Intrappreneur Innovation at the center of education







TOMORROW'S EDUCATION, TODAY.



AN OBVIOUS PARADOX

Modern society pressures the education system. Education does not keep pace with society and the disparity between the two continues to widen. Despite efforts and investments to be abreast of technological advances, preparing learners for their future remains a major challenge, especially in school models and practices dating from the 19th century (Kelly, 2019). The speed of technology development in an increasingly volatile, uncertain, complex and ambiguous (VUCA) world where the digital environment is collaborative and malleable, paradoxically becomes a barrier and raises many concerns. Many studies prove it.

To be profitable in light of the current labor needs, societal expectations and international competition, companies are required to change rapidly, challenging schools to prepare learners for this evolving society. However, employers believe that young people are not prepared to succeed in the current skills-based economy. Moreover, learner disengagement from school is increasing due to the lack of experiential learning opportunities. Although technology can increase academic success and motivation (Fullan, 2013), its evolution must imperatively promote a pedagogy that evokes creativity and innovation, and in which learners are active and actors. Sadly, on-the-job training and employee professional development are limited compared to comparable countries. And what about inclusive education in schools and communities? Many young people do not participate fully in the life of their community. Yet, doesn't every child have the right to succeed and develop to their maximum potential?

Faced with the need to strengthen inclusive education, to promote a culture of lifelong learning and to narrow the gap between schools and society, the pressure is on the education system to infuse new life to adjust to this present-day reality. Catching up in education seems obvious so that youth can contribute to a world different from that of today. Collective collaboration between schools and companies will provide the means to remain competitive in the era of Industry 4.0 and Society 5.0, new industrial revolutions, imbued with digital and interconnected robotics, bringing fundamental changes both in systems and processes in management and manpower methods. Youth in Atlantic Canada, our workforce of today and tomorrow, nurtured by stakeholders throughout this school-to-work transition, will build digital skills to adapt and achieve the requirements of a technology-driven economy. This valuable human capital will benefit businesses, communities and schools triggering novel learning environments, encouraging the adoption of a digital strategy and a redefinition of professions.

Kelly, R., (2019). Constructing Leadership 4.0: Swarm Leadership and the fourth Industrial Revolution. Palgrave Macmillan.

Fullan, M. et Langworthy, M. (2013). Towards a New End: New Pedagogies for Deep Learning. Seattle, Washington, USA. http://www.newpedagogies.org/Pages/assets/new-pedagogies-for-deep-learning---an-invitation-to-partner-2013-19-06.pdf

FACING REALITY

It is obvious education must adapt and respond to the challenges created by these rapid changes. Academic organizations are pointing to promising avenues that can improve the education of today's learners, including collaboration, creativity, computer thinking, etc., skills indispensable to them forever. In fact, the OECD, in its project The Future of Education and Skills: Education 2030, emphasizes that learning involves not only teaching and assessment but also the co-construction of knowledge. Indeed, in effective schools, teachers and learners become co-creators in the teaching-learning process, accompanied by parents and members of the community, including businesses, who collaboratively guide learners towards their goals, so they can understand the opportunities offered by this new digital shift. This personalized learning aims to support and motivate learners to cultivate their passions, to establish links between various experiences and learning opportunities, to design their own projects and learning process in collaboration with others, and to acquire and maintain strong literacy and numeracy skills.

Already, in 2016, the EECD plan, the 10-Year Education Plans targeted objectives to meet the needs of an innovative society, in particular: a balanced life, a committed and ethical citizenship, the desire to learn throughout life. In addition, Succeeding at Home: A green paper on education in New Brunswick (2019) highlights not only the importance of valuing education as an economic, social and democratic engine, but also the imperative to reinvent the schools supported by the community and local and international businesses. Indeed, in her study, Jetté (2015) underlines the importance of strengthening the community's capacity for social change, which involves a re-foundation of power structures in education. More recently, the study by Lachapelle and Bourque (2020) indicates that collective collaboration benefits the community by developing resilience.

