



The pleasures and perils of virtual undergraduate biomedical industry placements

Julia Choate and Daniel Andrews

Biomedical Discovery Institute, Monash University.

To enhance undergraduate biomedical students' awareness of non-medical/research career pathways, an Industry placement subject was established and commenced at Monash University in 2018, with 61 students completing on-site placements. Students work on a problem-solving project with a host supervisor, selecting an employability skill to develop, and use reflective practice to consider their skill and personal development during placement. In 2019, 67 students completed placements, with one virtual placement (at the student's request). With the COVID pandemic, virtual placements were offered, aligning with the lockdowns and the 'work from home' situation in Melbourne. In 2020, 49 students completed placements, all but one virtual, and in 2021 69 students completed placements, with only 7 students on-site. Thus, the number of placements was able to be maintained despite predominantly virtual or hybrid (i.e. virtual and on-site) options. Student performance was similar for virtual, but significantly higher for hybrid placements ($P=0.006$), when compared to the on-site placements. The student:host ratio has significantly increased since 2020, with hosts taking more students, particularly for virtual or hybrid placements, suggesting that these placement formats are easier for the hosts (e.g. no requirement to provide an office space). Students who completed the industry placement were tracked after graduation, using university graduate enrolment data and LinkedIn profiles. For the students who completed their placement pre-COVID (2018 and 2019), 71% went onto further study (47% Medicine) and 17% went into biomedically-related jobs (11% other jobs). For the students who completed their placements (predominantly virtual or hybrid) during COVID (2020 and 2021) 65% went onto further study (27% Medicine) and 24% went into biomedically-related jobs (11% other jobs). This data suggests that the placements, virtual or on-site, are achieving the aim of exposing students to diverse career pathways.