TRANSITIONAL APPROACHES TO TEACHING IN THE SUPERLAB ENVIRONMENT

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PROBLEM

With the completion of Building 15 in 2020, for the first time at Edith Cowan University (ECU), undergraduate students had the opportunity to learn hands-on practical skills in a SuperLab environment. Moving from smaller classes into more open-plan learning environments requires a shift in thinking on behalf of both the student and the teacher. Teaching styles and training techniques will need to be modified in order to encourage skill development and present novel opportunities for student engagement.

PLAN

This project set out to capture the student experience, via questionnaires and focus groups, across a diverse range of student cohorts transitioning into the SuperLabs in 2020. Five ECU Academics (Balmer, Berry, Wajrak, Gough and Phillips) commenced teaching in the SuperLabs with a diverse cohort of students from a variety of units across chemistry, genetics and biomedical sciences. The plan for this project was to seek and probe students' perceptions and experiences of learning in the SuperLabs.

ACTION

Students' experiences in the SuperLabs were captured, via an online questionnaire deployed using *Qualtrics*, across a diverse range of student cohorts, for both students commencing studies and those with previous experience of the smaller laboratory environment, to understand how the two lab environments compared, with regard to their learning experience. 35 survey questions were designed using Likert scale, multiple-choice, emojis to convey emotions and extended comments.

The dominant finding of this project was that the results obtained were highly dependent on students' previous laboratory experience, i.e., whether they were students whose first laboratory environment was the SuperLab or students who had previously studied in other smaller lab classes (24 student capacity). Overwhelmingly, the data showed that students value and prefer the new SuperLab environment and had mostly positive experiences, however, when we drilled down to individual responses, students identified some important issues which were detrimental to their learning, such as: not being able to hear instructions, could not see the demonstrator, uncomfortable chairs, not enough demonstrators to assist, significantly harder to concentrate with so many students around and a lot more noise.

REFLECTION

These findings are important and need to be considered when designing teaching plans for the SuperLab environment. It is crucial that teaching staff are aware of issues which have a negative impact on students' learning in the SuperLab environment and think about how to best overcome those problems.