

LAUREN DWYER

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EDUCATION

PhD Communication and Culture; Technology in Practice

Toronto Metropolitan University & York University | Toronto, ON | 2018 - 2023

Dissertation: Isolated Circuits: Human Experience and Robot Design for the Future of Loneliness

Master of Professional Communication

Toronto Metropolitan University | Toronto, ON | 2015-2016

Major Research Project: Towards a Communication Model for a Sociable Companion Robot

BSc Honours Psychology

Memorial University of Newfoundland | St John's, NL | 2010 - 2014

Undergraduate Thesis: Evaluating Emotion Dysregulation In A Distressed Community Sample

AFFILIATIONS & ASSOCIATIONS

User Experience Professionals Association (UXPA)

International Communication Association (ICA)

Canadian Communication Association (CCA)

INDIVIDUAL FUNDING & AWARDS

2018 - 2021 | Edward S. Rogers Sr. Graduate School Fellowship

2018 - 2021 | Ontario Graduate Scholarship

2018 - 2020 | Toronto Metropolitan Graduate Development 2018-19 Toronto Metropolitan Graduate Assistantship

2015 - 2016 | Toronto Metropolitan Graduate Fellowship

2015 - 2016 | Toronto Metropolitan Graduate Assistantship Award

ACADEMIC SERVICE

2024 - 2025 | Mount Royal Faculty Association Academic Policy & Governance Committee | Mount Royal University

2024 - 2027 | Mount Royal Faculty Association Grievance Committee | Mount Royal University

2024 | Honours Program Development | Information Design, Faculty of Business, Communication & Aviation, Mount Royal University

2024 | Program Review Participation | Information Design, Faculty of Business, Communication & Aviation, Mount Royal University

2023 | Peer Reviewed Article 2 | New Media and Society

2023 | Peer Reviewed Article 1 | New Media and Society

SCHOLARSHIP OF TEACHING & LEARNING

Using the literature circle model for student assessment | Centre for Innovation in Teaching and Learning (CITL) Instructor Series (Fall 2024) | Memorial University of Newfoundland | Facilitated by Dr. Connie Morrison

AI for Educators Panel (April 2024) | Memorial University of Newfoundland Faculty of Education | Facilitated by Dr. David Gil

Ethical AI: Time for the Difficult Conversations Panel for the Faculty of Business, Communication, & Aviation (March 2024) | Mount Royal University | Facilitated by Dr. Hadi Fariborzi.

SCHOLARLY & RESEARCH POSITIONS

Graduate Researcher | Canada-UK Artificial Intelligence Initiative Fund | AI-Enhanced Social Robots to Improve Children's Healthcare Experiences

McMaster University, University of Alberta, Sick Kids Hospital, and University of Glasgow | September 2020 - November 2022

Graduate Researcher | SSHRC Partnership Grant | Global Journalism Innovation Lab: Revitalizing Journalism and Accelerating Knowledge Mobilization from Canadian Universities

Toronto Metropolitan University | Toronto, ON | May 2020 - January 2022

Graduate Researcher | SSHRC Insight Development Grant | Participatory Campus Planning

Toronto Metropolitan University | Toronto, ON | May 2017 - January 2022

Graduate Researcher | Communication Leveraging AI and Robotics for Healthcare (CLAIR-Health)

Toronto Metropolitan University | Toronto, ON | May 2017 - September 2022

Graduate Researcher | CBC Audience Research Lab

Toronto Metropolitan University | Toronto, ON | July 2017 - December 2017

Graduate Researcher | Modalities in Research Project (MoRe)

Toronto Metropolitan University | Toronto, ON | 2016 - 2017

Graduate Researcher | SSHRC Insight and Connection Grant Funded | Virtual Hamilton

McMaster University | Hamilton, ON | July 2016 - July 2017

Graduate Researcher | Spaceball Space Station Companion

Toronto Metropolitan University | Toronto, ON | September 2015 - May 2016

Graduate Researcher | hitchBOT

Toronto Metropolitan University | Toronto, ON | September 2015 - Present

Undergraduate Researcher Psychology and Law Lab

Bounded Rationality and Law Lab, Memorial University | St. John's, NL | January 2013 - May 2014

Undergraduate Researcher Clinical Psychology Lab

MIRIAM Lab, Memorial University | St. John's, NL | January 2012 - January 2014

Undergraduate Researcher Child Psychology and Law Lab

Eye Witness Memory Study, Memorial University | St. John's, NL | January 2013 - December 2013

