

collaborative process for finding solutions to complex social problems





DEVELOPMENT, RESEARCH AND WRITING OF REPORT

André Fortin

Creative Facilitation and Social Innovation Advisor Institut du Nouveau Monde andre.fortin@inm.qc.ca

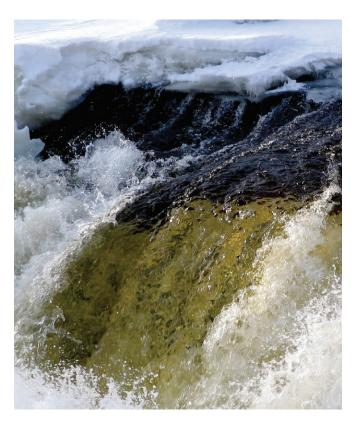
REVISION

Paul Carle, Julie Caron-Malenfant, Sophie Gélinas, Adam Kahane, Olivier Lenoir, Michel Levesque, François P. Robert, Michel Venne TRANSLATION ABACA Traduction

February 2013

This document is a work in progress. We welcome your comments with the view to improving it.

Changein Turbulent Times



We are living in a world where we are interconnected as never before and where we are witnessing accelerating change. This world is also characterized by turbulent and unpredictable environments that cause us to question how we do things and invite us to think outside the proverbial box.1 Learning to innovate is an increasingly invaluable skill, now required to outdistance competition, ensure the survival of organizations and stay connected to the needs of our times. In order to find solutions to complex social problems, we need to discover a new type of leadership² that prioritizes the notion of cooperation and a letting go of hierarchy, control and pressure for short-term results. In this context, a number of creative processes for supporting change have been developed in recent years. These processes suggest that we can no longer merely adapt to change using the tools and best practices of the past; instead we must learn to project ourselves into the future so as to prepare ourselves for it.3 By turning more often to dialogue involving various stakeholders around a common problem, it is possible, in our view, to marshal the collective intelligence to serve organizational and community development.

Collective intelligence⁴ refers to the cognitive capacities of a society, community or collection of individuals to jointly develop, in highly complex contexts, through a dynamic of collaboration and dialogue. Collective intelligence is characterized by a group's ability to successfully interact in a situation involving a challenge, crisis or change: the group's synergy fosters greater innovation and problem solving than if individuals had remained isolated.

collective intelligence

Complex problem solving and social innovation

Like all industrialized nations, Quebec faces challenges to remain economically viable and maintain its population's standard of living and quality of life. Moreover, its communities are confronted with major issues, such as climate change, rural community decay, increasing high school drop-out rates and illiteracy, social inequalities, inadequate health care for an ageing population, etc. In order to foster sustainable development, stimulate profound social change and reconcile the myriad interests at play, collaboration among various stakeholders and citizens is essential. The ideal would be to convene all parties of a system and gather the main actors together in one room to work on change. As the biologist, Francisco Varela, stated, "The capacity to mobilize the collective experience to identify what has been learned and find solutions to complex problems will be the major challenge of the 21st century." In this regard, entering into an intersectoral dynamic is key to problem solving since it enables the interchange of roles and responsibilities for an accrued sharing of resources.5 Moreover, social innovation processes are paramount for allowing individuals and groups to cooperate and, together, build a future adapted to their realities and needs.

Social innovation is not a new phenomenon, but wide-spread use of the concept over the past six years shows that it increasingly responds to a need for renewed practices. Social innovation can be defined simply by saying that it produces ideas that contribute to the common good. Broader definitions have also been proposed, one by the Réseau québécois en innovation sociale. It defines **social innovation** as

- a novel solution (idea, approach, intervention, service, product, law);
- that is more effective and sustainable than existing solutions in meeting a well defined social need:
- that gathers stakeholders from a group (institution, organization, community);
- that has a measurable benefit for the community and not merely for certain individuals; and
- that is transformative, systemic and constitutes, in its inherent creativity, a break with existing solutions.

