

# Innovation by Design

*A Discussion of Graduate Students, with Leadership by Graduate Students*  
**University of Prince Edward Island**

## Acknowledgements

Utmost gratitude is expressed and respect is offered to the Mi'kmaq people of Abegweit in Mi'kma'ki. We acknowledge that Mi'kma'ki is the ancestral and unceded territory of the Mi'kmaq people, who, in 1725 first signed the Treaties of Peace and Friendship with the British Crown. Those treaties did not deal with the surrender of lands and resources, but instead recognized Mi'kmaq title and negotiated a path toward an ongoing relationship between nations. We acknowledge that the roundtable discussions were held in Mi'kma'ki, and express gratitude to those upon whose lands they took place. We convey our respect to all Indigenous peoples living in this region, to the knowledge keepers, and to their brave and resilient leaders, past and present.

With gracious financial support from the Canadian Association of Graduate Studies (CAGS) via the Social Sciences and Humanities Research Council (SSHRC), graduate students were compensated for their expertise and work, and were able to network and build new and stronger linkages over a shared meal.

The roundtable was only possible through the engagement of UPEI graduate students as leaders and conversationalists. The time, work, and perspectives shared by all fourteen of the graduate students involved are gratefully acknowledged. The contributions of the student leaders to the planning, event, and report are of especial note.

Sincere thanks to Dr. Marva Sweeney-Nixon, UPEI Associate Vice President Research & Dean of Graduate Studies for supporting the development of the event, and offering opening remarks. Further thanks to the Faculty of Graduate Studies (FGS) and Office of Commercialization, Industry, and Innovation (OCII) for serving as organizers and co-hosts of the event.

A full list of those involved in the Roundtable are included in Appendix A.

## Preamble

An evening of roundtable discussion on the theme “Innovation by Design: the role of Social Sciences, Humanities, and Arts in Innovation in Canada” was held on January 17, 2024. Co-hosted by the UPEI Faculty of Graduate Studies and the Office of Commercialization, Industry, and Innovation, the event brought together fourteen interdisciplinary graduate students for a conversation of graduate students, led by graduate students, and reported by graduate

students. The event provided an opportunity for leadership development, interdisciplinary network building, and sharing of expertise. The global representation in the room provided further insights, drawing not only from the interdisciplinary expertise represented, but also from the varied cultural backgrounds of the participants, which infused the directional themes of conversation with enriched layers of experience and insights. This report outlines the event itself, and presents an analysis developed and authored by UPEI graduate students of the key themes and big ideas of the discussions.

## Overview of Roundtable Event

The roundtable event commenced with welcoming remarks from Dr. Marva Sweeney-Nixon, AVP Research & Dean, Graduate Studies on the pivotal role of graduate students to innovation bringing fresh perspectives, critical thinking, and deep commitment to advancing knowledge. UPEI was noted as one of twelve participating institutions in the CAGS & SSHRC funded project, with the exciting opportunity to have UPEI graduate students' voices heard and contributed to the national conversation.

After an overview of the structure of the evening, an activity to engage and introduce all present took place; those present conversed about their background and what they were seeking out of the event. Enthusiastic conversations ensued, with the comfort level in the room growing as those in attendance built and strengthened their connections with each other.

A brief overview of the roles of the co-hosting units followed to familiarize all with the mandates and services of FGS and OCII, and how they relate to the roundtable itself. Dr. Rebecca Mok then segued into framing the conversations with a brief introduction to the variety of definitions of innovation as she discussed 'What is innovation?' and its role in developing new ideas, solving challenges, and creating value.

Next, the Facilitators for the session each spoke about their respective research, academic and professional endeavours that contribute to innovation. Fairouz Gaballa (Masters of Island Studies, Thesis stream) spoke to her past and ongoing research on the impact of physical activity on cognition in individuals with dementia. Nabeel Zafar (Masters of Education, Global Perspectives) spoke about his area of professional and research interest in blended educational leadership approaches for the governance of multi-campus educational institutions. In addition to contextualizing the expertise of the Facilitators, these short presentations modeled the framing of the conversation of connecting their discipline to innovation.

