AIMS

The aim of this paper is to inform the audience about the current findings of the OLT Strategic Priority Project 'How universities can best support students to develop generic skills: Enacting strategies for graduate employability'. This project has a focus on life sciences and computer science and is relevant to other sciences and mathematics.

METHODOLOGY AND CONCLUSIONS

This paper focuses on science graduates proceeding to career pathways other than research science, to illustrate what knowledge, skills and attributes graduates need to negotiate the world of work and their perceptions of whether or not these were developed during their higher education studies.

The paper reports on the development of a framework for employability skills development, including best practice in employability skills education and our learning from the review of manifold prior work on employability, generic skills and the labour market; case studies of students in transition from study into work; and retrospective studies on graduates who have been in the workforce sufficiently long to meaningfully reflect on their transition experiences.

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