Imagining Canada's Future

Summary of Roundtable Discussions with Graduate Student Researchers

Member schools of the Canadian Association for Graduate Studies reflect a diversity of perspectives, focus and university cultures. This document highlights the thrust of reports from CAGS members who took part in the SSHRC's *Imagine Canada's Future* initiative. Six themes/questions were put to more than 300 students at self-selected CAGS schools. This summary reflects common themes and priorities that were reported back from sessions across the country. An index and links to those reports and the SSHRC documents can be found here. More reports and videos are highlighted on the CAGS website. This document concludes with a list of observations that will feed into CAGS' next steps to keep this important work active.

There are more Canadians involved in graduate research now than at any other time in history. Decisions about how students:

- Choose topics and conduct research,
- Interact with the individuals and communities they study
- Choose research topics and share that knowledge

All have the potential to impact the fabric of Canadian society. Those decisions also influence public perceptions of the role of research and researchers in a rapidly changing world.

CAGS undertook outreach to graduate students in its role as an advocate for graduate education and those involved in its future. The enthusiastic response from members to this project – even with short organization timelines – was an indication of the interest and concern about the role graduate education from individuals who will be leaders and researchers in the near future.

The students were asked to organize discussions around one or more of the following questions:

What new ways of learning will Canadians need to thrive in an evolving society and labour market?

What effects will the quest for energy and natural resources have on our society and our position on the world stage?

How are the experiences and aspirations of Aboriginal Peoples in Canada essential to building a successful shared future?

What might the implications of global peak population be for Canada?

How can emerging technologies be leveraged to benefit Canadians?

What knowledge will Canada need to thrive in an interconnected, evolving global landscape?

The result was more than 60 hours of conversation. Often, like the interconnected world we live in, the questions merged. For instance, Memorial and Laval University panelists referenced resource development issues many times in their discussion of the question around new ways of learning. Similarly UNBC participants included examples and suggestions around Aboriginal experience and aspirations in their discussions on resource developments.

1. What new ways of learning will Canadians need to thrive in an evolving society and labour market?

The message was clear from each and every institution that took place on this question. The urgent priorities are collaborative learning – and the breaking down of silos among disciplines, institutions, and sectors of society.

Canada needs the kind of intellectual strength and dynamism that graduate education provides. It needs focus on sustained inquiry and critical reasoning that graduates have mastered. It needs their capacity for abstract thinking in order to inspire innovation and entrepreneurship. The trick

> *"We need programs and research to encourage more collaboration…We must reconceive knowledge production as it is undertaken in higher education."*
>
> *Keita Demming, University of Toronto*

is to move it beyond disciplinary isolation.

How do we reconceive?

Many participants felt the concept of a PhD as a "solitary scholar" is ill-suited to the collaborative nature of the modern workforce. A book-length dissertation or thesis is designed to be undertaken as an isolated venture. It does not translate public dissemination of that knowledge nor employability afterwards, especially outside of academia.

> *« Travailler dans des projets collaboratifs c'est un vrai défi puisqu'on a des formations différentes, on a une façon différente de regarder les objets, les phénomènes. Mais c'est justement en favorisant ces collaborations que les chercheurs et les personnes hautement formées seront en capacité de jouer sur différents tableaux*
>
> *Nolywé Delannon,HEC*

Learning how to combine the benefits of hyper-specialization and academic rigour with "softer" skills might contribute to the marketability of researchers and encourage economic productivity.

As participants at HEC pointed out, it also benefits researchers likely to be contributing to diverse projects through their careers.

Encouraging a multidisciplinary/interdisciplinary way of learning addresses the realities of multiple career changes during the course of one's life. Yet, finding the right balance in a hyper-specialized culture was a concern for many panelists.

The OCAD group questioned whether the current system has the adaptive capacity to shift in to the future. "'Generation Z' sees the world in a different lens. Social media, digital tools and travel make us more connected than ever before", concluded the panel. They cited technology-enabled education and individuals learning skills online as two areas that will be important to Canadian education.

But UQAC participants remind us that:

Ces nouvelles méthodes d'apprentissage demandent l'acquisition de nouvelles compétences. Puisque la recherche de demain se fait via internet, la base même d'une recherche universitaire implique donc la maîtrise de l'informatique. Au 21e siècle, ce langage devient essentiel pour bien comprendre, et ce, au même titre que le français ou l'anglais.

The panel at the University of Ottawa reinforced that view. Academic research could go "beyond journals" and reach further into communities by sharing information through videos and open sources.

