perfectio

VOTRE RÉFÉRENCE EN FORMATION DES ADULTES

SPECIAL EDITION

SOAR

WINTER 2020

TABLE OF CONTENTS

EDITOR IN CHIEF:
RACHEL ANNE NORMAND

TRANSLATION:
BIANCA CESARIO

PROOF READING:
LYDIENNE GUIDOIN

GRAPHIC DESIGNER:
MARIE-EVE SÉGUIN

PRINTING:
BRADDA PRINTING SERVICES INC.

In this publication, the masculine is used with the sole intention of lightening the text.

WORD from the edito

Soar [SOR]

to suddenly and dramatically move upwards, to suddenly increase in number or amount[1]

The 21st century is a period of change. We are at the beginning of an exponential shift in terms of changes that have the potential to alter our society, workforce and workplaces. This is an era in which we need to reflect on tomorrow's education: about new (personal and social) skills to incorporate into our curriculums and about new ways of learning.

[1] Antidote Dictionaries.

r IN CHIEF

Rachel Anne Normand

Over the past decades, many public, private and academic organizations around the world have considered the skills that are needed to meet both today and tomorrow's challenges in society. A consensus is emerging: new demands are arising in the area of education and employment. In education, we no longer talk about accumulating knowledge,[2] as outlined by Marc L. Johnson. Nowadays, a skills-based approach prevails. In the labour market, know-how and skills are increasingly valued. Employers are looking for resourceful, reliable, motivated, loyal employees—individuals who possess behavioural qualities or, alternatively, generic skills.

Soar is the culmination of several months of research and writing. The editorial process began a long time ago with the production team, as we wanted to make sure that it was not only well done but also relevant. Given the wealth of information available on skills, it was important for us to choose the angle and subjects that best reflect the reality of our field and the various developments that are occurring.

First, it was imperative for us to define the competencies that are emerging in the 21st century, which we did in the *Discovery* section. It begins by exploring multiple skills (essential, generic, language and technical) and then looks at the ways in which they form a whole, the curriculums in which they are embedded and the ways by which adult learners can acquire them in order to develop all facets of knowledge.

Horizon follows close behind these discoveries. As mentioned by Senator Diane Bellemare in her article, "Canada is shifting from a jobs economy to a skills economy".[3] Is the adult education field prepared to deal with these changes in a way that supports today and tomorrow's workforce? It is often said that learners are at the core of our approaches. But is this true, especially with regard to university curriculums? This is one of the themes featured in Marc L. Johnson's article. Among other things, he discusses the educational signature that distinguishes the Université de l'Ontario français from other institutions.

This paper concludes with the *Recognition* section, in which articles focus respectively on transformations in the delivery of digital programs and services, and on a creative way to recognize achievements, learning experiences and skills development. In the digital era, how do we ensure that people can access computer-based services? How do we recognize skills development using digital technology? The articles by Guy Levesque and Hervé Dignard, on pages 26 and 28, include answers to these questions.

There is no denying that skills must be part of educational curriculums. That is why our literacy and basic skills network is an important vehicle for putting forward new pedagogical practices that promote skills development.

I hope that, with *Soar*, we will succeed in demonstrating how the skills-based approach is essential for citizens to overcome the current and future constraints of today's society and labour market. I trust that the following articles will assist you in your research and teaching practices.

Happy reading! ♦

[2] See article "University in the Era of Competency" on page 23.
[3] See article "Developing Skills at the Dawn of the Fourth Industrial Revolution" on page 20.

WORD FROM THE EXECUTIVE DIRECTOR

Gabrielle Lopez

The data speaks for itself. According to a report from Statistics Canada entitled *Les compétences en littératie des francophones de l'Ontario : état des lieux et enjeux émergents* [available in French only], many Franco-Ontarian adults continue to experience literacy difficulties.[1] Percentages in regard to low literacy levels in this group are significant: 48% in literacy, 56% in numeracy and 78% in digital literacy. These percentages represent many Francophone adults who need to refresh or upgrade their skills, as competency requirements on the labour market continue to increase.

