Pedagogical interventions to re-enforce empathy as part of project-based learning

Keywords

Design Factory New Zealand Te Tumu Herenga Whakaaro o Aotearoa, Empathy, Human-Centered Design, Multidisciplinary, Soft skills.

This paper focuses on pedagogical interventions that emphasise and deepen learner understanding of empathy within human-centered design processes, in the context of multidisciplinary project-based learning at Design Factory New Zealand Te Tumu Herenga Whakaaro o Aotearoa. Empathy, a component of emotional intelligence, is considered a soft skill. While there is no universal definition for soft skills, they include a range of social and people skills, personal attributes, and even self-management skills. These behaviours, attitudes, or personal qualities, often set apart from 'hard skills' that are more cognitive or technical in nature, are increasingly seen as important in the future world of work. Soft skills like empathy are not easily replicated by machines, and are thus desirable for gaining employment, both in Aotearoa New Zealand and internationally. Moreover, in a world of work where collaboration and communication are important, recent studies also show that a focus on skills such as empathy can improve team performance. Given this futurefocused view, embedding soft skills, like empathy, within teaching and learning in tertiary education is valuable. Design Factory New Zealand Te Tumu Herenga Whakaaro o Aotearoa is a co-creation space where multidisciplinary groups of learners work with industry or community partners to solve complex problems. Design Factory papers are available to many undergraduate students across the Waikato Institute of Technology, meaning learners often do not know each other before enrolling, and come from diverse fields of study. Learning outcomes focus on students using human-centered approaches (including empathy) to research, investigate and produce reasoned

and critical responses to problems, as well as students improving soft skills like empathy to support their multidisciplinary team, and improve their ability to work alongside industry partners. To help students investigate problems, Design Factory teaches a human-centered approach to problem-solving; in particular, introducing design thinking as an approach, and using a five-step model, where Empathy is the first step (followed by Define, Ideate, Prototype, Test). A variety of tools and techniques are used to develop a deeper awareness of the complex problem and of the impact on people connected to the challenge. To support students' development of empathy as a soft skill to use within their multidisciplinary group, various strategies are used in teaching and coaching to scaffold learning and awareness of empathy. This research reports on four specific pedagogical interventions focused on deepening learners' understanding of empathy within a design practice context. These strategies include: empathy interviewing as a tool for understanding the users or stakeholders central to their challenge; emotional intelligence workshops with external guest speakers to help develop selfawareness; personal development planning to support individual learning and future-focused skill development while participating in a group project; and facilitated team feedback activities where team members provide positive and constructive feedback. These pedagogical interventions have resulted in trackable individual growth, a deeper understanding of the value of empathy in solving complex challenges, as well as greater understanding of how to create a positive working environment within a multidisciplinary team.