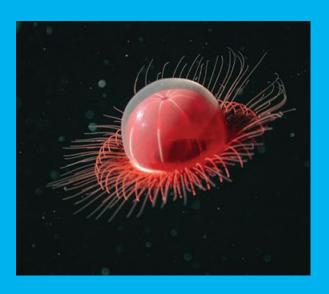
Contributions to social innovation go far beyond the social domain. Social innovators are forerunners of open innovation (an approach based on sharing, cooperation and unexpected discoveries), and such expertise is increasingly sought by institutions and companies to accelerate technological innovation. Through creative processes and implementation, social innovators increase society's capacity to act and solve the main issues that impede innovation, drawing upon democratic rules and good governance, effective work procedures, change management, and the exercise of leadership.⁷

6 PROPERTIES OF COMPLEX SYSTEMS

NON-REDUCIBILITY	It is impossible to understand a complex system by focusing on just one relation since each party's purpose depends on its connection to the whole (the whole is greater than the sum of its parts). The transformation of people and organizations is a parallel process, one that is interactive, both on a social and individual scale, which explains the importance of an inclusive vision.
AWARENESS	A complex human system has the meta faculty of being aware of its awareness, of building learning upon learning, and communication upon communication, and can therefore observe itself while functioning at a high level.
UNPREDICTABILITY	A complex system exhibits forms of autonomy making it impossible to be completely controlled. Its future cannot therefore be predicted ahead of time. A minor action can lead to a major outcome (butterfly effect), and a major action can lead to a negligible one.
EMERGENCE	A complex system demonstrates unexpected behaviour and has an ability to continuously create novelty to adapt to what emerges. By delving into the reserve of human creativity, infinite resources can be accessed to resolve the challenges of tomorrow.
INTERACTION	The greater the number of interactions in a system, the greater the complexity due to the chains of logical elements that co-exist and intermingle. An increase in interactions leads to group or organizational instability and, in turn, stimulates change.
SELF-ORGANIZATION	Complex systems are capable of attaining an overall order by themselves to adapt to changing environments. In a dynamic, non-linear system, the coexistence of pockets of stability and chaos enables a system to self-organize and thus self-renew.

Also known as the ocean depths, the abysses⁹ occupy 60% of the Earth but are still a mystery: 95% remain unexplored. Prior to 1960, we thought that no life could subsist in the ocean's abysses for lack of light.

However, it is now known that the abysses are the largest reservoir of life on Earth. One can find precious minerals,



energy sources, and new organic substances, along with adaptation strategies unheard of until now. For example, several organisms have developed bioluminescence (production and emission of light by a living organism) to adapt to their hostile environment.

The analogy of the abysses is of more than just passing interest in that their characteristics can be used to motivate LABIS participants to develop innovative solutions.

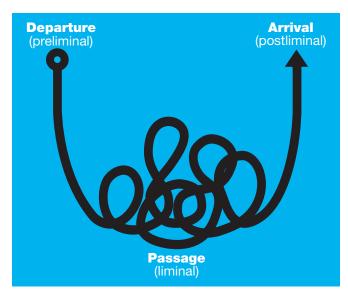
analogy of the abysses

Design thinking¹⁰ is a human-centred philosophy and approach to innovation, drawing upon empathy and creativity. Design thinking makes connections between research discoveries and their adaptations by creating products and experiences that put the needs of people first. Prototyping consists of rapidly building models to test a concept, process or theory. It is the key tool used in design thinking and aims to help people learn through practice rather than reflection.

design thinking

The U-Process of change

In the literature, change and transformation are often represented by a U-shaped curve. Most of the models were developed in the 1970s. They do not belong to one field or discipline in particular, are not exclusive to one culture, era or mode, but have instead emerged from the spheres of practice, intervention and research. Certain curves describe intervention processes that are brand new while others describe rituals that have existed for thousands of years. The fact that all human beings experience shock, loss and rupture several times during their lifetime therefore appears to be a universal characteristic. For example, U-curves have been used to describe cultural adaptation, by Lysgaard (1955), the grieving and dying process, by Kübler-Ross (1975), the process of scientific revolution, by Kuhn (1983) and, more recently, the process of emergent change, by Scharmer (2009).