SHIFTING FROM EGO-SYSTEM TO ECO-COMMUNITY

Although 20th-century capitalism fostered massive economic growth, including innovation and prosperity, it contributed to social inequalities and even market failures. Fuelled by the need for self-esteem, power, capital accumulation and competition, this ego-system is based on results and not on the number of participants in the economy. Unlike the ego-system, the eco-community embraces universal values and interdependence, requiring collaboration and partnership for all to participate in the economy.

- Partnership: Establish an educational relationship with external experts, mentors and teachers to facilitate support for learners in our schools;
- Career awareness: Highlight and value the needs and opportunities in NB;
- Experiential learning: Provide learners with authentic and meaningful learning situations;
- Virtual learning: Connect learners to learning and career opportunities wherever they are, and develop a shareable body of knowledge.



The **Intr'Appreneur** project attaches importance to digital issues in the labor market and education. It aims to create an educational environment to bridge the gap between the world of education and the world of work to ensure a genuine inclusive education that promotes the professional integration of learners to the new economic reality. The term **Intr'Appreneur** refers to the opportunity to learn together, to co-create with others. This ecosystem, highlighting a community learning network, promotes personalized education by valuing the contribution of teachers, parents, researchers, learners, entrepreneurs and other partners to collaborate in the search for decentralized solutions to achieve school autonomy.

Community collaboration, at the heart of the **Intr'Appreneur** project, provides the foundation for improving the education system. When schools and communities collaborate to solve problems, they support educational projects aimed at improving the world around them, generating a strong sense of responsibility and commitment on both sides. Moreover, according to Beaumont, Lavoie and Couture (2009), this provides a deep sense of belonging, efficiency and motivation to teachers to engage in their school, while benefiting from the expertise and the experience of other community actors (field of services, companies, etc.).

Aligned with the vision and values of the EECD, "Plan vie carrière" (Francophone sector) and "Personalized Learning" (Anglophone sector), the **Intr'Appreneur** project responds to the community needs to contribute to the global and green economy. Its major partners Steelcase, Apple, STAPLES, Engage VR and Logics Academy support the countless innovative learning methods.

Face-to-face, remote and hybrid training (combining the two) enriches learning through the interaction of professionals from communities, provinces and neighbouring countries in technological initiatives aimed at solving environmental and cultural problems such as climate change, clean energy, rights and respect for Indigenous Peoples, diverse ethnicities and newcomers. Instead of limiting learning to a single approach and a fixed location, it offers completely redesigned ways of learning adapted to today's world. Community members and economic actors are present and active in the educational journey, offering learners a real-world experience while preparing them for this new era of work. The project calls upon schools, communities and industries to embrace innovation as a variable that promotes learning as well as the development of healthy, thriving and inclusive communities and schools.

BENEFITS FOR ALL

By participating in the **Intr'Appreneur** project, schools expand their pool of resources, curb work in silos, and help learners thrive and learn in an ever-changing regional, provincial and global economy. More specifically, the project wants to:

- Restore parental and community confidence in schools and learning through projects that reflect local priorities and develop a better understanding of individual goals;
- Increase the professional autonomy of school personnel;
- Promote inclusive education and well-being:
- Strengthen the role of schools in communities;
- Enhance digital skills;
- Explore new professional avenues in terms of future careers;
- Encourage learners and teachers to become actors in their learning:
- Foster collaboration and sharing of approaches and solutions between schools;
- Strengthen 21st-century skills;
- Develop risk-taking and resilience;
- Access to ongoing education related to scientific knowledge;
- Improve student achievement and the quality of education.

Entrepreneurs linked to this project will equally benefit. New, improved and interconnected products, services or methods resulting from student projects will provide visibility in the community, adding value and hope to companies faced with the changing market conditions. Not only will profits and customer communication improve, but entrepreneurs will thrive by displaying openness to digital skills and developments in the world of technology and research. After all, prosperity is a two-way street.

