<u>Care Conference 2021 – 3:10 – Sept. 15, 2020</u>

Memorial University: A university with a twist or two

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INTRODUCTION AND LAYOUT

- Memorial University: You are what Memorial is about an institution that touches the lives of every Newfoundlander and Labradorian.
- Want with to start with a story a young girl growing up in Labrador me.
 - o Father and grandfather were miners
 - Grandmother was taken out of school at a young age and went into service to help support the family
 - My parents didn't want that for me and my siblings sacrificed so my siblings and I could go to university
 - We all did and now here I am
 - o Everyone should be able to live that dream
- At the laying of the cornerstone of the new university campus in 1952, the minister of education said,
 - o "The mere act of creating a university is static, but the purposes of a university are dynamic."
- We saw that dynamism during COVID, retention went up 5 per cent, professors did an amazing job
- Memorial University College began as a two-year junior college providing postsecondary education in the arts and sciences, and to improve teacher training.
- In 1949 we were elevated to university status to
 - o "encourage the preservation of the Newfoundland culture,"
 - o and to be an "active and energetic means to the economic development of Newfoundland more than merely a centre of culture and learning."
- Mose Morgan, Memorial's 6th president, said Memorial must not be a replica of universities found elsewhere, saying

- "It is and must remain unique, with its roots deep in the traditions and needs of this province."
- And as Dr. Gary Kachanoski, my predecessor, noted in his installation address,
 - o it was important to understand "the natural and unending process of transformation" of Memorial.
- So, while I could talk about the role of A university, it wouldn't really apply to Memorial.
 - o Our origins,
 - o our place in the consciousness of the people of NL,
 - o our commitment to THIS place, makes our role as a university unique among post-secondary institutions.
 - Memorial University of Newfoundland and Labrador, serves the whole province, founded to serve
- If you think about the role of a university, most of us would come up with basically the same things:
 - o Educating students; we shape the future
 - o Generating knowledge; transforming the future
 - o Fostering innovation; in the spirit of students
 - o Basic and applied research; research that transforms lives
- Memorial does all of that and more; with a bit of a NL twist. That twist is Team Memorial –
 - o all of you who raised your hands
 - o all of our bright and energetic students (like Nathan, 2nd year business student, Secret Cove Brewery micro-brewery in Lab City)
 - o all the people I've met since starting last April (nurses and residents in hospital in Happy Valley-Goose bay; aquaculture; MI in Lewisporte training seafarers)
 - all the people throughout the province who benefit from the outreach and engagement of faculty and staff
 - o the connection of people to place that most universities don't have
 - We are all Team Memorial: people working together across our province, our world, for our futures.
- The role of Memorial in our province can be explained using four of the guiding themes in our new strategic plan, *Transforming Our Horizons*; they fit well
 - o Proactive programs
 - o Inspired learning
 - o Dynamic research
 - Commitment to communities

- We offer inspired learning in proactive programs
 - o Our commitment to communities, and
 - o engaging with people in those communities ensures we conduct dynamic research that has local relevance but global reach.
- And that, in two sentences, is the role of OUR university.
- The benefits of our university, is another matter that I'll get to in a bit (supporting entrepreneurship, Genesis)

PROACTIVE PROGRAMS

- Role #1: we offer proactive programs, educating global citizens for tomorrow's needs.
- Universities educate students.
 - o For nearly 100 years, we've educated many generations of Newfoundlanders and Labradorians,
 - o providing them with tools to become leaders who shaped the province.
- That's more than a simple education.
 - o It's an important role upon which the social and economic health of our province has and continues to depend.
- It's a Memorial twist:
 - o doctors, nurses, teachers, scientists, engineers, artists and performers
 - o the people who built this province and keep it running are mostly Memorial graduates.
- we are a world-class institution
 - o students come here because they know they will get a world-class education
 - o a survey of undergraduate applicants in 2020 showed that the main reason they applied to Memorial was because of our programs.
- offer a number of unique programs in a variety of disciplines, taught by exceptional professors.
 - we offer Canada's only master of business administration in social enterprise and entrepreneurship,
 - o and the only co-op program in ocean and naval architectural engineering in the world
- always have an eye to what NL needs; what we can provide to help it excel. So, we continue to renew and develop responsive programs, for example
 - o heard a lot today about the growth of the tech sector in NL