MANAGEMENT & ADMINISTRATIVE POSITIONS

Academic Chair Data and Artificial Intelligence

School for Advanced Digital Technology, Southern Alberta Institute of Technology | September 2022 - December 2023

Program Coordinator NSERC-CREATE Responsible Artificial Intelligence Program

Toronto Metropolitan University | January 2022 - November 2022

Communication Manager

InkWell Workshops | Toronto, ON | September 2020 - January 2022

UXPA International Mentee Program

User Experience Professionals Association International | New York, NY | July 2020 - September 2020

Academic Administrative Assistant

Office of the Dean Creative School | Toronto Metropolitan University | Toronto, ON | September 2017 - September 2018

Student Support and Accessibility - SWASP Position

Glenn Roy Blundon Centre, Memorial University | St. John's, NL | October 2011 - December 2014

COURSE INSTRUCTION

Assistant Professor - Information Design INFO 2670 Tools for Information Designers (2 Sections) | Classroom
Mount Royal University | Calgary, AB | Winter 2024

Assistant Professor - Information Design INFO 3611 Designing for Interactivity | Classroom
Mount Royal University | Calgary, AB | Winter 2024

Adjunct Instructor - Digital Media Studies BDES 3601 | ONLINE
George Brown College | Toronto, ON | Winter 2022

Graduate Teaching Assistant - CMN 324 Storytelling Communication | ONLINE
Toronto Metropolitan University | Toronto, ON | Winter 2022 | Supervising Instructor - Dr. Jessica Mudry

Guest Lecture - CMN 601 Visual Communication - Writing for Research | ONLINE
Toronto Metropolitan University | Toronto, ON | Fall 2021 | Supervising Instructor - Dr. Ger Zielinski

Graduate Teaching Assistant - CMN 601 Visual Communication | ONLINE
Toronto Metropolitan University | Toronto, ON | Fall 2021 | Supervising Instructor - Dr. Ger Zielinski

Graduate Teaching Assistant - CMN 432 Communication for the Engineering Profession | ONLINE
Toronto Metropolitan University | Toronto, ON | Fall 2021 | Supervising Instructor - Dr. Jessica Mudry

Research Workshop - SPSS Fundamentals | ONLINE
Toronto Metropolitan University | Toronto, ON | Summer 2021

Graduate Teaching Assistant - CMN 315 Organizational Communication | ONLINE
Toronto Metropolitan University | Toronto, ON | Winter 2021 | Supervising Instructor - Dr. Opeyemi Akanbi

Graduate Teaching Assistant - CMN 306 Risk and Crisis Communication | ONLINE
Toronto Metropolitan University | Toronto, ON | Fall 2020 | Supervising Instructor - Dr. Sibon Chen

Research Workshop - NVivo Fundamentals | ONLINE
Toronto Metropolitan University | Toronto, ON | Summer 2020

Elite Martial Arts Level 1 Instructor - Beginner fitness | Classroom
Elite Martial Arts | Toronto, ON | September 2019 - July 2020 | Head Instructor - Dan Novak

Elite Martial Arts Level 1 Instructor - Women's Self Defense | Classroom
Elite Martial Arts | Toronto, ON | September 2019 - July 2020 | Head Instructor - Dan Novak

Guest Lecture | CE 3157-016 Advanced Practices in Multimedia Storytelling | Classroom
Chang School | Toronto Metropolitan University | Toronto, ON | Winter 2020 | Instructor - Leanne Simpson

Graduate Teaching Assistant - CMN 215 Messages, Modalities and Media | Classroom
Toronto Metropolitan University | Toronto, ON | Fall 2019 | Supervising Instructor - Dr. Frauke Zeller

Graduate Teaching Assistant - CMN 215 Communication Revolutions | Classroom
Toronto Metropolitan University | Toronto, ON | Winter 2019 | Supervising Instructor - Dr. Carolyn Meyer

Graduate Teaching Assistant - CMN 443 Contemporary Inter-cultural Communication | Classroom
Toronto Metropolitan University | Toronto, ON | Fall 2018 | Supervising Instructor - Dr. Eva Woyzbun

Graduate Teaching Assistant - CMN 600 Science and Technology Communication | Classroom
Toronto Metropolitan University | Toronto, ON | Winter 2016 | Supervising Instructor - Dr. John Shiga

Graduate Teaching Assistant - CMN 306 Risk and Crisis Communication | Classroom
Toronto Metropolitan University | Toronto, ON | Fall 2015 | Supervising Instructor - Dr. Frauke Zeller