The U-Process of change usually includes three main stages. ¹² First of all, at the left top of the stroke, there is the **departure** or **preliminal** stage. This is often a time of taking stock. It is a moment of suspension before the journey. The system is described as it is. Difficulties are specified, along with what works well; strengths and weaknesses are outlined. We prepare for a journey that is usually provoked by an overload, a significant meeting, an illumination or a dissatisfactory report that gives us the motivation to take a leap, in order to modify what is bothering us.

Secondly, the bottom centre of the curve is associated with **passage** or the **liminal** stage. Passage takes place in an irrational, chaotic, symbolic, artistic or imaginary place. The tools for this stage stem from fields other than classical science (creativity, rituals, martial arts, etc.). During this phase, there is an emphasis on expression and the emergence of something profound from human beings in touch with their own authenticity. The aim is to produce symbols and stories, to generate desires and intuitions.

Thirdly, the right top of the stroke represents the **arrival** or **postliminal** stage. This is the phase of the system's reorganization after chaos. Here, it is a matter of integrating new characteristics, sensations, images. We restructure from the journey's milestones. We take position socially as a new entity. We make choices, perform new acts, and spread a new vision or way of seeing things.

Most U-Process models advocate values of equality, respect, democracy and dialogue, and promote practices focused on participation, self-learning, co-construction of meaning and purpose, listening, suspension of judgement, and letting go. Many U-Processes also call into question leadership style, governance and the meaning of ethics. It is not uncommon for them to be marked by strong emotions experienced by participants, emotions generally deemed negative in our groups and societies. ¹³ Finally, at the end of the U-Process, new people and organizations emerge, representing a microcosm of the new world to be created. In this regard, groups of people who experience the U-Process together demonstrate a greater capacity to manage complexity and respond to the difficult questions inherent in any process of change.

co-creation

Co-creation¹⁴ is a **collaborative practice** for developing a product, a service or a system. This practice in open innovation emphasizes sharing and is interdisciplinary in that it combines several viewpoints and encourages the cross fertilization of ideas to enrich reflection and creation.

Co-creation is work done in conjunction with developers and stakeholders and involves **new relations among different people**. Co-creation transforms the consumer or user into an active partner and focuses more on the quality of interactions among people than on technologies. Co-creation implies redefining the way organizations engage with individuals, consumers, employees, suppliers, and other stakeholders.

Co-creation is a **creative process** between producers and users with a view to **generating added value and results**. In a context of co-creation, the production of knowledge and its transfer is a non-linear process involving several stages of construction and de-construction. Co-creation is also a process of change that often targets the greater good and enables institutions to improve their social legitimacy. Finally, co-creation is a learning process that must be guided, hence the central role played by the facilitator in developing a climate open to exchange and experimentation.



To arm and support organizations, governments and communities, the Institut du Nouveau Monde (INM) has developed the Social Innovation Laboratory (LABIS). ¹⁵ Using the model of scientific laboratories that are guided by observation and experimentation, this new type of innovation laboratory offers a neutral space designed to solve complex problems creatively. ¹⁶ LABIS positions itself in a highly experimental environment but uses rigorous and structured methodology. It advocates decentralization, flexibility, inclusion, and participation of a variety of sectors in decision making.

DIFFERENCES BETWEEN A TRADITIONALLY STRUCTURED ORGANIZATION AND A SOCIAL INNOVATION LABORATORY¹⁷

TRADITIONAL ORGANIZATION SOCIAL INNOVATION LABORATORY

Promotes a hierarchical structure	Promotes a collective approach and horizontal structure
Is inclined to be static	Is inclined to be dynamic
Focuses on experts	Focuses on a multidisciplinary team
Is risk-adverse	Is open to failures as a source of learning
Is market-driven	Is user-centric
Favours production outcomes	Favours social change outcomes
Intellectual property belongs to the organization	Intellectual property is shared among participants
Is based on a linear process of change	Is based on an iterative and organic process
Evaluates success through prescribed indicators	Success is conditional upon the aspirations and desires of users and beneficiaries

The LABIS concept involves the integration of specific expertise stemming from three distinctive academic traditions: group dynamics, complex system theories, and design thinking. The intersection of these traditions offers a rich conceptual basis for the development of novel solutions to intractable problems arising from contexts where the social and ecological problems are complex.