It is important to bring the university to the people and to bring people to the university – to

> "We talk about teaching and engaging society in technology and research. But higher education rarely publishes anything at a reading level that would serve the masses."
>
> *Tim Brunet PhD Student Education, UWindsor*

create a relationship, they said. That kind of bridge opens the way for lifelong learning. Learning how to better connect with the community by making the information more compelling and applicable to daily life and by involving community in participatory research has potential benefits in raising profile and respect for graduate education and research.

The Queen's University panel addressed Interdisciplinary collaboration saying it would result in sharper research priorities and increased credibility with the public.   Here's a short video on the topic.

QUEEN'S UNIVERSITY COLLABORATIVE RESEARCH SESSION

Alex Cheezo at University of Quebec at Temiscamingue points out that it takes training – and a new way of learning - to popularize research and to make it accessible to others.

The UQAT panel also delved into the particular challenges that contribute to the current chasm between many aboriginal communities and the research community. New ways of listening and learning are part of facing that challenge.

McGill's panel discussed the need to strengthen Canadians' digital literary skills. "We need to strengthen the ways we prepare students to evaluate and adjudicate between valuable and spurious knowledge, and real and fabricated controversies," said McGill's Gregory Trevors.

The potential of art and design as a way of communicating research results and as a way of engaging the community in a research project was identified by both OCAD and the University of Ottawa.

Many participants agreed there will always be a need for singularly focused research projects undertaken by individual scholars and researchers. But when Queen's University participants were interviewed at the end of their session, they echoed the observations of peers across the

country: collaborative/interdisciplinary work was the most likely to generate innovation. Good first steps, they felt, could be interdisciplinary focussed grant workshops and increased internal communication within institutions.

2. What effects will the quest for energy and natural resources have on our society and our position on the world stage?

This question evoked rich discussions during panels in three of Canada's resource-rich provinces, BC, Newfoundland and Quebec. All three raised the need for Canada to become more sophisticated in its resource development – moving beyond being an extractor and exporter of raw materials.

Canada's energy quest has already raised major questions around current processes for decision-making, regulation and community involvement. Canada's role as a global environmental partner is also under scrutiny. Panelists saw potential - and a responsibility- for their generation of researchers to foster and support positive change.

Participants felt a more sophisticated approach would afford an opportunity to strengthen communities, economic and democratic processes. UNBC participants felt that social sciences and humanities research "could and should help Canada become a driver of the world beyond just the extraction of natural resources". They expressed a critical need to question the status quo and research the economic and social models of Canadian resource development.

They felt their research could enrich Canada's democratic processes by investigating who currently benefits from resource development and how those benefits are shared. Answers to these questions might increase the number of Canadians who benefit from living in a resource-rich country. Consequently, it could help develop a sense of ownership and citizen engagement. Handled correctly, they felt this could elevate Canada to a leadership position on the world stage.

An interdisciplinary look at health and social indicators, environmental policies was a path that was suggested by UNBC. And panels at UNBC, Memorial and Laval flagged a need for more support for both interdisciplinary and transnational research protocols. They cited the need to break down silos in research communities. This work would not only would help the business sector adapt best practices and policies from other nations – it could inform provincial and federal policies to help repair Canada's reputational damage around its environmental record and move Canada into a global leadership position.

Students from Memorial University of Newfoundland and Labrador said that in their experience, gained knowledge in the humanities is often not applied in political and economic planning – and Canada suffers as a result.

They warned that it is important for humanities and social sciences research to examine current truisms about the development and stewardship of resources and impact on communities. MUN participants felt that it was important for research to challenge the status quo which often portrays Canadians as simply " job seekers - not citizens" .

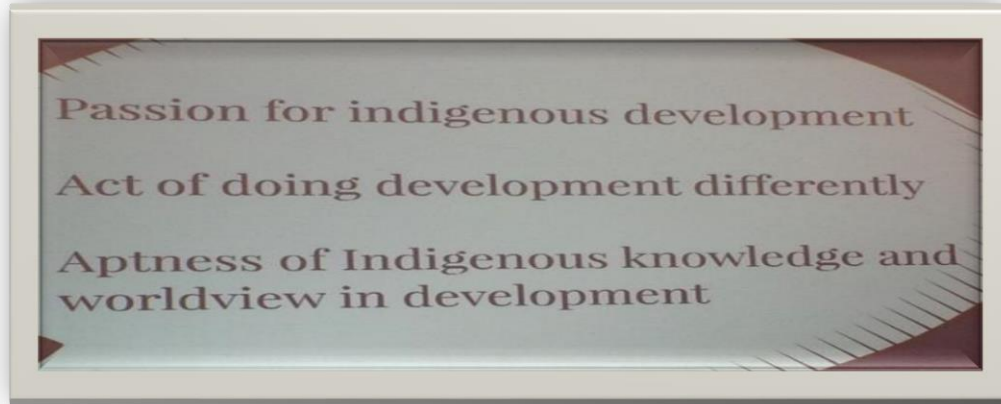Participants from Laval were among those who spoke of the responsibility to take a holistic

