## Makerspace unites engineers, artists, entrepreneurs and fashion students

AREN MILLER looks into how the Makerspace at Curtin University Library creates opportunity for users to learn and develop through the act of creation.

Curtin University Library has been exploring ways to share non-traditional resources through the development of a makerspace to help clients develop creativity, critical thinking and problem-solving skills. To achieve this, we have built a maker community that shares equipment, experience, and expertise. Although there are challenges to meet, the Makerspace is an important contribution to fostering creativity in our users.

The equipment reflects the interests and needs of our users. We have electronic equipment such as Arduinos, Raspberry Pis, and Makey Makeys; virtual reality headsets and 3D scanners; video and audio gear; sewing machines, badge makers, graphics tablets, and creative software. This equipment is available for anyone to use. Occupational therapy lecturers, for example, have borrowed the 360 Fly cameras to create home visit safety assessment videos to provide an immersive 3D virtual experience for online students.

As more people discover our Makerspace, the space itself has become a popular resource to 'borrow'. The space is relaxed and welcoming and is well equipped to host meet ups and events. Alongside daily drop in sessions, our Makerspace hosts visualisation and interactive media, game design, and popular culture classes. The space has been used for design thinking workshops and drop-in coding assistance, while student groups such as Bloom Curtin (for young entrepreneurs) and the Illustration Club also meet there. These activities help create a vibrant space, and often lead to serendipitous encounters and new ideas.

Perhaps the most important resource-sharing in our Makerspace is the exchange of experience and expertise. We have tried to create a community where people can learn from one another and it has been wonderful to see users share knowledge and skills derived from their personal interests.

Our Makerspace sharing culture has also fostered many collaborative projects and events. This year, the crossdisciplinary Poppy project has involved engineering students working with the library to create a robot mascot, while fashion students explored designs for suitable outfits for



Makerspace clients can use equipment for their projects, such as sound and video recording devices.

it. We also collaborate with makers to facilitate workshops, such as clay sculpture or learning to use Arduinos. We share these experiences with the wider community by talking with community groups about our work, and we frequently run sessions for visiting school groups.

Undoubtedly, there are challenges in redefining ideas about what services and resources academic libraries provide. We need to work hard to communicate what we are doing and why, and to demonstrate the efficacy of having a makerspace in our library. We need to be aware of the safety and wellbeing of our clients, and to ensure that we provide equity of access to our Makerspace and make clear the benefits of it for all our students. We endeavour to find the right balance between procedures and rules, and strive to be flexible, spontaneous and experimental – all necessary ingredients for creativity to flourish.

While meeting these challenges, our Makerspace remains true to the purpose of the library - helping our community develop their skills.

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