Examining student outcomes from undergraduate research experiences.

Paula M. Myatt and Susan M. Jones

Undergraduate research (UR) is a recognised form of engagement used to enhance student learning and can be broadly defined as any active experience in which students are exposed to research within their discipline. These experiences have been associated with positive student outcomes such as gains in communication skills, and confidence. This project examined one School within an Australian university and investigated the extent to which undergraduate students were exposed to UR and the student outcomes. The research utilised interviews with staff and an online student survey. Interviews with eight staff highlighted a strong culture of integrating research into teaching and creating research opportunities for students, with many examples of UR activities identified. A common characteristic was the design of authentic experiences for students. Through the online survey 42 students reported a variety of outcomes, mostly positive, from their UR experiences. More than 70% of students believed they had made gains in all ‘becoming a scientist’ areas investigated, including the ability to work independently, to develop patience and the need to take care in conducting procedures. More than 85% of students reported they had made gains in areas such as ‘discussing scientific concepts’ and ‘working collaboratively’. The UR experiences also influenced their thinking about future career paths, including postgraduate research. This study revealed an intention by academics to provide authentic learning experiences for students through research, and strong student evidence indicating learning gains. The strong gains reported by students in this study were similar to gains reported previously in other literature.

Please reference as: