Impact Evaluation of a Novel Community-Engaged Interdisciplinary Learning Project

Megan Dodd, Lovaye Kajiura, Robert Fleisig, Brenda Vrkljan - McMaster University

The IMPACT Project engaged first year engineering (>900), undergraduate biology (>90) and graduate-level occupational therapy students (>40) with community volunteer-clients. The central learning objective for the students was to effectively work as team members to address a unique, open-ended problem with their own creativity and applied knowledge. Students acted as researchers, designers, evaluators, and consultants while drawing from their varying academic disciplinary backgrounds and face-to-face interactions with the client. The project included elements of experiential learning from collaborative and active learning perspectives (Kolb, Boyatzis, & Mainemelis, 2001), interdisciplinary and service learning aspects through community engagement experiences (Becker & Park, 2011), and design-based research (Barab & Squire, 2004). The learning outputs of the project were to effectively develop assistive devices tailored to address individual client challenges with performing activities critical to health and quality of life. To evaluate the impact of this interdisciplinary community-engagement learning project, focus group evaluations were transcribed verbatim and analyzed using a cross-comparative analysis. Experiences of students, instructors, and clients were captured to evaluate experiences and perceived personal value of participation. Evaluations indicate high-impact outcomes for students and community members. Results suggest numerous and diverse positive student learning outcomes that are both consistent with and additional to findings of a meta-analysis of service learning projects (Yorio & Ye, 2012). Notable student learning outcomes include: increased confidence in disciplinary and course knowledge; increased confidence in ability to critically apply course knowledge to problems; increased awareness of community health and mobility issues; strengthened sense of community and campus belonging; inspiration and personal connection in their chosen field of study; and increased motivation to be an active community contributor. Positive outcomes for community clients include: new connections, meaningful participation in the education of the next generation of leaders and citizens, motivation for continued involvement in community projects, and increased confidence.