Connecting silos through design thinking: Radical collaboration in the Wearables Research Collaboratory

In their comparative study of competencies of translators and technical communicators, Minacori and Veisblat (2010) document the convergence of skills across these professions. They identify the following skills of technical translation students as most attractive to employers: analyzing, understanding, and conveying the meaning of a technical text; understanding audience; and writing clear instructions (p.761), and technical communication curricula includes assignments that focus on these areas. However, technical communicators increasingly must address ambiguous and ill-defined problems, i.e., situations in which design thinking competencies are most needed. Design thinking pedagogies include prototyping, working across “silged” cultures, and embracing non-sequential processes for developing multiple solutions demanded of complex problems.

Study of design thinking methodology is rarely found in technical communication scholarship; therefore, we share a case study of the Wearables Research Collaboratory (WRC, wrcollab.umn.edu) in which eight of us--two faculty, two graduate students, and four undergraduate research assistants--collaborated across academic silos to deploy design thinking methodology in investigations of wearable technologies.

We discuss collaboration across cultures of central vs. departmental units, seniority, and academic position; describe learning experiences that support sustained periods of question finding, ideation, and visualization; and provide a model of “radical collaboration” for work beyond silos.


All of us are affiliated with the University of Minnesota, Minneapolis, MN, USA ahduin@umn.edu, moses004@umn.edu, mcgra340@umn.edu, thamx007@umn.edu

Ann Hill Duin, Ph.D., is a Professor of Scientific and Technical Communication at the University of Minnesota where she studies the impact of emerging technologies on the future of teaching/learning and higher education.

Joseph Moses, Ph.D., is a Senior Lecturer of writing studies at the University of Minnesota where he is developing an agile writing framework for instructional design in technical communication.

Megan McGrath is a Ph.D. candidate in the Writing Studies Department at the University of Minnesota—Twin Cities, where she teaches first-year writing and technical and professional writing. Her research examines how emerging technologies, such as wearables, influence agency, identity, and social norms.

Jason Tham is a PhD candidate in the University of Minnesota’s Rhetoric and Scientific and Technical Communication program. He studies how emerging technologies invite different ways of thinking and learning, and the increasingly intense flow of information occurring between people and machines.