- **Digitization** How can we improve digitization capacity and position businesses to be more innovative, agile and resilient in response to changing market conditions?
- Workforce of the future How can we support school-to-work transition, help Atlantic Canadians build new skills in growing sectors and boost digital skills?
- **Green economy** How can we foster tech adaptation, waste optimization, clean energy and decarbonization of key sectors?
- Inclusion How can we increase the inclusion of under-represented groups and direct specific attention on Indigenous people, newcomers, international students, women and youth?

ADVISORY COMMITTEE

ROLE OF THE ADVISORY COMMITTEE

The Advisory Committee of the **Intr'Appreneur** project has an informal structure resembling a team of coaches to strategically support the vitality of the project. Its primary role is to accompany and support the Project Manager in his reflection on the development of the project. Holding an advisory role, the committee acts as a consultant to co-validate the proposed ideas and the chances of their success, by identifying their obstacles and helping to find expert advice on possible solutions. It is up to the Project Manager to measure the impact of the committee's recommendations on the organization and assess its implementation capacity while maintaining the integrity and mission of the project.

COMPOSITION OF THE ADVISORY COMMITTEE

Appointed by the Project Manager, the Committee is composed of a multidisciplinary group of leading experts who have solid knowledge and extensive experience relevant in various fields, such as lifelong learning, learning environments, skill development, economic, community and learning development.

FUNCTION MODE OF THE ADVISORY COMMITTEE

The Advisory Committee will meet approximately twice a year. The Project Manager is responsible for the meeting agendas, monitoring meetings and actions agreed, and a progress report on the status of the project. Remuneration of members is voluntary.

CREATION OF A PEER-REVIEWED JOURNAL

Research articles pertaining to the project, as well as articles on theoretical reflections, are written by researchers to share and promote their findings and analysis. Collaboration with several universities as a « service to society » is creating a peer review committee to approve the articles according to specific rules. An **annual results presentation** (symposium) takes place in one of the participating schools or elsewhere, creating a learning event and pride for students and communities.

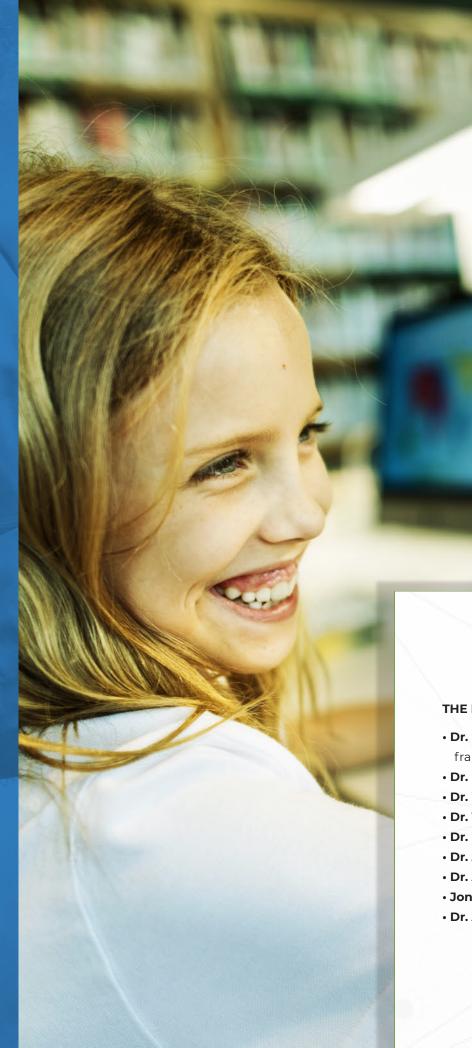
MEMBERS OF THE ADVISORY COMMITTEE

- **Monique Boudreau**, CEO, District scolaire francophone sud
- Adrienne O'Pray, President and CEO, New Brunswick Business Council
- Gaëtan Thomas, President and CEO, New Brunswick Economic Council
- Josh Waite, Economic Development Officer, ACOA, Expert in the « ecosystem » development approach, in digital innovation and competence development
- Rachel Brown, Director, Post-Secondary Relations (PS Education, Training and Labor), GNB, EECD
- David Hawkins & Brad LeBlanc, BrainWorks Marketing Inc.
- Denis Daigle, Lead, Information
 Technology Strategy and Planning, GNB,
 EECD
- François Godin, Senior Project Manager,
 Educational Facilities and Pupil
 Transportation, GNB, EECD
- David Després, Director of Administrative and Financial Services, District scolaire francophone sud
- **Dr. Mario Chiasson**, Project Manager, Director of Research, Innovation and Change, District scolaire francophone sud