- o three masters programs in technology;
 - one master of data science, has been approved by Senate and hope to have 25 students enrolled in Sept 2022
 - two are still under development
 - all are one-year graduate programs
 - designed so students can quickly re-train (e.g, an engineer working in the oil industry) and specialize in areas of high demand for the tech industry
- Can't tell what the future will bring;
 - our new core science facility is designed in a way that acknowledges though we don't know what tomorrow's inventions might be, the new facility will be able to handle them
 - o built to be nimble, able to change
 - core science facility offers teaching and learning spaces never seen before at Memorial.
 - o sitting in a lab or classroom is only one way to learn.

INSPIRED LEARNING

- Role #2: Memorial provides inspired learning with a vibrant in-person, enriched online focus.
- Through teaching and learning, universities support students in the pursuit of knowledge.
- But today's students want more than tutorials and lectures; they want rich, experiential learning experiences.
- We want to ensure your kids and grand-kids get an international education

Experiential learning

- students at Memorial want to see the real-world relevance of their learning; they look for opportunities to apply their new knowledge and skills.
- Courses and programs that involve experiential learning
 - o enrich students' experiences by introducing them to other perspectives and needs,
 - o providing them opportunity to contribute their knowledge and skills in support of public partners.
- A great example of this is our partnership with the East Coast Trail Association.

- o students from various disciplines including
 - the Faculty of Humanities and Social Sciences,
 - the Faculty of Science,
 - Student Life
 - and the QE II Library
- o helped map part of the trail from Topsail
- Outputs include:
 - the translation of signage and web materials into German and other languages,
 - the collection of geodata on the trail
 - and the creation of an iOS application for hikers
- president of the ECTA said, "The long-term health and welfare of the East Coast Trail is a shared responsibility, and our partnership with Memorial is essential to our future."
- sometimes these experiential learning opportunities change the course of a students' academic or professional trajectory.
 - o Students don't just support the economy but how we live in this province
 - o For example, business graduate Abigail Jeddore
 - While at MUN she connected with her Indigenous heritage through the Indigenous Student Resource Centre
 - o also volunteered at First Light, a non-profit organization in St. John's that provides services for Indigenous People
 - o now in law school and as a lawyer hopes to make a difference to Indigenous Peoples and other minorities.
- Through these learning opportunities, Memorial cultivates students who become active participants in their fields, communities and the wider world.
- The unique Memorial twist:
 - we can leverage the university's rich communities to help students explore opportunities and make connections
 - o Team Memorial strikes again.

Micro-credentials and remote learning

- unique geography in NL
 - o more than 270 communities spread over a land mass more than three times the total area of the Maritime Provinces,
 - o not everyone can make the trek to Corner Brook or St. John's

- we need to be available to learners in cities, and in the coves and communities
- need to leverage our history as leaders in online learning,
 - looking at continuing education, e-learning hubs, students in Lab City could take a 1st year course with students from all over
 - o open classrooms and programs to people throughout the province;
 - o and strengthen community-based learning needs.
- Expand experiential learning opportunities
 - Micro-credentials; Typically, short courses to advance a skill set, hundreds offered by MI
 - Bring people together from different parts of the province for online training doesn't have to be a degree!
- new online learning opportunity we're proud of, MUN Up:
 - o created early in the pandemic as an online resource to house student supports and services to help prepare them for the remote learning environment
 - recently honoured with the Atlantic Association of College and University
 Student Services Award of Excellence in Student Services for this initiative.
- also created MUN 101:
 - o introduces first-year students to Memorial before they set foot on campus
 - o an orientation and transition program to help first-year students adjust to university life, learn the ropes and become part of the community
 - o hopefully set them on the road to success.

DYNAMIC RESEARCH

• Role #3: Memorial is a leader in research with global reach and local relevance – areas of strength that reflect our history, culture and location.