An innovation laboratory uses a process that gathers together various stakeholders to develop a common understanding of a problem for which participants can design new innovative solutions.

Every laboratory has its own unique approach and dynamic. However, **seven elements** have been identified to **foster success**: ¹⁸

- The use of **qualitative research** provides a reference base enabling an overall understanding of the problem. Qualitative research is a complement to the quantitative statistics and data that are more readily available and enables the concerns of diverse individuals to be assembled.
- **Co-creation of solutions**. This is done across sectors, avoiding silos and with the goal of citizen commitment. In co-creation, a broad range of participants, competencies and viewpoints stimulates innovation. Co-creation workshops are implemented with a group that has been carefully selected, made up of a majority of decision makers and individuals in a position to implement projects.
- Access to an **enjoyable physical environment** that promotes dialogue and stimulates creativity.
- Rigour and clarity in designing workshops and sessions so that participants understand how their contribution fits into the whole process and are made to feel comfortable about sharing their analyses and creativity.
- Rapid production of prototypes to develop models, which, in turn, produce solutions. Prototypes help participants think quickly about the impact of the system's interventions and offer fertile ground for creative solutions that may eventually be implemented.
- Support by a multidisciplinary team that facilitates activities, produces analyses and offers support to participants. The team's main work involves designing the process, and providing leadership, qualitative research and knowledge concerning collaborative approaches.
- **Continuous learning**. The laboratory develops different tools and methods to facilitate participants' ongoing commitment.

developmental evaluation

Developmental evaluation¹⁹ is forged in response to a need to support learning in real time in complex and emerging situations. This type of evaluation is appropriate for processes involving multiple stakeholders and partners, where there are high levels of innovation, where decision making can occur quickly, and where there are zones of uncertainty.

Developmental evaluation therefore

- implies that an innovative initiative will integrate an evaluator from the start of the project as a member of the team;
- aims to provide feedback in real time with a view to generating learning to clarify an evolving situation;
- has the evaluator play a role that goes beyond data collection and analysis since the evaluator can, under certain circumstances, actively intervene to clarify decision making and facilitate learning; and
- aims at grasping the system's dynamic and envisaging novel strategies and ideas.

The LABIS model

LABIS is a process designed to produce social innovation in response to a clearly identified problem area. It is based on collective reflection that takes complexity and creativity into account and uses deliberation to develop an inclusive vision, targeted strategies, and innovative projects. Three main objectives guide how it works:

- Stimulate and support social change initiatives.
- Create a space open to respect, confidence and creativity.
- Design and implement projects with a strong social impact.

LABIS is represented by a U-curve that consists of five phases. These five phases do not follow a linear path since, depending on the laboratory's evolution, it is possible to return to a previous phase or skip a phase altogether. LABIS is therefore a dynamic model that constantly evolves with the stakeholders and new information that emerges to modify the initial context. A five-phase LABIS cycle usually lasts from eighteen to twenty-four months. In some situations, several cycles may need to be repeated to elucidate a complex social issue.