TRACES OF PROGRESS

Research is the driving force behind the project, enriched by data collection. The project will progress over the years with evidence providing information on priorities, changes, decisions, student progress and improvement plan. This longitudinal study spanning several years will generate a wealth of data and outcomes contributing to the advancement of knowledge in education and will feed the subsequent steps.

To this date, no comprehensive research has been undertaken on the impact of learning environments on learners in inclusive education. The design and use of innovative learning environments linked to the world of work will attempt to meet the specific research objectives of the project. These are: (1) identify strategies to meet the specific needs of each learner; (2) better understand the influence of space on learning and skill development; and (3) examine the effects on learner wellness and engagement. The results will lead to the development of evidence-based interventions and guidelines related to recent innovations in education.



THE RESEARCH TEAM

- Dr. Mario Chiasson, Lead Researcher, District scolaire francophone sud
- Dr. Daniel Gray Wilson, Harvard University
- Dr. Wesley Imms, University of Melbourne
- Dr. Viktor Freiman, Université de Moncton
- Dr. Michael Fox, Mount Allison University
- Dr. Arleen Strickland, Steelcase Applied Research
- Dr. Alec Couros, Regina University
- Jonathan Landry, AEFNB
- Dr. Angela Aucoin, Université de Moncton

THE PLAN

The Intr'Apreneur longitudinal project consists of four main phases that target the stages of developing a learning culture in a rapidly changing society. Collective intelligence leverages expertise within and outside schools through continuous professional development. Thus, school administrators and partners support teachers and school staff, strengthening the knowledge base to iteratively develop and refine their skills.

- 1. INITIATION PHASE: The first phase of two years, started in September 2019, consists of taking stock of the current state of knowledge to identify solutions to the educational issues raised by the literature and recent reports from EECD, aimed at meeting the needs of all students. In addition to visiting innovative schools and innovation research centers, scientific readings and discussions, the Management Team (DSFS) highlighted the urgency of connecting schools to the world of work by promoting the development of modern skills. Training on leadership, innovative practices and infrastructure led to a better understanding of the development of a school culture, with leadership nurturing deep learning. Thus, the Management Team, with the consultation of educational and community partners, developed learning spaces (layout and technological tools) in five schools. In addition, the Advisory Committee and long-term planning have been established.
- 2. AMPLIFICATION PHASE: The second three-year phase consists of the implementation of the stages, including the objectives, the measurement indicator and the deadlines. The project proposes the development of spaces for 15 schools (5 per year) with specific objectives. This phase captures the experiences of students, teachers, principals and community members serving as a guide in the evolution of the project by establishing benchmarks to facilitate changes in an interactive design process. In fact, feedback loops will make subsequent interventions more reliable in a dynamic evolving system.

- 3. INSPIRATION PHASE: The third three-year phase builds on the results and reflections of the previous phase to ensure the continuity of the project, while including the other districts of the province through the previous stages. During this phase, learners reflect on the needs of others and call upon other disciplines, their freedom of thoughts and their creativity to act on possible solutions. They engage their critical mind by imagining solutions with humane and societal values, desirable and possible, while relying on criteria conditioning the validity of an idea: feasibility (functional and achievable in the foreseeable future), viability (a sustainable economic model) and desirability (expectations of the target population).
- 4. ANCHORING PHASE: To ensure real change, the fourth phase helps secure the transition to the next project.