As the Canadian Chamber of Commerce's report *Top 10 Barriers to Competitiveness for 2016* states: "Indeed, the employment landscape is changing, and the demand for high-skilled workers is growing (up 19% since 1998, according to Statistics Canada) while the need for low-skilled workers is declining (down 11% over the same period). Digital and STEM (science, technology, engineering and math) skills, which are critical to a workplace with more robots, data and artificial intelligence, can only be acquired if the fundamentals are in place."[2]

The Coalition ontarienne de formation des adultes (COFA) recognizes the importance of developing and mastering the basic skills needed to live in today's society. Our organization strives to help adults in Ontario succeed, whether by improving the availability of online training, by designing curriculums to increase skills among adults, or by testing learning models that integrate several types of skills.

This special edition dedicated to 21st century skills is an opportunity for the COFA to share with you some of the latest insights and practices in education so that we can work together to prepare for the major changes in society that are on the horizon.

Enjoy your reading! ♦

[1] Julien Bérard-Chagnon, *Les compétences en littératie des francophones de l'Ontario : état des lieux et enjeux émergents* (Social and Aboriginal Statistics Division, Statistics Canada, April 2015), 61, **http://www.coalition.ca/wp-content/uploads/2015/05/Litteratie_francophone_Ontario_Rapport.pdf**. [Available in French only.]

[2] Canadian Chamber of Commerce, *Top 10 Barriers to Competitiveness for 2016* (February 2016), 15, **http://www.chamber.ca/media/blog/160218-top-10-barriers-to-competitiveness-for-2016/**.

WORD FROM THE PRESIDENT

Renaud Saint-Cyr

"Are we ready to face the fourth industrial revolution?"

This is how Ms. Bellemare challenges us in her article on page 20, referring to the digital revolution, which is the fusion of technologies that generate artificial intelligence. Current innovations are occurring at a rapid and exponential speed. Klaus Schwab, founder of the World Economic Forum, says that this revolution "is disrupting almost every industry in every country. And the breadth and depth of these changes herald the transformation of entire systems of production, management, and governance."[1]

Given the COFA's mission to support its members in creating conditions that are conducive to the achievement of training objectives for Ontario's Francophone adults, it is important for the organization to stay current on the topic of 21st century skills. It must also take advantage of forums for discussion with its sponsors, partners in the literacy and basic skills sector and members so as to discuss current issues and find solutions for the future together. In this regard, the COFA is ready to do just that. Together with employers and partners in the adult education and training sector, and under the leadership of Employment and Social Development Canada, the COFA is participating in the development of a new competency framework called Skills for Success, which will combine certain essential skills with generic skills such as creativity, collaboration and adaptability.

The COFA strives to increase access to training for more Francophones, while continuing to manage and participate in a number of provincial, regional and national skills development initiatives with stakeholders in other Francophone areas including elderly care, childhood education, hospitality, etc. As per Klaus Schwab's recommendations, our response to these changes "must be integrated and comprehensive, involving all stakeholders of the global polity, from the public and private sectors to academia and civil society."[2] It is through collective efforts that we will be able to properly prepare today and tomorrow's workforce, to provide access to quality training that meets the many needs of a citizen evolving in modern society, and to ensure that no one is left behind.

This special edition dedicated to 21st century skills is a step forward in the right direction.

Enjoy your reading! ♦

[1] Klaus Schwab, "The Fourth Industrial Revolution: what it means, how to respond," *World Economic Forum*, published January 14, 2016, accessed March 4, 2020, **https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/**.

[2] *Ibid.*

1

DISCOVERY

Essential, Generic and Language Skills:

A COMPREHENSIVE APPROACH TO ADULT LEARNING

By Lydienne Guidoin // Trainer, Programme de formation à distance

Why should these skills be considered together when talking about adult education?

When we refer to 21st century skills, we envision the changing world we live in where an increasingly complex array of knowledge is needed. Interpersonal skills require more advanced abilities than in the previous era. It becomes important to adapt quickly and continuously to the transformations that occurred in the last few decades.