approach to energy and natural resource management. This includes authentic engagement with people living in rural and remote places, starting with the opportunities to receive high quality education

Panelists called for more support to incorporate a global perspective into this research. Not only would this help adapt best practices and policies from other

nations – it could inform provincial and federal policies to help improve reputational damage and move Canada into a leadership position. Above all, having these resources gives our country the opportunity to examine its value system and identity at a critical time in its development.

McGill's Olivia Heaney points out that support for the energy humanities would develop a knowledge area that Canada should cultivate in order to thrive in an interconnected, evolving global landscape. "Our energy concerns often derive from issues of habit, institution, and power—all of which are areas of expertise for the humanities and social sciences," she said. "This area of research will allow us to better understand the habits, institutions, and structures of power that facilitate our attachment to modes of living that aren't sustainable. It will allow Canada to propose new theoretical tools for shaping relations between humans and nature on regional, national, and global scales."

Several groups identified this as an essential research question that should be assertively developed. "The advantages Canadians have been given with natural resources" means a responsibility for an authentic development and consumption responsible economic development plan. Yet as Concordia's Meaghan Matheson points out, it is also important to ask if we have learned lessons from past experience. "How do we offer help without imposing the 'we know best' mentality

Passion for indigenous development

Act of doing development differently

Aptness of Indigenous knowledge and worldview in development

.

3. How are the experiences and aspirations of Aboriginal Peoples in Canada essential to building a shared future?

This discussion incorporated aspects of several other questions. New ways of learning, new technology, natural resources, globalization and managing into the future were all touched on by groups addressing the role of Aboriginal Peoples in Canada.

Two streams were prevalent in these round tables. The first: relationships with the community and the aspirational challenges faced by young aboriginals. The second challenged some presumptions that need to be explored if Aboriginal related-issues are to be meaningfully addressed by the academy and the research infrastructure.

Respect for Knowledge

Cultural or local knowledge was a common thread.

Respect for this knowledge and the people who hold it must be an integral part of the approach to research undertaken. Participants from UQAT were clear about the obligation to connect with the community. Education/training of the community in order to relate to the research and to maximize benefit from it was cited as an example. It can also mean training community members to be the liaisons with or interlocutors for the communities themselves. This would be a way to better engage the researchers with the community, access indigenous knowledge and understanding – and disseminate the research later.

All of the universities dealing with this question were adamant about the need to transmit accurate and culturally competent information to the university community – students, professors as well as granting councils, etc.   The McMaster, Laurier and Brock Round Table synthesized this in two themes:

- *The need to educate and build awareness regarding the socio-historical context of First Nations, Métis, Inuit Peoples across all sectors of the Academy.*

- *Recognition that Indigenous knowledge is a valid body of knowledge that underpins Indigenous methodologies and approaches to research.*

The University of Victoria has been consulting with communities, individuals and stakeholder groups to develop an Indigenous ___ic Plan. ___rk so far ___following:

___limitations ___vship and

___ns of community recognition as credentials.

Il y a très peu d'espace pour les initiatives et les recherches positives. Il n'y a pas non plus vraiment de place pour les réalités autochtones dans les curriculums au primaire et au secondaire et cela contribue à ériger des barrières.

Mylene Jubinville,UQAT

Be sensitive to language and constraints created for some students by the need to use academic and social sciences jargon.

UQAT also addressed this proposition. Mylène Jubinville stated that: "La recherche n'est pas connue, elle n'a pas beaucoup de place dans les média. Tout ce que l'on entend est toujours négatif."

Be sensitive to Indigenous methodologies and protocols.

This situation makes it difficult for young aboriginals to develop interest in work that could be important to the future of the communities.

"Comment accroître la capacité des Peuples autochtones à participer à la recherche?

Suzy Basile asked : " En respectant les protocoles et les lignes directrices que ces dernières ont elles-mêmes développées pour mieux gérer et mieux participer à toutes les recherches qui se font chez elles".