 Lasting three years, it requires deep change management towards the consolidation of new practices. This anchoring, which represents the beginning of a cultural transformation of the school, needs well-managed support for all those involved to ensure the sustainability of new practices over time. Only then will the participants be able to resist new challenges.



STRUCTURE OF THE FRAMEWORK

The Intr'Appreneur project brings together partners with skills, knowledge and experience in modern educational spaces who are interested in improving the school system. The richness of their collaboration (cross-functional, intercultural) is based on the sharing of invaluable opportunities for cross-skills and networking. More and more schools are unlocking their door to community participation enabling learners to acquire diverse perspectives and real-world skills. The Project Manager, supported by the Advisory Committee, ensures the leadership and vitality of the project. Experts bring their knowledge and experience, including previous research on the subject, practical advancements in the development and use of innovative learning spaces to make these schools a guaranteed success.

PARTICIPATE NOW!

Schools and learners are at the core of this project and need your help. The team believes that your involvement will improve classroom practices while benefiting from your experience, expertise and knowledge.

WHAT CAN YOU DO NOW?

The project invites you to discover the existing projects or those under development by consulting our website.

HOW CAN YOU CONTRIBUTE?

As a partner: Dare to invest in the future by supporting the Intr'Appreneur project to help prepare the highly qualified workforce of tomorrow with significant growth potential. In addition to benefiting from exceptional visibility, you contribute to the advancement of society and the success of a milestone event, while helping to build the future of education.

As a researcher: Dare to invest in the future by responding to the social, scientific and economic challenges of tomorrow to advance knowledge in education and innovation. As a researcher, you will strengthen the capacities of the Intr'Appreneur project in order to optimize education and the wellness of learners. The measure will guide the development of expertise in New Brunswick through a large-scale and scalable project, studied internationally, while creating the possibility of collaborative research.

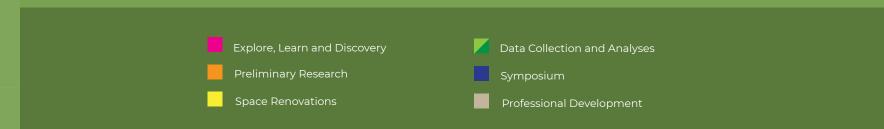
To join us

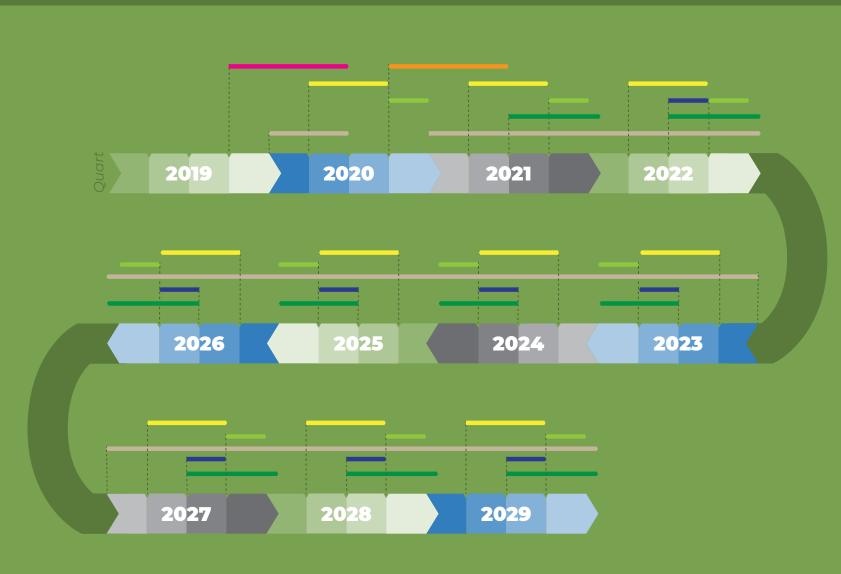
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PROJECT TIMELINE





THANKS TO OUR PARTNERS AND MAJOR COLLABORATORS!



































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