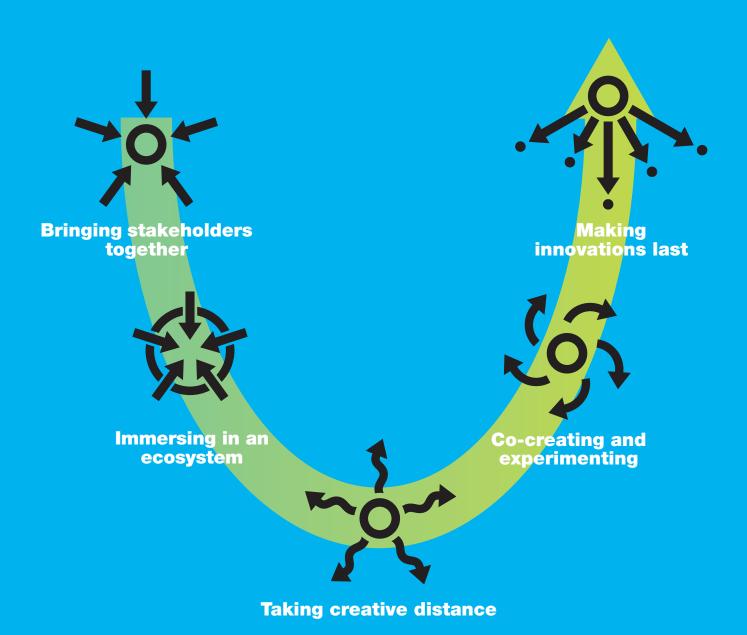
Roles of LABIS actors

The INM's role in LABIS is to design the approach, ensure ongoing support, lead workshops and offer developmental evaluation throughout the process. To start a LABIS project, **one of the stakeholders must be invested as a leader and convince other system players to join**. In an initial phase, there should be a minimum of eight to ten stakeholders. The group can then expand to reach an optimum number of between twenty and thirty participants.

The **stakeholders' role** is two dimensional:

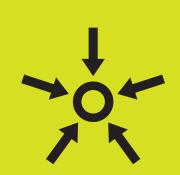
- Becoming unequivocally involved in solving a clearly identified complex problem. LABIS is a process that yields results but raises a good number of challenges, including the choice of participants. It is important to favour actors who have a degree of influence and real capacity for action that will lead to change.
- Investing the required time and financial resources in the initiative undertaken. For the process to advance, an involvement of eight to ten days a year is required on the part of participants. In addition, a financial contribution from participants, each according to their ability, is necessary to ensure the viability of the process.

The 5 phases of LABIS



The 5 phases of LABIS

To better understand the five phases of LABIS, here are the main goals, planned activities, and tools that can be used.



Bringing stakeholders together

GOALS

- Identify and bring together stakeholders
- Present the conditions for participating in LABIS
- Undertake a diagnostic of the problem area

ACTIVITIES

- Exploratory research
- Discussions
- Literature review

TOOLS

- Internet
- Semi-directed interviews
- Meetings



Immersing in an ecosystem

GOALS

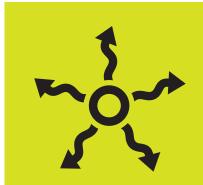
- Create a group dynamic
- Launch a groundbreaking process of reflection
- Draw upon the collective intelligence of participants to enable unique insights
- Establish an initial progress report

ACTIVITIES

- Two-to three-day initiation laboratory
- Workshops using collaborative methods
- Field visits

TOOLS

- Open Space
- World Café
- Story Telling, Testimony
- Scenario Workshop



Taking creative distance

GOALS

- Create some distance with regard to the issue addressed
- Nurture the emergence of original reflections
- Produce new commitments

ACTIVITIES

- Two-to three-day creative laboratory
- Brainstorming and forecasting workshops

TOOLS

- Creative techniques: mind maps, attribute listing, wild ideas, hold-ups, analogies, etc.
- Artistic media





Co-creating and experimenting

GOALS

- Consolidate teams by cementing the common vision
- Use practices from elsewhere to inspire and formulate novel projects
- Establish a co-creation and experimentation process

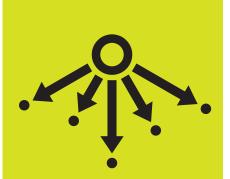
ACTIVITIES

- Prototypes
- Pilot projects: development, experimentation, enhancement
- Learning trips

TOOLS

- Rapid prototyping
- Monitoring matrix
- Logbooks

4



Making innovations last

GOALS

- Develop an overall analysis of the first innovation cycle
- Foster the sustainability of the structures and projects implemented
- Reach new stakeholders to bring about a change of scale

ACTIVITIES

- Developmental evaluation: lessons learned, challenges met, adaptations made
- Creation of a business model
- New cycle of meetings and workshops