In relation to the recognition theme, participants had clear ideas about approaches and "rules" for research, timing, and ethics if Aboriginal related issues are to be appropriately addressed by the academy.

A participant at the University of Regina stated that there is a fundamental lack of understanding of what it means to do Indigenous research. That report went on to point out that "researchers need to build close relationships with their participants, to get to know them, to understand the community, to develop real trust before a cooperative relationship develops." They felt this approach is devalued in conventional research.

Universities across Canada are working to address these challenges. For instance, The University of Victoria framed their discussions as a dual opportunity to contribute to recommendations for the University of Victoria's proposed *Indigenous Academic Strategic Plan* as well as respond to SSHRC's *Imagining Canada's Future Initiative* questions pertaining to Aboriginal Peoples. They provided recommendations to SSHRC to improve the volume and value of research by and for Aboriginal Peoples. These can be seen in the left hand column.

The University of Winnipeg discussed the challenge of stringent ethical guidelines applied to research performed within and about the Aboriginal community. While it was recognized that it is important to ensure ethical research, it was posited that the most appropriate approaches to research related to Aboriginal issues may require a broader view of "ethics" – that there is not "only one proper way of conducting research".

The McMaster, Laurier, Brock panel took the initiative to provide a comprehensive list of observations and recommendations for the Academy, SSHRC and CAGS. It elaborates on the observations and recommendations made at other Round Tables.

Social Challenges

The trio highlighted challenges that exist beyond the research infrastructure: "The United Nations Permanent Forum on Indigenous Issues has repeatedly called for the collection of disaggregated data that describes the distinct experiences of Indigenous peoples.

Yet, Canada does not have a national child welfare data collection system. This is problematic for an accurate understanding of the Indigenous context as data regarding Indigenous children is only available at the provincial level. The provinces do not collect data in a uniform way, thus it is challenging to make regional cross comparisons".

As you read through the reports you will likely discover that this question elicited the most

"We do this work because we care about our communities."

Angela Snowshoe, URegina

personal and passionate responses of all of the Imagining Canada's Future questions.

4. Global peak population:

No institution took this issue on. Nevertheless, the discussions under all of the other questions spoke to many issues around peak population. Most notable was the discussion around an interconnected, evolving global landscape.

5. How can emerging technologies be leveraged to benefit Canadians?

Two groups chose to deal with this question specifically in their sessions, but other institutions weighed in. This question is multifaceted – encompassing the dynamics of local vs global, teaching and learning, marginalization and power dynamics and sharing – and that's just for starters.

Both the Western-Windsor session and the ADESAQ group grappled with the definition of "*emerging technologies*" (ET). These discussions determined tenor of their sessions.

The Western-Windsor consortium suggested it could be "anything used to improve lifestyle or make things more efficient". This included tangibles such as new types of seeds and farming,

medical breakthroughs and electric cars. It also included "*a revamp of existing global systems*" such as impacts on journalism, civilian protest, and environmentalism.

The ADESAQ group started with a definition of digital culture as the emergence of the ability to allow humans to attain new heights of knowledge, productivity and innovation. This led to a discussion on aspects from space travel to the role of disruptive technologies.

Both groups agreed that there are real and tangible positives to emerging technologies - and accompanying negatives. Both spoke of the necessity of monitoring and managing an area of constant change.

Digital Engagement

Participants at the University of Ottawa spoke of the potential of ET to create intellectual spaces and new forms of engagement as a model for future research. They touched on crowdfunding for research, for example, as a way to foster a sense of connection and partnership with the wider population – creating interest and ownership.
Concordia's Magda Olszanowski however, added that approaching the tech sector as a social sciences researcher has had challenges with institutional resources.

There were many positives of emerging technologies for both Round Tables including wide scale knowledge mobilization, access to education, the development of the sharing economy both within Canada and around the world. Emerging technologies provide some of the tools that will provide cures for disease, address environmental problems. Both Round Tables saw the development of emerging technologies as both a boon and a challenge to Social Science and Humanities researchers.

Negatives were also easily identified: participants all understood that lack of access to emerging technologies created new types of inequality. Access to digital technology is still a challenge even in parts of Canada creating a new reality of haves and have nots. It is pointed out that even

with access, given the present systems of education, there is a threat of digital illiteracy with the same potential ill effects as the lack of literacy and numerously have on populations and economies now. The existence of Big Data and its control, or the lack thereof, poses a threat to privacy and creates opportunities for misuse.

