

29th Australasian Association for Engineering Education Conference 2018



WORKSHOP

Design Factory New Zealand: A co-creation space where students work in multidisciplinary teams with industry partners to solve complex problems

Elna Fourie, Aidan Bigham

Waikato Institute of Technology

Corresponding Author Email: elna.fourie@wintec.ac.nz

OVERVIEW OF WORKSHOP

This workshop will provide an opportunity for participants to work with Design Factory New Zealand (DFNZ) principles to experience learning as a multidisciplinary team, working on a complex problem.

Participants will have a chance to see how DFNZ acts as a transformation agent within students, staff, institution and the wider community.

DFNZ as a curriculum allows students to explore new themes that challenge the usual paradigms. We encourage students to take ownership of their learning, to be open minded, and to have the freedom to respond to solutions without the shackles of a traditional design process driven by cost.

By partnering with industry and exposing students to create solutions for real world problems, DFNZ has the aim of producing global citizens who have a better chance of succeeding in the workplaces of the future.

Currently DFNZ has facilitated learning to students from Civil and Mechanical Engineering, Communication, Information Technology, Business, Design and Sports Science.

Industry partners working with the DFNZ team tap into a pool of carefully selected and motivated students who are supported to come up with innovative and holistic solutions to their problems. Industry can use DFNZ as an opportunity to solve specific and existing needs of the company, or utilise fresh thinking to approach complex and wider issues. Involvement with the Design Factory can provide industry with critical strategic insight.

Industry partners have so far included Opus (now WSP-Opus), Midland Trauma, Waikato District Health Board Hamilton City Council, Waikato Regional Council, Equus Education, & Habitat for Humanity.

ACTIVITIES

This will be a very active session. There will be a broad range of activities from empathy interviewing, ideation exercises, physical prototyping and pitching or roleplaying of ideas. The activities will occur over a 70 minute period, leaving remaining time for a question and answer session.

TARGET AUDIENCE

Anyone that wants to make changes, whether they are slight changes in facilitation to substantial changes in institutions and communities.

OUTCOMES

Participants will leave with an experience of the design thinking process and the relationship between multidisciplinary teams, industry and our institution.

There will be some resources and ideology that participants can adopt in their own contexts no matter their professional background

REFERENCES (OPTIONAL)

<https://www.wintec.ac.nz/designfactory>

KEYWORDS

PRESENTERS' BACKGROUNDS (max 50 words)

Note: The maximum length of a Workshop Proposal should be 2 pages.

Aidan Bigham, Design Factory NZ Facilitator & Coach

As a Principal Academic Staff Member in the Centre of Engineering and Industrial Design, Aidan has spent many years investigating and implementing innovative teaching techniques and flexible learning strategies. Aidan is a passionate teacher who is excited about Wintec's take on Design Factory, enjoying the multidisciplinary, project-based approach which transforms future generations.

Elna Fourie, Design Factory NZ Facilitator & Coach

A Senior Academic Staff member in the School of Media Arts, Elna works with multidisciplinary student groups on real-world projects and contexts. With self-management, problem-solving, and ability to work with others being crucial skills for work in any industry, Elna sees potential in the Design Factory approach for enhancing students' professional capability.