Local and global research

- 64 researchers from Memorial are on the World's Top 2% Scientists list
 - Their work enriches the province, contributing to its long-term sustainability, with a global reach.
- So, just as we look forward as much as we look back; we look out as much as we look in.

- Much of Memorial's research centres on addressing real-world problems in Newfoundland and Labrador
 - o results in an enormous wealth of knowledge in areas such as
 - oceans and fisheries science,
 - boreal forests.
 - climate and harsh environments,
 - among others.
- This niche research is transformed into solutions that support the local economy; then exported to assist similar communities globally.
- For example, the Marine Institute collaborates on projects around the world:
 - o from skills training for oil and gas in Tanzania,
 - o to safety in the fishing industry in the Philippines,
 - o to aquaculture in Indonesia
 - o reflects the fact that the identity and livelihood of NL is tied intricately to the sea.

Ocean research

- Over 40% of Memorial's research is ocean-related; Marine Institute is doing incredible work
 - o partner with the Ocean Frontier Institute, a \$220 million collaborative research initiative aimed at harnessing the vast potential of the world's oceans
 - also part of Canada's Ocean Supercluster, a private-sector-led partnership using innovation and commercialization to drive sustainable economic growth from our oceans.
- With our history and physical location, we have emerged as full participants in the blue economy (the sustainable use of ocean resources for economic growth); and educating students who will be ready to tackle tomorrow's needs
 - o world-renowned and longstanding oceans-related research, strategic focus for the future, targeted towards sustainability and stewardship of the resources;
 - Green ship technology research in the Faculty of Engineering and Applied Science hopes to reduce energy consumption and environmental impacts;
 - o aquaculture can address global food insecurity and provides much needed jobs in remote, coastal areas of the province;
 - o building artificial reefs in Placentia Bay is creating new fish habitats;
 - o and millions have been invested in minimizing the impact of oil spills.
- Tackling climate change/green technology:

- Unlike most other Canadian universities, Memorial places an emphasis on the offshore industry.
- The engineering faculty has a plan to expand its programs into offshore wind and marine energy, should demand dictate
- o expect that shift to happen in the next five to six years
- Mysa, founded by Memorial alumni, Genesis graduate, smart thermostats for electric heaters, in 2018 became first carbon-neutral company from Newfoundland and Labrador: plug for Mysa – I bought them! Expanding into air conditioning
- SmartICE: world's first climate change adaptation tool combining traditional knowledge and advanced technology; training and employing local youth as producers, operators and technicians of the technology; visited them in Niain, amazing things happening
- Addressing global challenge of e-waste, electronic garbage:
 - o Josh Lepawsky, global expert on e-waste,
 - o only Canadian asked by the UN to be part of an initiative to solve the e-waste problem world-wide;
 - o work has led to revised international policies and recycling certification
- Growing research strength in agriculture at Grenfell Campus,
 - o environmental and agriculture research is attracting international students
 - Ever heard of the Functional Foods Sensory Lab? It examines natural or processed food products with known health benefits beyond basic nutritional needs, such as the antioxidants in blueberries
 - Work has included a study of moose and caribou meat that has uncovered previously unknown benefits of these products aren't you all happy about that?

Research with social aspects

- Another aspect of Memorial's role as the province's only university;
 - o research is committed to supporting not only industries, but solving social issues unique to, or overrepresented in, NL.
- As such, Memorial is responsible for some of the most important breakthroughs in areas such as public health and housing.
- For example, patients and health-care practitioners around the world can thank a Memorial medical team for a pioneering breakthrough
 - o one that is helping save the lives of those affected by a deadly "Newfoundland curse."
 - o research team made the groundbreaking discovery and treatment of sudden cardiac death syndrome.

 their life-saving screening methods and preventative treatments are being implemented in other countries and saving lives of those affected by a deadly genetic disease.