Two major topics for both of the Round Tables were the role of government and -or control and management in relation to emerging technologies and the role of scholars in the whole arena of emerging technologies.

In terms of government responsibility, it was recognized that government does not "own" emerging technology. Much of emerging technology is generated by and "owned" by the private sector. Globally, we are in a state of flux concerning how to understand and manage it. This is a significant challenge given the impact of people everywhere. It was pointed out by the ADESAQ group that:

"Un investissement gouvernemental soutenu en faveur d'une universalisation de l'accès aux nouvelles technologies aurait un effet multiplicateur bénéfique sur les inégalités sociales préexistantes, dans la mesure où il offrirait aux populations marginalisées de nouveaux modes d'intégration à la vie économique, sociale et politique de leur communauté, ce qui contribuerait à accélérer le développement des milieux défavorisés et ainsi contribuer à minimiser l'impact des inégalités sociales."

Participants saw emerging online platforms as loci for community creation and building - where people share information, interests, ideas, and solutions online. But most agreed with the observation from a University of Ottawa participant that being in the same physical space has huge benefits for learning. Digital technology was seen as a complement to online communities and sharing with examples of transferring to real-world solutions, and encouraging people to work together in places such as community gardens, makerspaces, and social supports groups

Participants saw a role for government in ensuring universal access by providing infrastructure. But it went beyond that with a call for a new approach to education starting at kindergarten to ensure digital literacy and numeracy; to encourage continued research and development; as well as to work to oversee the gathering and use of data.

Big Data was a key issue in the discussion around the role of the scholar. ADESAQ posited a positive result of " *l'émergence des données massives permettra progressivement, par un traitement quantitatif adéquat et sophistiqué, l'identification de patrons comportementaux et de régularités statistiques autrement inobservables. Cette forme d'investigation, privilégiant l'identification de simples corrélations au détriment de l'analyse causale traditionnelle, laisse présager une transformation radicale des pratiques courantes et de recherche.*"

But they warned: " mais également intervenir à titre législatif, exécutif et judiciaire de manière à s'assurer que les droits et intérêts de ses citoyens ne soient pas brimés."

The Windsor-Western Round Table discussed the role academics can play as society adopts ETs. They suggested an obligation for scholars to study the impact of technologies to gauge impact

> *"We need to examine each technology as it fits within society and remember to learn from the past. We have to think forward and examine future technology through a critical lens."*
>
> *Western/Windsor Panel*

on equality, transparency and utility.

They also discussed the importance of being reflective about research.

> *"We must remain aware of our use of ETs, and be ethical about our methods of study, remembering to carefully consider our role as researchers and the impact we have on our subjects."*
>
> *Western/Windsor Panel*

Democratization is a potential benefit but it also comes with an obligation to engage a wider public. Various methods of collaboration with those outside of academia were discussed. It included working with innovative technology companies to assess materials before they go on the market, and working with the government to create policies around ETs.

At the end, both Round Tables clearly recognized the ubiquitous nature and permanence of emerging technologies - a sort of endless cycle.

A quote from Lisa Ndejuru, (Université Concordia) provides a graphic example of the reach and possibilities of technology:

"Si je vais au Rwanda, dans la commune ou mon grand-père a fait sa maison par exemple, parmi les petits enfants qui vont chercher l'eau à la source, certains d'entre eux possèdent un téléphone cellulaire. C'est très particulier de voir quelqu'un qui ne porte pas de chaussures posséder un téléphone cellulaire. Le pays est complètement recouvert par la fibre optique ; l'infrastructure pour ce genre de technologie est donc déjà en place. Avec les nouvelles technologies, la voie du développement, ce n'est plus nécessairement passé du point A au point B, puis du point B au point C, puisqu'on peut très bien passer directement de A à C".

6. What knowledge will Canada need to thrive in an interconnected, evolving global landscape?

CONCORDIA PANEL PARTICIPANTS

The majority of discussants at Concordia's session on this question were Canadians who also hold citizenship in a different country of origin. That scenario played itself out in sessions at several other institutions as well – a testimony to the relevance of this question – and to the changes that have occurred here. It is not surprising then that a common observation at these sessions was, as McGill puts it: "looking into the future requires a healthy dose of introspection." Or as Concordia states: "Canada needs a reality check of who we are and what we want our global role to be."   A common theme echoed in these discussions: for Canada to thrive in the 21st century, we require deep understanding of our own population, including how various communities integrate within our society, and of the languages, cultures, histories, economic impacts, and integration of our own and global populations.