The roundtable conversation rounds followed. Participants had been pre-divided into groups of five to provide interdisciplinary representation, and a range of perspectives. The Facilitators had developed conversation prompts and these had been shared with the Participants days prior to the event to consider and prepare preliminary contribution points. Each group spent 25-30 minutes engaged in conversation with each Facilitator, for a total of 70 minutes spent contributing to the discussion of the central theme. One facilitator focused their conversation on three areas - the intersection of narrative and innovation, inclusive design and accessibility in

innovation, and cross-cultural collaboration. One facilitator prompted those at their table to converse on participants' experiences on the social sciences contributing social innovation to societal challenges, harnessing cultural innovation for societal progress, areas in need of innovation, and the role of technology in innovation through the lens of social sciences, humanities and arts.

Embedded Reporters, also graduate students, captured the discussion that took place, performed a brief analysis, and verbally provided a preliminary overview of the key themes and points from the conversations that took place. The in-depth analysis from each Reporter of the conversations follows in this report, authored directly by the Reporters themselves.

Informal networking continued, as conversation amongst those present continued to flow over the hour+ that followed, as a meal was shared with all present.

A few days following the event, a Debrief meeting of leaders (Facilitators & Reporters) and staff was held to discuss the event, identify and validate themes of each conversation, and overall key themes across the conversations. The reporting framework and plans for a social media post to disseminate news of the event were developed.

## Analysis and Themes of the Roundtable Conversations

During the event, days following, and in the debrief meeting, the Reporters led the process of analyzing the roundtable contributions to extract themes and key points. The themes may have been specific to one round of conversation, across both rounds of conversation with the same Facilitator, or even across Facilitators as an overarching theme.

Central themes drawn from the roundtable conversations included:

- Capacity for stories to build team security & trust
- Role of stories to consolidate data & make it more transparent
- How narrative supports being able to hear/visualize the need(s) the innovation satisfies in its context
- Ethics & innovation, with stories able to serve as a bridge
- Memory & its links to innovation
- Cohesion - sharing/being part of the same story to lead to innovation's success
- Critical links between mental health & social innovation
- Complex problems that require innovative solutions, and the need for social sciences to participate in solution development
- Essential to integrate more diverse values to bridge gaps, empower diverse voices

## In-Depth Analysis of Conversations and Themes

Conversation led by Fairouz:

Facilitator: Fairouz Gaballa - MAIS Thesis

Reporter: Nathaniel Coward - PhD Educational Studies

Appendix B includes the full text of the prompts developed and shared with participants ahead of the roundtable conversation.

To contextualize the analysis that follows, the Facilitator's general framing of the foci of the conversation:

- Powerful intersection of narrative and innovation; stories have a unique ability to shape our understanding of complex issues and spark creative solutions.
- Inclusivity is essential in all aspects of work; what does inclusive design mean to you, and how can we, as graduate students, actively contribute to making our products, services, and environments more accessible?
- Exploring the world of cross-cultural collaboration, a rich tapestry of challenges and opportunities; experiences of successful cross-cultural collaborations and challenges encountered

In-depth Analysis - Author: Nathaniel Coward

Conversation A focused its attention on three areas during the round table: 1) the intersection of narrative and innovation (i.e., how narrative shapes understanding of issues for innovative solutions), 2) how inclusive design and accessibility in social sciences contributes to innovation, and 3) cross-cultural challenges and opportunities and challenges for innovation. Only the idea that storytelling builds the trust required for success in collaborative research projects was common between them. The remaining themes from the discussions were as follows:

### *Group One*

Two themes were pulled from group one's discussion. First, the theme that stories help researchers better frame problems in creating solutions was established. Stories, by conjuring real life contexts, help researchers better see what the world needs. They allow researchers to share in the protagonist's perspective and can inspire the research to know how people might do things differently and further instruct them in how to effectively apply their research skills. Second, the group acknowledged stories as an effective way to collect, consolidate, and clarify data in social science and humanities research. This was seen in narrative's double function. First, stories were recognized as conveying information beyond the narrative, highly valuable for innovation. It was suggested, for example, that storytelling consolidates and communicates attitudes, perspectives, and values of the world often taken for granted. One participant commented on the connection between stories and the capacity to listen deeply, allowing for better understanding implicit elements to better inform research. It was also acknowledged that in addition to consolidation, storytelling can also give transparency: we may not know how to

contextualize raw data, but stories arrange data in an accessible way common between researchers and participants. In this way, stories help organize and make transparent what a data set might offer to tell us.

### *Group Two*

Three related but different themes were pulled from group two's discussion. First, it was acknowledged that stories are a form of meaning-making. As such, stories have value in their potential to create changes in attitudes that can alleviate human suffering. With this acknowledgment, the group opened its exploration by questioning if stories could be a bridge between ethics and research innovation. If we value stories as ways of conveying and creating that which is meaningful, then these stories must be taken into consideration with any innovation that would impact those who tell them. This led into another idea explored in group two's discussion - the link between memory and innovation. As one student suggested in a discussion on cultural bias, the resources to conduct innovative research to overcome crises in a particular culture might only and already be found in that culture. In other words, solutions are drawn from the cultural resources that are available. This led to the final part of the discussion and the idea that a culture is bound by its memories and cultural resources often addressed in the social sciences and humanities research. This is so much so, as one student pointed out by using his own country as an example. They expressed the need for cohesion of a people's story in which all individuals of the culture feel they participate. Otherwise, as was the case with this participant's country, any attempt to implement even the most beneficial innovations will ultimately fail.

### Conversation led by Nabeel:

Facilitator: Nabeel Zafar - MEd, Global Perspectives

Reporter: Iqra Amin - MBA, Global Leadership

Appendix B includes the full text of the prompts developed and shared with participants ahead of the roundtable conversation.

To contextualize the analysis that follows, the Facilitator's general framing of the foci of the conversation:

- share research findings and/or your experiences as to how social sciences contribute to fostering social innovation for addressing contemporary societal challenges?
- the arts and humanities contribute to cultural innovation, and how can this innovation be harnessed for societal progress?
- top three innovative ideas that pertain to the social sciences, arts, and humanities and can help Canada in stimulating and advancing innovation.
- Within the scope of social sciences, arts, and humanities, how effective do you see the role of technology?

In-depth Analysis - Author: Iqra Amin

Conversation B focused on the contribution of social sciences to social innovation and the role of technology in society. The two groups addressed the same prompts but developed distinct ideas. Their discussions have been categorized under distinct headings to ensure clarity.

### *Group One*

#### Contribution of Social Sciences to Social Innovation

This group highlighted the role of social sciences in understanding qualitative aspects and ethical implications of innovation. They emphasized that social sciences contribute to societal development by involving communities, focusing on solutions that consider the user's perspective. They pointed out that big companies often fail due to a lack of consumer perception, an area where social sciences excel. The importance of people management, customer-centered service, and cultural understanding were also stressed as key drivers in steering society towards innovation.

#### Challenges and Fears in Technology and Society

The group expressed concerns about the challenges and fears arising from technology's impact on society. They noted that technology, driven by capitalism, often overlooks human impact, leading to social isolation, particularly through social media. The group emphasized the importance of policies that address these issues, underscoring the need for government input. They discussed the role of social sciences in contextualizing innovation and examining its impact on everyone, stressing the need for a more human-focused approach in technological advancements.

#### Ideas Needing Change in Social Sciences

This group discussed the issue of unequal access to education, influenced by economic status. They advocated for more recognition of skills learned online and emphasized the need to level the educational playing field. This understanding can guide policymakers in creating more equitable educational policies, particularly in recognizing the value of online learning. Secondly, they highlighted the challenges faced by immigrants, pointing out the lack of resources such as employment and housing. The group suggested that more creative thinking is needed to improve the social situation for immigrants.