In addition to the essential skills that were sufficient prior to all socio-economic transformations, generic and language skills are now being added. We are increasingly looking for transferable knowledge, skills and abilities that enable us to succeed personally, professionally and socially. In terms of training, there is a real need to focus on these skills and to consider them as a whole.

This article discusses the difference between essential, generic and language skills, why it is increasingly important to focus on these skills and why they should be considered as a whole when it comes to adult education.

ESSENTIAL, GENERIC AND LANGUAGE SKILLS: DEFINITIONS

To better understand the difference between essential, generic and language skills, it is important to define what they are.

ESSENTIAL SKILLS

Essential skills are competencies that are needed for life, learning and work. They are the foundation for learning all other skills.[1] There are nine essential skills. In this article, we will identify six of these.

- **Numeracy** refers to the use of numbers. We use this skill to count money, create schedules, prepare budgets, analyze data and complete any other task related to numbers.
- **Oral communication** pertains primarily to the use of speech. We use this skill to communicate or exchange ideas.
- **Reading** refers to our ability to understand sentences or paragraphs within a document to get a general understanding of meaning.
- **Writing** refers to our ability to write texts and documents on paper or on a computer.
- **Thinking** refers to our ability to evaluate information in order to make sound decisions.
- **Computer use/digital skills** are mandatory to understand and process information from digital sources such as computers, tablets, telephones and cash registers.[2]

How are these skills identified in the Ontario Adult Literacy Curriculum Framework (OALCF)?

With respect to the Literacy and Basic Skills program in Ontario, essential skills are identified as broad competencies that define the OALCF. Indeed, we can see that essential skills are clearly identified through the following competencies: A. Find and Use Information; B. Communicate Ideas and Information; C. Understand and Use Numbers; and D. Use Digital Technology.

[1] Government of Canada, "Literacy and Essential Skills," accessed January 21, 2020, **https://www.canada.ca/en/employment-social-development/programs/essential-skills.html**.
[2] Skills/Compétences Canada, "What are the Nine Essential Skills?," accessed January 21, 2020, **https://www.skillscompetencescanada.com/en/essential-skills/what-are-the-nine-essential-skills/**.

GENERIC SKILLS

As for **generic skills**, they are general abilities acquired through personal and professional experiences. They are "a set of abilities that have more to do with personality than with a specific function. [...] [They] evolve over the course of a person's life in various life experiences and work situations [translation]."[3] Like essential skills, they are needed to perform a task. According to the Institut de coopération pour l'éducation des adultes, there are 22 generic skills.[4] In contrast, the team of Daniel Poulin, a guidance counsellor at a Quebec employment centre, has identified 68 generic skills.[5] Below are a few examples:

- **Team spirit** is the ability to contribute to the achievement of a goal shared by others, to collaborate with others, and to focus on the success of the group rather than one's own success.
- The **ability to learn from our experiences** helps us to acquire knowledge or know-how through practice or experience. It focuses on continuous improvement.
- The **ability to communicate** allows us to pass on messages and to convey information orally or in writing. This skill helps us to live as part of a community.
- The **ability to adapt** refers to our reaction to new situations. In a context of change, this skill helps us to anticipate future impacts.
- **Leadership** refers to our ability to engage in a project, as well as lead, influence or inspire others to accomplish said project.
- The **sense of responsibility** is defined as the ability to accept responsibility and be accountable for our actions. We use this skill when we have decisions to make.[6]

How are these skills identified in the OALCF?

Generic skills are identified through the following two broad competencies: E. Manage Learning; and F. Engage with Others.

LANGUAGE SKILLS

Finally, **language skills** are abilities that are closely related to language. These skills are already present in the previously mentioned essential and generic skills because, although they are listed in the language category, they include:

- written skills, including writing texts; and
- oral skills, including oral communication, interaction and oral comprehension.

How are these skills identified in the OALCF?

Language skills are included in the six broad competencies identified in the OALCF.

SKILLS AND ADULT LEARNING

Now that we've defined the three sets of skills that are needed in this era of change, namely the 21st century, it should be noted why they are important for adult learning.