PUBLICATIONS & CONFERENCE PROCEEDINGS

Dwyer, L. & Zeller, F. (2023). Toward Authenticity in Social Robotics. Conference preceding for the Human-Machine Communication Pre-Conference, International Communication Association. *Awarded the Yuhua (Jake) Liang Award for Top Paper of the Division

Dwyer, L., Crawford, C., & Zeller, F. (2023). Media Framing of Dominant Ideologies in Explanatory Journalism Concerning Artificial Intelligence and Robotics. *Canadian Journal of Communication*, 48(4), 715–742. <https://doi.org/10.3138/cjc-2022-0017>

Foster, M., Candelaria, P., Dwyer, L., Hudson, S., Lindsay, A., Nishat, F., Pacquing, M., Petrick, R., Ramírez-Duque, A., Stinson, J., Zeller, F., & Ali, S. (2023). Co-design of a Social Robot for Distraction in the Paediatric Emergency Department (p. 465). <https://doi.org/10.1145/3568294.3580127>

Zeller, F., & Dwyer, L. (2022). Systems of collaboration: Challenges and solutions for interdisciplinary research in AI and social robotics. *Discover Artificial Intelligence*, 2(1), 12. <https://doi.org/10.1007/s44163-022-00027-3>

Dwyer, L., Woods, J., Zeller, F. (2022) Shifting sentiment; Author gender in explanatory journalism articles on AI, technology and robotics during the first wave of the COVID-19 pandemic. Paper presented at Congress 2022 Meeting of the Canadian Communication Association.

Dwyer, L. (2021). Designing companion robots for loneliness. Position paper presented at arttech: Performance and Embodiment in Technology for Resilience and Mental health. 24th Annual Conference on Computer-Supported Cooperative Work and Social Computing. October, Virtual.

Dwyer, L. (2021). Isolated Circuits; Designing companion robots for the future of loneliness. Doctoral Keynote presented at Intersections Cross Sections Conference. March, Toronto, Can.

Dwyer, L., Zeller, F., Smith, D., Lima, H. (2021). Communication Leveraging Social Robots for Healthcare. Paper to be presented at Congress 2021 Meeting of the Canadian Communication Association.

Dwyer, L., Crawford C., Zeller, F. (2021) Media Framing Analysis of AI, Robotics & Technology in Explanatory Journalism. Paper presented at the International Association for Media and Communication Research conference in July, 2021.

Dwyer, L. (2020) How Mental Health Apps are Exploiting User Data. Spotlight on Emerging Researchers: Explanatory Journalism Project. <https://bit.ly/3Dd8eML>

Dwyer, L. (2019). The Rhetoric of Recovery: Mental Illness and Recovery-Oriented Treatment. Paper presented at Future Communications 7th annual Conference and Symposium.

Smith, D., Zeller, F., Eyles, J., Silva de Jesus, D., Dwyer, L., Eyles, E. (2017) Virtual Worlds for Facilitating Urban Development Dialogue, *Proceedings of EVA London 2017*, UK, 109-111. Contributing author.

Dwyer, L. (2017). Towards a communication model for a sociable companion robot. Paper presented at Congress 2017 Meeting of the Canadian Communication Association Graduate Masters Session.

Zeller, F., Au Duong, J., Dwyer, L., Pavliuc, A. (2017). Modalities of Research. Paper presented at Congress 2017 Meeting of the Canadian Communication Association. Contributing author.

Smith, D. H., Zeller, F., Eyles, J., Eyles, E., Dwyer, L., Smith, H. (2016, July). Using 3D social worlds to enhance participatory urban planning. Paper presented at International Conference on Social Media & Society, 11-13 July, London, UK. Contributing author.

PROFESSIONAL CONFERENCES & PUBLIC EVENTS

2024: Spark After Dark | Keynote: Beyond Computation: The Intersection of AI, Communication, and Society

2024: Spark After Dark | Workshop/Talk: Generative AI – How-To

2024: mesh Con | Panel: How to innovate in risk-averse and slow-moving industries with Leen Li & Lauren Dwyer

2023: DMC Data & Security Conference | Talk: Shaping the Future of Data: Preparing the Next Generation for Technological and Ethical Challenges

2023: YYC Data Con | Panel: Data Science Day to Day - An Exploration of Data-Driven Industries | YYC Data Con

2023: mesh Con | Panel: Transformations for Future Generations: Health & Education

2017: SingularityU | Booth: hitchBOT the Hitchhiking Robot

MEDIA FEATURES

Podcast (September 2024): Current & Critical (forthcoming).