### *Group Two*

#### Contribution of Social Sciences to Social Innovation

The group shared their insights on how social sciences aid in fostering social innovation. One participant with an engineering background highlighted how social sciences help engineering focus on sustainability, particularly in research and development, ensuring that innovations are safe for the environment and contribute to economic and environmental well-being.

#### Ideas Needing Change with Influence of Social Sciences

The group spoke to current challenges and opportunities where social innovation would be key. Accommodating religious practices, such as the provision of prayer rooms, which reflects a

policy direction toward greater religious inclusivity and respect in multicultural societies. Their suggestion for promoting Canadian culture and values, for instance through 7D replicas of historical sites, aligns with cultural policy initiatives aimed at boosting tourism and national identity. Moreover, this group's focus on creating a stigma-free environment for male mental health issues marks an important policy consideration in healthcare, recognizing and addressing often-neglected aspects of mental well-being.

#### Role of Technology in Social Sciences Context

The group acknowledged the negative impact of technology on youth but also noted its positive aspects, such as making information more accessible and improving the quality of life.

Technology was seen as a tool for creating communities and connecting people with common interests. The group pointed out that, despite some challenges like hostility, privacy breaches, and the theft of real knowledge, technology generally has a more positive than negative impact. It can spread information quickly and create equality, as evidenced by apps like Be My Eyes, which helps blind people navigate their environment.

## Conclusion

An overarching theme of the roundtable was the fundamental role social sciences, arts, and humanities have in contextualizing innovation. With the focus on people -- as designers, users, and implementers of innovation initiatives -- the social sciences are essential to serve as the figurative heart, conscience, voice, and guiding hands. The social sciences can help to focus an innovation on legitimate needs, ensuring representative voices to inform tailoring the innovation to engage user buy-in, and conduct holistic broad analysis of potential and actual impacts for users and communities.

The complexities of the world's problems require the holistic development of solutions, of which the social sciences are essential. Many of the conversationalists noted areas in need of innovative solutions, and while they did not have concrete answers to these complex issues, it was clear that they saw an important role for the social sciences, humanities and arts in the solutions to be developed; complex problems involving people require a person-centric focus in the development of the solutions.

# Appendix A

## Participants

### Leaders:

- Facilitator: Fairouz Gaballa, Master of Island Studies, Thesis
- Facilitator: Nabeel Zafar, Masters of Education, Global Perspectives
- Reporter: Iqra Amin, Masters of Business Administration, Global Leadership
- Reporter: Nathaniel Coward, PhD Educational Studies

### Conversationalists/Participants

- Danielle Osagie, Masters of Business Administration, Global Leadership
- Yu Geng, Masters of Business Administration, Global Leadership
- Liang Zhao, Masters of Education, Global Perspectives
- Ismot Jahan, Masters of Business Administration, Global Leadership
- Oyepeju Oyeleke, PhD Sustainable Design Engineering
- Abhay Singh, Masters of Business Administration, Global Leadership
- Emmanuel Egorp, Masters of Business Administration, Global Leadership
- Jan Vaughnce Yrish Plaza, Masters of Education, Global Perspectives
- Edwina Mary Laing-Ewuah, Masters of Business Administration, Global Leadership
- Taiwo Pojo, Masters of Business Administration, Global Leadership

### Faculty & Staff

- Dr. Marva Sweeney-Nixon, UPEI Associate Vice President Research & Dean of Graduate Studies
- Dr. Rebecca Mok, Business Development Officer, Office of Commercialization, Industry, and Innovation
- Kendra Mellish, Graduate Programs Officer, Faculty of Graduate Studies



# Appendix B - Discussion Prompts

Facilitator: Fairouz Gaballa

Conversation Prompts:

1- Narrative & Innovation: the powerful intersection of narrative and innovation. Stories have a unique ability to shape our understanding of complex issues and spark creative solutions.