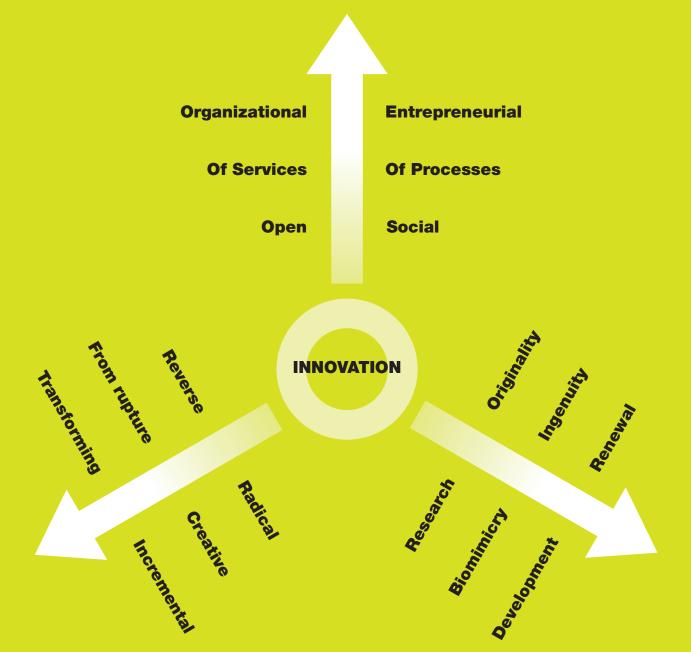
TOOLS

- Evaluation chart
- Appreciative inquiry
- Visual diagram



References

- 1 RAMIREZ, R., SELSKY, J.W. and VAN DER HEIJDEN, K. (2010). **Business Planning for Turbulent Times: New Methods for Applying Scenarios**. Earthscan. 314 pages.
- 2 PEARSON, Carol S. ed. (2012). The Transforming Leader: New Approaches to Leadership for the Twenty-First Century. Berrett-Koehler Publishers, 294 pages. JOHANSEN, Bob. (2012). Leaders Make the Future: Ten New Leadership Skills for an Uncertain World. Berrett-Koehler Publishers, 245 pages.
- 3 SCHARMER, Otto. (2009). Theory U: Leading from the Future as It Emerges. Berrett-Koehler Publishers, 530 pages.
- 4 LÉVY, Pierre. (2010). **Vers une science de l'intelligence collective**. 33 pages. http://www.ieml.org/IMG/pdf/00-2-vers-sci-IC.pdf ATLEE, Tom and POR, George. (2000). **Collective Intelligence as a Field of Multi-Disciplinary Study and Practice**. 5 pages. http://www.community-intelligence.com/?q=node/130
- 5 PHILLS, J.A, DEIGLMEIR, K. and MILLER, D.T. (2008). **Rediscovering Social Innovation**. Stanford Social Innovation Review, 11 pages. http://www.ssireview.org/articles/entry/rediscovering_social_innovation
- 6 Réseau québécois en innovation sociale RQIS. (2011). Favoriser l'émergence et la pérennisation des innovations sociales au Québec. Synthèse des travaux de la communauté d'intérêt sur l'innovation sociale. 101 pages. http://www.uquebec.ca/dqis/documents/Favoriser l'%C3%A9mergence.pdf
- 7 Idem
- 8 FORTIN, André. (2000). La complexité du changement organisationnel : résistance au chaos ou stratégie créative. Article for Master's degree in Communications. Université du Québec à Montréal, 21 pages. MCMILLAN, Elizabeth. (2008). Complexity, Management and the Dynamics of Change. Routledge, 243 pages.
- 9 CAUSSE, Christine and VALLETTE, Philippe. (2009). **Secrets des abysses**. Groupe Fleurus, 80 pages.
- 10 BROWN, Tim. (2009). Change By Design: How Design Thinking Transforms Organizations and Inspires Innovation. Harper Business, 264 pages.
- 11 MAHY, Isabelle and CARLE, Paul, eds. (2012). **Théorie U. Changement émergent et innovation. Modèles, applications et critique**. Presse de l'Université du Québec, 267 pages.
- 12 FORTIN, André. (2000). Le rite de passage : outil d'intervention pour faciliter les transitions. Article for Master's degree in Communications. Université du Québec à Montréal, 23 pages. CARLE, Paul, ed. (1998). Processus non linéaires d'intervention. Presse de l'Université du Québec, 174 pages.
- 13 MAHY, Isabelle and CARLE, Paul, ed. (2012). Théorie U. Changement émergent et innovation. Modèles, applications et critique. Presse de l'Université du Québec, 267 pages.
- BASON, Christian. (2010). Leading Public Sector Innovation: Co-Creating for a Better Society. The Policy Press, 278 pages. RAMASWAMY, Venkat and GOUILLART, Francis. (2010). The Power of Co-Creation: Build It with Them To Boost Growth, Productivity, and Profits. Free Press, 276 pages. ROSER, T., SAMSON, A., HUMPHREYS, P. et CRUZ-VALDIVIESO, E. (2009). Co-Creation: New Pathways To Value An Overview. Promise Corporation, 22 pages. http://www.promisecorp.com/newpathways/
