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WORKSHOP

User Centered Design Thinking to Drive Student Engagement in a Makerspace

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ABSTRACT

Telstra Creator Space is a University makerspace located at the University of Melbourne's innovation precinct, Melbourne Connect. It is accessible to students and staff from the Faculty of Engineering and Information Technology (FEIT) and to Melbourne Connect tenants to; design, fabricate and test their early prototypes.

The University of Melbourne has appointed QinetiQ Australia to manage the operations of Telstra Creator Space and drive engagement with the broader FEIT.

How might we generate engagement with teachers and students to connect them with makerspace capability?

Determining and understanding the needs of various groups has been key to developing a makerspace where users can design and complete their practical projects. A high level of engagement across the groups is required to overcome their respective challenges and maximise the benefits of a makerspace.

This workshop will take a user centred, design thinking approach to the problem of attracting and driving student engagement in a University makerspace. The workshop will guide participants to identify and explore the barriers and hurdles that impact on wider university engagement and limit usage of makerspaces.

The participants will discover, define and explore, then develop and test their solutions. Participants will apply this framework to their makerspace challenge, develop and share their solutions, and receive feedback from the facilitators and the wider group.

WORKSHOP MODE

The workshop will be facilitated in hybrid mode.

OVERVIEW OF WORKSHOP

Applying design thinking methods to attract and engage users (students, academics and others) to a University makerspace.

ACTIVITIES

The workshop will apply the principles of user centred design to understand and define the problem of, and a solution to, attracting and driving student engagement in a University makerspace. In small groups attendees will be guided through the process by the team from the University of Melbourne's Telstra Creator Space.

- Understanding who the users are and where they are coming from, including how to identify all potential users
- Defining the problems the users are encountering prior and during engagement with a makerspace
- Defining a solution or solutions to the issue and the fastest and most meaningful way to validate them
- Understand where the solution fits in the users experience, and how it might be further iterated to improve engagement or better understand the user

Groups will be given the opportunity to share their solutions to the workshop and compare notes.

Non-standard materials will not be required, pens, markers and paper will be provided.

TARGET AUDIENCE

Academics looking to transition their units to more hands-on teaching, existing makerspace staff looking to generate further student engagement.

OUTCOMES

Attendees will gain first-hand experience with understanding user needs and rapidly validating proposed solutions for driving student engagement in a makerspace. Attendees will use design thinking to generate a minimum viable concept for their particular makerspace problems.

KEYWORDS

Makerspace engagement, User centred design, design thinking.

PRESENTERS' BACKGROUNDS

Matthew McCoy is the Service Lead at the University of Melbourne's Telstra Creator Space, Matthew has overseen the process of service design and engagement, from inception to delivery.

As the Service Designer, Sara has applied design thinking to develop the user experience and engagement at the Telstra Creator Space, working with academics and students to understand, define and develop solutions.

Filip Surla has been supporting the service development in a variety of ancillary roles including training management and student mentoring.