- A. How do narratives and storytelling contribute to the innovation process?
- B. Can you share a personal or professional experience where a compelling narrative influenced the development of a creative solution or idea?
- C. In what ways can storytelling help communicate complex issues and make them more understandable to a broader audience?
- D. How can we balance the need for storytelling with the demand for evidence-based decision-making in innovative processes?

2. Inclusive Design and Accessibility: inclusivity is essential in all aspects of our work. What does inclusive design mean to you, and how can we, as graduate students, actively contribute to making our products, services, and environments more accessible?

- A. What does inclusive design mean to you, and why is it important in today's context?
- B. How can graduate students actively contribute to making products, services, and environments more accessible and inclusive?
- C. Can you share examples of successful inclusive design projects or initiatives that have inspired you?
- D. What challenges do you foresee in implementing inclusive design, and how might we address them collectively as a community of graduate students?

3. Challenges and Opportunities in Cross-Cultural Collaboration: explore the world of cross-cultural collaboration. It's a rich tapestry of challenges and opportunities. Can you share experiences of successful cross-cultural collaborations and, on the flip side, discuss any challenges you've encountered? How can we navigate these complexities as a community?

- A. Share your experiences or observations of successful cross-cultural collaborations. What made them successful?
- B. What challenges have you faced or witnessed in collaborating with individuals from different cultural backgrounds or disciplines?
- C. How can graduate students navigate and leverage the diversity in cross-cultural collaborations to enhance creativity and problem-solving?
- D. What strategies can be employed to build trust and effective communication in cross-cultural collaborations?

## Facilitator: Nabeel Zafar

### Conversation Prompts:

1- Introduce yourself and share three things out of your work and experience that you bring to the table regarding social, economic, environmental and technological advancement.

2- Can you please share research findings and/or your experiences as to how social sciences contribute to fostering social innovation for addressing contemporary societal challenges?

- A. Is there any example where social sciences address any social issue or contribute?
- B. What is the impact of social sciences on community development and fostering innovation?
- C. Can you share one thing that you like to improve or innovate for society? How?

3-How do the arts and humanities contribute to cultural innovation, and how can this innovation be harnessed for societal progress?

- A. Share examples of art and humanities-driven initiatives that have encouraged positive change.
- B. What was the impact of these innovations on society?
- C. Can you share one thing that you like to improve or innovate through arts and humanities? How?

4- Let's talk about the top three innovative ideas that pertain to the social sciences, arts, and humanities and can help Canada in stimulating and advancing innovation.

- A. What are the core innovations that are changing or may help businesses today?
- B. What is the one problem or opportunity you see in Canada that you like to improve? How?

5- Within the scope of social sciences, arts, and humanities, how effective do you see the role of technology?

- A. Can you share two technological advancements that contributed to society and community recently?
- B. Give any one area in which you want to change or innovate. How?
- C. Do you think there are more benefits of technology than challenges, please explain your point with an example.

# Appendix C

## Budget Reconciliation

Cost Item	Details	Vendor	Student Awards	
	16 meals + tip (\$40) & Delivery (\$10)	City Kitchen		\$307.03
Catering	Beverages	WalMart		\$15.68
	Leaders (4)	Grad Students	@\$211.24/student	\$844.96
Participants	Participants (10)	Grad Students	@61.24/student	\$612.40
		Total		\$1,780.07
		Cheque Recieved		\$1,780.00
		Balance		-50.07

## Appendix D

### Event photos & social media posts



#### LinkedIn:

[https://www.linkedin.com/posts/ocii-upei\\_university-of-prince-edward-island-is-proud-activity-7160982132415152128-zbTk?utm\\_source=share&utm\\_medium=member\\_ios](https://www.linkedin.com/posts/ocii-upei_university-of-prince-edward-island-is-proud-activity-7160982132415152128-zbTk?utm_source=share&utm_medium=member_ios)

X: [https://twitter.com/ocii\\_upei/status/1755217570083266648?s=46](https://twitter.com/ocii_upei/status/1755217570083266648?s=46)