Article (June 2024): Digital Journal: Bridging academia and innovation in the age of AI

<https://www.digitaljournal.com/tech-science/bridging-academia-and-innovation-in-the-age-of-ai/article>

Podcast (April 2023): Current & Critical - Understanding Human-Centred Technologies (and how they will impact us all)

<https://www.collisionsyyc.com/episodes/e330-lauren-dwyer>

CBC Article: AI can write essays now — what that means for Calgary universities and colleges

<https://www.cbc.ca/news/canada/calgary/artificial-intelligence-post-secondary-calgary-alberta-1.6790256>

The importance of future-proofing tech programs

<https://www.sait.ca/news//2022/11/the-importance-of-future-proofing-tech-programs>

Podcast (November, 2021): Innovation Heroes: A hitchhiking robot's guide to the future.

https://link.chtbl.com/IHS3E3_?sid=guest

Article (November, 2021): Innovation Heroes: A hitchhiking robot's guide to the future

<https://bit.ly/3c6QIOH>.

RESEARCH & SCHOLARSHIP PLAN 2024

Research Direction & Ethical Focus

My research agenda for the next five years is anchored in the establishment and development of a research group dedicated to understanding the interaction between emerging technology, user experience (UX), and social behaviour modification with a pronounced emphasis on ethics. This initiative will prioritize student experiential learning and career readiness, incorporating ethical considerations into UX design frameworks to better prepare students for both academic research and professional practice.

Ongoing Scholarship & Dissemination Efforts

My ongoing scholarship continues to explore human-centered design and its intersection with user experience, consistently emphasizing authenticity and ethical considerations in emerging technologies. This research trajectory has led to several significant projects and forthcoming publications:

1. Qualitative Content Analysis in Human-Computer Interaction

I am co-authoring a chapter on the application of qualitative content analysis in the study of human-computer interaction, which will be included in the Handbook of Qualitative Content Analysis. This chapter, co-authored with Dr. Frauke Zeller (Professor & Chair of Design Informatics at the University of Edinburgh), is slated for publication by Edward Elgar Publishing Ltd. in Spring 2025.

2. Towards Authenticity in Social Robotics

I am collaborating with Dr. Frauke Zeller on a journal article titled "Towards Authenticity in Social Robotics," which is currently being revised for submission to the International Journal of Social Robotics. This work delves into the ethical considerations surrounding the integration of robotics into human social environments, aiming to ensure that these technologies promote genuine and meaningful human-machine interactions.

3. Canadian Perspectives on Loneliness: Communication as Meaningful Connection

I have a solo-authored article under review in its second round of revisions with Frontiers in Digital Public Health. This article examines the issue of loneliness in Canadian society, highlighting the critical role of communication as a means of fostering meaningful connections. Pending approval, I will apply for an open access research fund to support its publication.

Funding Initiatives & Collaborative Research Projects

The first two years of this plan will focus on securing funding and establishing foundational research programs. I will apply for a SSHRC Insight Development grant, with plans to scale this funding to a SSHRC Insight grant. My ongoing and upcoming projects include:

1. Making Time for Her: Including Women in AI-Enhanced Assistive Technologies Design

This collaborative project, for which I am a co-investigator, focuses on the role of AI-enhanced assistive technologies in supporting women during life transitions. We aim to address the systemic underrepresentation of women's needs in technology design, particularly in the context of aging. The project team includes prominent researchers from the University of Edinburgh, Toronto Metropolitan University, and McMaster University, among others. The project has been submitted for funding through the ORA program, with results expected by the end of September 2024. The proposal seeks \$600,000 over three years.

2. Designing Emerging Technologies for Behaviour Modification and Social Innovation

I plan to apply for the Internal Research Grand Fund (IRGF) in September 2024, along with the Undergraduate Research Assistant fund and a SSHRC Insight Development Grant, to support a pilot project investigating the impact of digital and physical technology design on societal structures and individual behavior modification. This research will involve undergraduate research assistants in data collection, analysis, and literature review, providing them with valuable hands-on experience in multidisciplinary research.

3. Minimum Standards for News Reporting

I am collaborating on an exploratory project aimed at establishing consensus standards for journalistic practices in an era of increasing media consolidation and declining diversity in news reporting. This project, involving scholars from the University of Montreal, Laurentian University, and Toronto Metropolitan University, among others, will consist of scholarly research, public engagement through a dedicated platform, and an international conference on journalistic standards scheduled for May 2025.