There are many reasons why an adult may want to pursue training. Among the most popular is the desire to learn new skills or upgrade existing skills in order to increase independence, resourcefulness, job readiness or help with transition to post-secondary education.

Adult learners are looking for skills that will enable them to succeed now and in the future. To do so, it is essential to have skills that can adapt to the social and economic changes of this changing era, as these undoubtedly have repercussions in all spheres of life.

In addition to being focused on learners, adult education must therefore be proactive and capable of adapting quickly and continuously. The three sets of competencies defined above must be part of it because they are the ones that will enable learners to face transformations.

The reality in which adults evolve highlights their know-how and interpersonal skills, and when we want to integrate competencies into their training, we must take this fact into consideration. Essential skills demonstrate knowledge; they are skills or knowledge generally required to perform a specific task. In contrast, generic skills demonstrate know-how and interpersonal skills; they are transferable from one task to another. Finally, language skills demonstrate knowledge, know-how and interpersonal skills, as they are found in the first two skills.

In adult education, these three skills form a set or a whole because the objective of training is to develop all aspects of knowledge. With that said, we can appreciate that it is crucial for adult education organizations to integrate these three skills spontaneously into their learning programs. ♦

[3] Institut de coopération pour l'éducation des adultes, "*Univers des compétences génériques*," published January 1, 2011, **www.icea.qc.ca/site/actualites/univers-des-competences-generiques**. [Available in French only.]

[4] Institut de coopération pour l'éducation des adultes, *Identifier des compétences génériques pour favoriser l'autonomie des adultes* (2012), 3, **http://mescompetencesgeneriques.net/wp-content/uploads/2015/03/referentiel-ICEA.pdf**. [Available in French only.]

[5] Daniel Poulin, *Autoévaluation des compétences génériques* (CLE Terrebonne, 2001).

[6] *Ibid.*

INCORPORATING 21st Century COMPETENCIES INTO CURRICULUMS

By Hussein Liban // Trainer, Programme de formation à distance
and Rachel Anne Normand // Manager, Programme de formation à distance

The revolution of digital, robotics and information technology industries is dramatically changing how we define specialized competencies or hard skills, hence the need for continuous training.

We are noticing, however, that these competencies are not sustainable and are not sufficient on their own to guarantee success in today's labour market, nor is knowledge. We need to acquire an entirely different set of skills, commonly referred to as 21st century competencies, non-technical competencies or soft skills.

What characterizes these competencies is that they are transversal and multidimensional. They include "knowledge", "know-how" and "behaviour". They are associated with cognitive, intrapersonal and interpersonal development. With such competencies, one will be able to face complex problems and unpredictable situations.

We are far from an industrialized society in which knowledge alone is sufficient. So what do we need to do? Which competencies do we need to acquire to guard ourselves against the risk of living in precarious conditions?

A great deal of research and studies conducted on 21st century competencies emphasize the importance of six broad competencies. In particular, references such as those from the European Union, the Organisation de coopération et de développement économiques and the United Nations Educational, Scientific and Cultural Organization include communication, critical thinking, creativity, collaboration, information and communications technology, and problem solving.

The world is evolving with remarkable speed. This is why it is crucial for educational institutions, whether at the elementary, secondary, college, university or community levels, to incorporate 21st century competencies into their curriculums. Should learning curriculums be redesigned? Perhaps. Such competencies could also be incorporated into existing curriculums as study subjects or support instruments for other study subjects. Regardless, both curriculums and teaching methods need to be revised so as to incorporate 21st century competencies.

Authentic task-based learning among adults has proven to be successful. Therefore, it is imperative to continue on this path and adapt our teaching methods so as to focus on problem solving, collaboration, experience and formative assessment. In doing so, we will ensure that 21st century competencies are incorporated into our curriculums.

In this era of change, educators have a vital role. Their attitudes, beliefs, practices and openness to change are indeed paramount. We appreciate that incorporating these new competencies may disrupt their daily habits and present challenges. Naturally, educators are expected to not only teach such competencies but possess them as well. As such, professional development is imperative for them.