- 15 LABIS is inspired by the practice of Adam Kahane of Reos Partners and by Otto Scharmer's Theory U.
- WESTLEY, F., GOEBEY, S. and ROBINSON, K. (2012). Change Lab/Design Lab for Social Innovation. Waterloo Institute of Social Innovation and Resilience, 20 pages. http://sig.uwaterloo.ca/highlight/what-is-a-change-labdesign-lab
- 17 TORJMAN, Lisa. (2012). **Labs: Designing the Future**. MaRS Discovery District, 20 pages. http://www.marsdd.com/wp-content/uploads/2012/03/MaRSReport-Labs-designing-the-future 2012.pdf
- 18 Idem
- 19 DOZOIS, E., LANGLOIS, M. and BLANCHET-COHEN, N. (2010). DE 201: guide du praticien de l'évaluation évolutive. The J.W. McConnell Family Foundation and l'Institut international des droits de l'enfant et du développement, 83 pages. GAMBLE, Jamie. (2008). A Developmental Evaluation Primer. The J.W. McConnell Family Foundation, 69 pages. http://www.mcconnellfoundation.ca/fr/resources/tags/evaluation
- 20 PATTON, Michael Quinn. (2011). Developmental Evaluation: Applying Complexity Concepts To Enhance Innovation and Use. The Guilford Press, 373 pages.













Based in Montreal, Institut du Nouveau Monde (INM) is a not for profit and non partisan organization whose mission is to promote citizen participation in the democratic life of Quebec. Founded in 2003, INM works from a sustainable development perspective for justice and social inclusion, respecting democratic values, in a spirit of openmindedness and innovation. Through its activities, INM proposes a structured and deliberative approach based on the "informing, debating and proposing" formula. INM strives to increase participation in and improve the level of public debate. It also helps reinforce social ties and democratic institutions.

INM's achievements have two main pivots. On the one hand, INM promotes the development of citizen skills on the part of individuals and organizations and inspires a "citizens' attitude" within society. To do so, INM has acquired transferable expertise and has undertaken a proactive monitoring of best practices in the area of citizen participation.

For individuals, INM organizes education, training, mobilization and support activities with respect to citizen action, such as the INM Summer School and Winter School, designed for young people under 35 years of age, and its À go, on change le monde! social entrepreneurship program.

INM has also developed, for the benefit of organizations, under the banner of INM Consulting Services, a service offer for companies, associations, and institutions wishing to open up and adapt to high-quality citizen participation.



To find out more about LABIS or to start one, please contact Julie Caron-Malenfant, Director, INM Consulting Services 514 934-5999 ext. 238, julie.caron-malenfant@inm.qc.ca 630 Sherbrooke St. West, Suite 1030, Montreal (Quebec) H3A 1E4

www.inm.qc.ca

With the support of

THE J.W. McConnell Family Foundation

La fondation de la famille J.W. McConnell