Interdisciplinary Expansion & Mentorship

In years 3 to 5, my focus will shift toward developing interdepartmental connections to foster interdisciplinary learning within the lab. I plan to provide mentorship opportunities in ethical UX design for students from the School of Communication Studies, Faculty of Arts, and the Bissett School of Business. These efforts will be supported by ongoing communication with the Institute for Innovation and Entrepreneurship, ensuring student preparedness for both research and industry.

Future Vision & Multi-Institutional Networks

Looking beyond the five-year mark, I envision forming connections with other universities to develop a multi-institutional research network. Leveraging existing partnerships, I plan to establish an ethical design training network with institutions such as McMaster, Toronto Metropolitan, York, and Memorial Universities, as well as the Universities of Alberta and Waterloo. This network, potentially funded through NSERC-CREATE and MITACS Elevate programs, will focus on training the next generation of researchers in ethical UX design. An additional goal is to establish a UX undergraduate conference that will bring together industry and academic partners, providing a platform for emerging researchers to showcase their work and share knowledge across institutions.

TEACHING PHILOSOPHY

Grounded in principles of openness, understanding, and flexibility, my philosophy of teaching places significant emphasis on human-centric design and effective information dissemination. The experience I gained at the Glen Roy Blundon Centre at Memorial University, where I ensured the provision of necessary learning accommodations for students, profoundly influenced my commitment to Equity, Diversity, and Inclusion (EDI).

My tenure as an Academic Chair further enriched my philosophy. Assisting students through academic challenges, misconduct allegations, and personal difficulties underscored the importance of empathy and understanding in academia. It fostered a deeper appreciation of student-centric education, a style that addresses not only academic performance but also personal growth and resilience.

Being tasked with the development of a new curriculum on Integrated Artificial Intelligence, I realized the crucial balance needed between technological innovation and human interaction. This reinforced my belief that, despite the rapid digitalization of our era, the human element remains integral. This understanding has shaped both the content of my teaching and my interaction with students, emphasizing empathy, emotional intelligence, and human connection.

Embracing the dynamic nature of technology and data science, my pedagogy integrates a wide range of subjects, including Information Design, User-Centric Design, Data Science, User Experience (UX), Usability Testing and Research, HCI, Content Management Systems (CMS), Information Architecture, and Quantitative and Qualitative Research Methods.

I encourage students to actively participate in shaping their learning objectives and assessments, mirroring my commitment to user-centric design principles. The focus lies on the students' reception and comprehension of information, aiming to equip them with knowledge that extends beyond the classroom and into their professional lives.

Feedback and effective communication form the pillars of my teaching methodology. Leveraging Pendleton's Feedback Model and the Situation-Behaviour-Impact model, I aim to foster critical thinking skills while valuing and acknowledging each student's unique perspective. It's my mission to create an environment where students feel seen, heard, and understood.

My experience as an Academic Chair has equipped me with the ability to recognize the multifaceted challenges within academia. This insight shapes my approach to instruction, favoring a collaborative learning environment that pairs instructor guidance with active student engagement.

When teaching technology-focused courses, I incorporate diverse engagement opportunities catering to different learning styles. Striving to instill a deep understanding of subjects over rote memorization, I ensure a symbiosis of theoretical concepts and practical real-world applications.

Communication in teaching should be meaningful and impactful. I ensure this by incorporating practical scenarios into course evaluations, such as mock risk communication strategies and application of learned methodologies. This approach allows students to engage more deeply with the material, understanding the practical implications of their learning.

In conclusion, my teaching philosophy, molded by my role as an Academic Chair and influenced by developing an AI curriculum, combines respect for diversity, understanding, flexibility, and readiness for a technologically advanced world. It seeks to strike a balance between technological developments and the human element, fostering an inclusive, engaging, and human-centric learning environment.

My teaching philosophy prioritizes an environment conducive to creativity and innovation. The classroom, in my view, should be a safe space for intellectual risk-taking and the exploration of novel ideas. By fostering collaboration, respect, and support, I aim to inspire not only the acquisition but also the creation of knowledge.

Additionally, I believe it's essential to equip students with skills for a globalized, interconnected world. This includes not only technical acumen but also soft skills like effective communication, critical thinking, and ethical decision-making. Particularly in fields like AI and UX, understanding societal implications of our work is vital. I integrate ethics and societal impact discussions into my courses, cultivating not just competent professionals, but conscientious global citizens.