Educators must understand the importance of these competencies while finding ways to incorporate them into their programs. Networking groups for the academic community are good resources to learn more about this topic. It is crucial for professionals in the field of education to work together for this change to be successful.

Once 21st century competencies are finally integrated into our curriculums, we will need to think about the assessment process. How will we assess these competencies? We will certainly need to redesign tests and how they are being designed and assigned.

To summarize, implementing such competencies into our learning curriculums is not easy but fundamental, as it will provide quantifiable benefits in a wide range of areas. We cannot afford to resist this cultural change. ♦

SOURCES :

Directorate-General for Education, Youth, Sport and Culture (European Commission). *Key Competences for Lifelong Learning*. EU Publications, 2019. **https://op.europa.eu/en/publication-detail/-/publication/297a33c8-a1f3-11e9-9d01-01aa75ed71a1/language-en**.

Organisation for Economic Co-operation and Development. *The Future of Education and Skills – Education 2030*. 2018. **https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf**.

Scott, Cynthia Luna. "The Futures of learning 2: what kind of learning for the 21st century?." *Education, research and foresight: working papers* (November 14, 2015). **https://unesdoc.unesco.org/ark:/48223/pf0000242996_eng**.

COMPETENCY-BASED CURRICULUMS, FRAMEWORKS AND PROGRAMS

By Pascale Lacelle // Freelance Writer-Editor

In Canada, there are many curriculums, frameworks and programs all based on various types of competencies and all have different ways of assessing levels of competency. Below are some examples.

PROGRAMME FOR THE INTERNATIONAL ASSESSMENT OF ADULT COMPETENCIES (PIAAC)

The **five levels of literacy** set out in the PIAAC (1 being the lowest, 4 and 5 being the highest) help to position adults on the literacy continuum and are based on the 500-point scale used for the 2003 International Adult Literacy and Skills Survey. Level 3 is considered "a suitable minimum for coping with the demands of everyday life and work in a complex, advanced society."[1] The PIAAC and its five literacy levels are the benchmark for literacy levels for the majority of frameworks, curriculums and programs in Canada and other parts of the world.

ESSENTIAL SKILLS FRAMEWORK*

Employment and Social Development Canada's (ESDC) *Essential Skills Framework* defines **nine essential skills** which "provide the foundation for learning all other skills and enable people to better prepare for, get and keep a job, and adapt and succeed at work."[2] Below is a list of these competencies:

- Reading
- Writing
- Document use
- Numeracy
- Computer use/digital skills
- Thinking
- Oral communication
- Working with others
- Continuous learning

The **level of complexity of tasks** related to these competencies is calculated on a scale from 1 to 5 (1 being a basic task, 4 and 5 being an advanced task).

**ESDC is currently making changes to this framework.*

ONTARIO ADULT LITERACY CURRICULUM FRAMEWORK (OALCF)

The OALCF is designed to support learning among adults and is used by all stakeholders in the Ontario Literacy and Basic Skills program. It is based on both the PIAAC's literacy levels and ESDC's Essential Skills Framework. **Six broad competencies** are defined under the OALCF:

A. Find and use information
B. Communicate ideas and information
C. Understand and use numbers
D. Use digital technology
E. Manage learning
F. Engage with others[3]

The **level of complexity of tasks** related to these competencies is calculated on a scale from 1 to 3 which coincides with the first three levels of ESDC's framework.