Looking ahead

- Not resting on our laurels but always looking ahead:
 - o embarking on a new innovation strategy process that will cover
 - programming,
 - social and cultural innovation,
 - entrepreneurship and innovation-driven research
 - next step in the university's commitment to promoting the advancement of innovation in the province.
- We might be nearing our 100 anniversary, but we're bursting with energy and new ideas
 - We will build our on ocean strengths to lead in the blue economy
 - We will support entrepreneurs who are starting innovative companies and employing thousands in NL

COMMITMENT TO COMMUNITES

- Which brings us to role #4 our commitment to communities and engaging others in all that we do.
- There is a global movement towards emphasizing public engagement at universities.
- At Memorial, we have a long tradition of public engagement, starting with our special obligation to the people of the province.
 - o reflected in the early work of the university relating to marine biology,
 - to our English program and the creation of the Dictionary of Newfoundland English,
 - o to being an early leader in tele-medicine.
- Many other Canadian universities struggle with the challenge of connecting their activities to their communities.
 - o at Memorial, it is not just a standard aspiration; it's a core value, defines who we are
 - o and not only on paper

- o it defines who we are
- o it's our own special twist.
- Our commitment to communities can be seen in initiatives large and small, are found across the institution, including:
 - o degree programs that respond to specific needs in the province in areas like education, health, engineering and social work
 - o non-degree offerings that develop professional and personal skills (microcredentials)
 - collaborations with the people of the province to build capacity for communityled development
 - research programs that involve public partners and respond to needs of the province, focusing on problems of specific relevance to NL in areas like the fishery, oceans and marine technology, culture and art, health and wellness

Transformation of economies

- Memorial plays an integral role in the revitalization and transformation of economies.
- As part of its unique mandate, Memorial plays an outsized role in supporting the continuity and evolution of small towns, rural communities and regions through specialized programming.
- In this role, Memorial directly engages with communities to envision their future; and to allow communities to draw on the resources of Memorial to turn ideas into reality.
- The Harris Centre's Thriving Regions Partnership Process is a great example of this type of hands-on support we provide to communities.
 - The program works with communities to bring regions together to examine challenges and priorities,
 - o and help them connect with researchers in developing real solutions to real problems.
- And imagine this!
- A professor can bring in \$1 million in research funding, what if we hired 20?
- The university has grown to be an integrated part of the environment of the province, but in many ways, so integrated that it's easily taken for granted.

BENEFITS

- Time to acknowledge the benefits of Memorial to our communities; can only scratch the surface here as I only have half an hour...
- The university is a significant contributor to the local and provincial economy.
- How significant?
 - Eight years ago an economic impact report was released; it's a bit dated but some key points:
 - o more than \$1 billion of the province's annual GDP (or 3.1 % of the total provincial GDP in 2012), could be attributed to the university
- We asked KPMG to prepare a new economic impact assessment; we hope to release next month, so stay tuned for more good news.
- But a sneak peak:
- Memorial is an incubator for unique research that enables industry and addresses social accountability, both at home and around the world
- Memorial is a hub connecting people, ideas and resources critical for success.
- Demographic challenge? We're the solution, play an integral role in the province's immigration strategy by attracting and retaining international students to live long-term in NL.
 - Almost 3,500 international students at Memorial; they contribute more than their business smarts: inject \$82 million annually into the province.
- Researchers and research funding contribute millions to our economy. How so?
 - o Faculty brought in \$160 million last year in research funding that's money that otherwise would not be here
- From the economic impact study I mentioned earlier?
 - o It reported a \$366 million annual impact on the province due to increased earnings of Memorial degree recipients who remain in the province
 - o alumni, like many of you, making Newfoundland and Labrador a vibrant place to work, live and grow.

CONCLUSION

Ultimately, it is the people that are Memorial that support our roles and responsibilities of being the province's only university – Team Memorial.

- Memorial's greatest strength is its people
- we are unified in our commitment to Memorial, to education making a difference in the economy
- Circle back to the young girl in Labrador who wanted to change her life
 - O University did that for me and my siblings and our kids
 - We didn't have to go into service of the mines
- We shape the future, we touch the future of Newfoundland and Labrador, we touch every aspect, socially and culturally.
- You want your university to be strong and we're committed to that.
- We are a university for the province, the world and the future. And I can't wait to see what that brings.