



## **Curtin Library Makerspace Case Study**

### ***Summary of the initiative***

In 2015, what would go on to become a creative learning environment fostering exploration, innovation and play through making, began with very small pop up tables around the Curtin Library. The idea of the Makerspace is to create a learning space for students, staff, and community members to use the equipment and materials to engage in creative making activities. Makerspace supports a philosophy of learning about open ended, self-directed outcomes where students are encouraged to find their own way through a problem and share their knowledge and experience to help each other learn.

As the Makerspace community of people sharing their knowledge and experience grew, an opportunity to encourage peer-to-peer learning developed. In 2018, Curtin students were employed to create content for online modules, assist with designing and creating the website and other learning materials, and design and facilitate workshops. In 2020-21 the Makerspace continues to employ a small group of students to work with and assist their peers, helping them with projects, using the equipment as well as developing and facilitating workshops. The students who utilise the Makerspace appreciate that the content is developed and delivered by students for students.

### ***How are students engaged as partners?***

The students that work in the Makerspace are equal partners in terms of how the space is run. Initiative is encouraged through autonomy and responsibility in determining the direction of the Makerspace and how things are done. The student partners are free to take their peers suggestions and work on them independently, implementing changes without needing to seek approval from staff. Students employed in the Makerspace are considered Students as Partners as they are consulted and involved in every part of the process, from the creation and development of ideas to the implementation and facilitation of those ideas.

### ***What cohorts and faculties are engaged as partners?***

Although open to all students from all faculties across Curtin, the student partners have primarily come from the Faculty of Science and Engineering as they are naturally drawn to the place and bring many of the skills needed to work with a lot of the equipment. During 2020-21 six Science and Engineering students have worked in collaboration with Makerspace staff Karen Miller and Marie Clarke, two of which graduated earlier in 2021 and one since. It is envisioned that the student presence will remain with up to six student partners in 2022. The wording of the job description has been reconsidered to attract students from all faculties across Curtin along with Curtin's Centre for Aboriginal Studies (CAS) to fill positions that are becoming available due to graduating students.

### ***What has been the impact of engaging students as partners?***

Karen believes the greatest impact of engaging students in this initiative is "...the relationships they form with their peers that the staff would not be able to achieve." The students form fast

connections and want to learn from each other in a way that doesn't translate from staff to student. They have made friends through their engagement in the space and relate on the same level through a shared understanding and connection. The student partners bring the ability to make authentic connections with other students that come in and use the Makerspace. A culture of sharing and exchanging information is created and the peer-to-peer relationships form quickly and flourish throughout the time the students are working on their project. Skills the student partners have gained and developed translate to employability skills. Students have reported back to staff that gaining referees and other relevant skills have resonated positively with potential employers and have been a great addition to their resumes.

***What UN Sustainable Development Goals (UNSDGS) have been addressed or are being addressed through this initiative?***

The UNSDG #4 – Quality Education is being addressed by this initiative by promoting positive learning opportunities outside of students structured study commitments aiding in the encouragement of lifelong learning.

***What are the next steps for the Makerspace initiative?***

With the continuing help of student partners, Makerspace staff are wanting to develop more of a community to enable the sharing of experience and knowledge and community/relationship building, as well as to gather feedback from the students that use the space. Ideally, this would be a student led group that will meet regularly, developed and facilitated by students for students. The future direction of the Makerspace centres around developing ideas and preparing for the operations and activities in the new Makerspace which will be opening in the refurbished library building in 2023, as well as training and upskilling the new recruits. In the more, immediate future, student partners will have the opportunity to assist school and community groups that continue to use Makerspace over the term break and throughout the coming semesters, thus continuing to develop their skills and knowledge working with diverse groups of various ages.