CANADIAN LANGUAGE BENCHMARKS (CLB)

The Centre for Canadian Language Benchmarks' CLB standard "is a descriptive scale of language ability in **English as a Second Language (ESL)** written as 12 benchmarks or reference points along a continuum from basic to advanced."[4] These benchmarks position adults along the continuum of ESL proficiency in oral and written comprehension and oral and written expression. The levels of competency are assessed on a **scale from 1 to 12**, divided into three stages[5]:

1 BEGINNER (LEVELS 1 TO 4)
2 INTERMEDIATE (LEVELS 5 TO 8)
3 ADVANCED (LEVELS 9 TO 12)

[1] Coalition ontarienne de formation des adultes, "Niveaux de littératie," last modified 2014, accessed February 7, 2020, **https://www.coalition.ca/trousse-dinformation/**. [Available in French only.]
[2] Government of Canada, "Understanding Essential Skills," last modified September 9, 2015, accessed February 7, 2020, **https://www.canada.ca/en/employment-social-development/programs/essential-skills/definitions.html**.
[3] Ministry of Colleges and Universities, *Introducing the Curriculum Framework* (March 2011), 6, **http://tcu.gov.on.ca/eng/eopg/publications/OALCF_introducing_the_CF_Mar_11.pdf**.
[4] Centre for Canadian Language Benchmarks, "On CLB," accessed February 7, 2020, **https://www.language.ca/resourcesexpertise/on-clb/**.
[5] Marie-Elyse Gauthier, "Overview of CLB and NCLC competency levels," published February 21, 2019, **https://www.language.ca/overview-of-clb-and-nclc-competency-levels/**.

COMPETENCY-BASED TRAINING: A Recipe for Success

By Mohamed Toukaleh // Trainer, Programme de formation à distance

How can we teach learners the competencies that they need to keep a job, change jobs, find a job, return to school or simply do well in society? This is a question that stakeholders in the adult education field probably think about often.

The *Ontario Adult Literacy Curriculum Framework*[1], commonly referred to as the OALCF, summarizes well essential competencies that are required on the labour market by grouping them into six broad competencies, three task groups and three levels.[2]

Any course intended for adult learners includes at least one of these six broad competencies and also takes into account learning objectives and styles. Practitioners must consider these elements in their teaching and progress assessments.

I did say "at least one of these six broad competencies", as any continuing education program could very well include two, three or more of these competencies. First, we must use the competencies that we've acquired to learn new ones or develop existing skills. Then, when learning a new competency, it is very rare that we will develop or improve only that one competency. Generally, and most often indirectly, we develop related competencies that serve as a stepping stone or as complementary skills, or help us reach our learning objectives.

I think it's great that we can knowingly teach numerous competencies at once because in real life, in everyday life and on the labour market, such competencies complement each other well. And why not go even further and incorporate generic skills into the training design process? These transferable skills are highly valued by employers. In addition to technical skills, generic skills are needed to perform any task. Very often, these are the skills that will make a difference in the final stages of staffing processes when employers or human resources advisors conduct reference checks.

Under the OALCF, the last two key competencies—E. Manage Learning and F. Engage with others—integrate both generic and essential skills. A more refined list of competencies and more information about their role in today's society can be found in the *Guide sur les compétences génériques*[3] (available in French only) by Sofia Gallagher and Yolande Clément from the Centre FORA. Below are some of these skills:

1. CREATIVITY
2. RESOURCEFULNESS
3. ANALYTICAL SKILLS
4. ADAPTABILITY
5. INTEGRITY
6. ATTENTION TO DETAIL
7. PERSEVERANCE
8. ORGANIZATIONAL SKILLS

Indeed, learners will select courses that match their personality and life experiences and thus their existing generic skills. However, during a course, individuals learn to recognize the importance of such skills and to value those that are required to achieve desired outcomes and, ultimately, learn to use these skills in their workplaces and communities.

To conclude, I would like to highlight two examples of possible training courses in which adult learners are led to develop more than one skill at a time.

The first is a training course in which adult learners seek to acquire knowledge in budget management. This course includes several components that, at first glance, seem quite distinct. First, there is the whole aspect of vocabulary, reading and understanding a budget that needs to be understood. Then, individuals learn how to do calculations and analysis to establish or simply understand a budget. They use free, modern computer-based tools such as Microsoft Excel or Google Sheets to create a budget, insert tables, perform calculations and design graphs. Finally, in terms of generic skills, learners are encouraged throughout this course to develop, among other things, their attention to detail, analytical skills and organizational skills.