> *"In Toronto, half the population is born outside of Canada. We've all got multiple personalities here. How does that affect Canada's position? It's important to acknowledge that, not in an old-time multicultural way, but in an emergent way"*
>
> *David Santos, PhD, Artist, Writer.*
>
> *Concordia*

According to Santos' fellow participants it will be important to learn how to develop and deploy knowledge in the spirit of inclusiveness across Canada's diverse populations. This will include ways of dealing with the tension that often accompanies diversity and being comfortable and confident with the inevitable societal push and pull. As the York Ryerson Round Table emphasized, graduate students are thirsty for interaction and interconnection.

And as you can see from this video they feel that interaction and interconnection are the only way forward.

"We have 250,000 immigrants every year coming to Canada," says Concordia's Nadia Naffi. "Because of all the events that are propagated on social media – and because immigrants here have access to these tools they are living in these transitional environments."

Her comments intersect with responses from other participants to the questions about how to use emerging technologies and new ways of learning – yet another example of connections between disciplines that was a theme repeated in many panels. Canadians will need to understand who they are and how they fit into a global context from a social, economic and environmental point of view. This includes how indigenous populations form part of the history and legal development of the country as well as how new Canadians will shape Canada into the future.

Canadians' well-being will be measured by the level of equality, political awareness and levels of education, health and happiness attained in an economically, environmentally sound country. As panelists at the University of Ottawa warn: "The super specialization that is occurring now is a risk." We need to develop an interdisciplinary approach and to see connections and links from multiple angles: between faculties and researchers... by thinking globally and by breaking barriers in exchanging information, by working together with society, for the good of society."

Conclusion and Observations:

Here is your chance to play with ideas, draw from your experience, research and expertise to think about the future.
Dr. Juan Carlos Castro, Concordia

Participants from all over the country were excited and engaged by this opportunity to think about Canada's future - their role in it and responsibility to it. For instance participants at the University of Toronto session exchanged contact information at the conclusion of their events. Most of them had met for the first time but they have connected with each other for personal, professional and academic since then. Many other participants have expressed enthusiasm about an opportunity to share ideas and questions with fellow graduate researchers from across the country. CAGS was impressed with the level of enthusiasm and thoughtful discourse at both Congress and ACFAS meetings earlier this year. And we plan to bring students together at the CAGS conference in October.

We are preparing to publish sections of several reports from this project to the CAGS "Re-Thinking the PhD" section of our website. Over the next few months we will be adding more as a way to highlight this work and stimulate further debate.

We conclude by providing some observations that were gleaned from the discussions.

- A real interest **in ensuring that social science and humanities research connects to its research subjects** and respects their right to understand the projects.
- A recognition that the education system needs to be **flexible** enough to **incorporate new and different modes of teaching, learning and research** without sacrificing **academic rigour: change** is likely to come more quickly and frequently than in the past.
- A developing world view **that Canada is not autonomous** – whatever is done here impacts others and vice versa.
- A recognition of the **growth of interdisciplinarity** as an approach to addressing issues.
- Exploring a **funding protocol** that reflects the overwhelming assessment of participants that future research requires a level **of interdisciplinary collaboration** aspect not previously recognized.
- More discussion on **emerging technologies** and how they are being used and understood.
- A discussion of the current system of the **sole-authored thesis** which was a repeated issue during discussion of collaborative research.
- Exploration of how **to support and share the work of universities** that are drawing up recommendations, **strategic plans, and protocols for Indigenous students**, researchers and communities.
- Discussion of next steps in work needed to address **how changes in labour markets** are affecting graduate studies and students. This includes **the tension** between teaching for the **job market** and being a **knowledge producer**.
- A **student-moderated online forum** to share further thoughts and research on the above questions and more
- Support for the UNBC proposal for **an open lecture** in a subject area that would benefit from interdisciplinary approaches

CAGS will consider how these points can be included in our study and research plan over the coming months.

We thank SSHRC for the opportunity to undertake this project under the *Imagining Canada's Future* initiative. CAGS also thanks the many students who participated in the Roundtables

LINKS:

ADESAQ,CONCORDIA,HEC,LAVAL,MCGILL

MCMASTER/BROCK/LAURIER

OCADU,OTTAWA,QUEENS/RMC

REGINA,RYERSON/YORK,TORONTO

UNBC,UQAC,UQAT,VICTORIA

WESTERN/WINDSOR

WINNIPEG

Video Reports:

MEMORIAL

QUEENS

RYERSON/YORK