The second is a training course designed to help adults learn how to create and deliver presentations. A large part of this training consists of good writing and note-taking. It is also necessary to practise oral communication skills so as

[1] Ministry of Colleges and Universities, *Ontario Adult Literacy Curriculum Framework* (October 2011), **http://www.tcu.gov.on.ca/eng/eopg/publications/OALCF_Curriculum_Framework_Oct_11.pdf**.

[2] See the table on the next page.

[3] Sofia Gallagher and Yolande Clément, *Guide sur les compétences génériques* (Sudbury: Centre FORA, 2013), **http://www.centrefora.on.ca/sites/default/files/documents/Ressources/Competences/PDF/Guide_final.pdf**. [Available in French only.]

to speak clearly and understandably in front of an audience of varying sizes. This training also puts a strong emphasis on modern computer-based tools such as Microsoft PowerPoint or Google Slides to create clear, original and interesting presentations. Throughout learning activities, learners also work on a few generic skills such as self-confidence, ease of communication, creativity, etc. Learners could also be pushed further and asked to make a presentation in front of their peers or practitioners to gather feedback.

These two examples show that training is not limited to the development of one specific skill. Rather, it combines numerous skills to ensure successful learning. By integrating several types of skills related to the learners' desired objectives into a training program, we ensure that they develop the knowledge, skills and expertise at all levels required to succeed and master thoroughly concepts that are taught. A true recipe for success! ♦

Competency	Task Group	Level 1 Indicator	Level 2 Indicator	Level 3 Indicator
A. Find and Use Information	**A1.** Read continuous text	**A1.1** Read brief texts to locate specific details	**A1.2** Read texts to locate and connect ideas and information	**A1.3** Read longer texts to connect, evaluate and integrate ideas and information
	A2. Interpret documents	**A2.1** Interpret very simple documents to locate specific details	**A2.2** Interpret simple documents to locate and connect information	**A2.3** Interpret somewhat complex documents to connect, evaluate and integrate information
	A3. Extract info from films, broadcasts and presentations	Tasks in this task group are not rated for complexity.		
B. Communicate Ideas and Information	**B1.** Interact with others	**B1.1** Participate in brief interactions to exchange information with one other person	**B1.2** Initiate and maintain interactions with one or more persons to discuss, explain or exchange information and opinions	**B1.3** Initiate and maintain lengthier interactions with one or more persons on a range of topics
	B2. Write continuous text	**B2.1** Write brief texts to convey simple ideas and factual information	**B2.2** Write texts to explain and describe information and ideas	**B2.3** Write longer texts to present information, ideas and opinions
	B3. Complete and create documents	**B3.1a** Make straightforward entries to complete very simple documents **B3.1b** Create very simple documents to display and organize a limited amount of information	**B3.2a** Use layout to determine where to make entries in simple documents **B3.2b** Create simple documents to sort, display and organize information	**B3.3a** Decide what, where and how to enter information in somewhat complex documents **B3.3b** Create more complex documents to sort, display and organize information
	B4. Express oneself creatively	Express oneself creatively, such as by writing journal entries, telling a story, and creating art		
C. Understand and Use Numbers	**C1.** Manage money	**C1.1** Compare costs and make simple calculations	**C1.2** Make low-level inferences to calculate costs and expenses that may include rates such as taxes and discounts	**C1.3** Find, integrate and analyze numerical information to make multi-step calculations to compare cost options and prepare budgets
	C2. Manage time	**C2.1** Measure time and make simple comparisons and calculations	**C2.2** Make low-level inferences to calculate using time	**C2.3** Find, integrate and analyze numerical information to make multi-step calculations using time
	C3. Use measures	**C3.1** Measure and make simple comparisons and calculations	**C3.2** Use measures to make one-step calculations	**C3.3** Use measures to make multi-step calculations; use specialized measuring tools
	C4. Manage data	**C4.1** Make simple comparisons and calculations	**C4.2** Make low-level inferences to organize, make summary calculations and represent data	**C4.3** Find, integrate and analyze data; identify trends in data
D. Use Digital Technology	n/a	**D.1** Perform simple digital tasks according to a set procedure	**D.2** Perform well-defined, multi-step digital tasks	**D.3** Experiment and problem-solve to perform multi-step digital tasks
E. Manage Learning	n/a	**E.1** Set short-term goals, begin to use limited learning strategies, and begin to monitor own learning	**E.2** Set realistic short- and long-term goals, use a limited number of learning strategies, and monitor own learning	**E.3** Set realistic short- and long-term goals, use a variety of learning strategies, and monitor and evaluate own learning
F. Engage with Others	n/a	This competency is not rated for complexity.		

GENERIC SKILLS: *A Key Element* TO KEEPING A JOB

By Pascale Lacelle // Freelance Writer-Editor

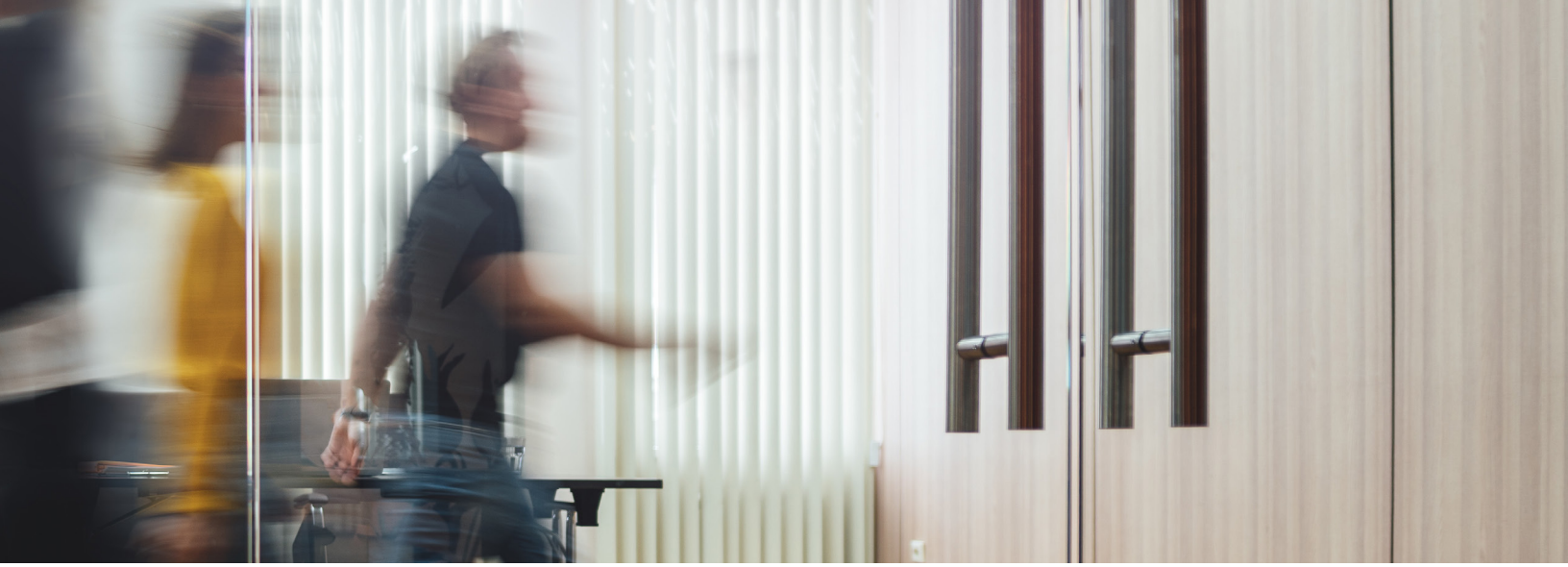
The labour market is continuously progressing and evolving with new trends and technology. Many individuals aspire to get the perfect job, a promotion and, of course, a competitive salary. That said, it is increasingly difficult these days to get the job you want or to keep it once you get it. But why is that?

At the dawn of this new decade, having the technical skills to do a job well is not enough. Employers are increasingly looking for people with strong generic skills. As Mohamed Toukaleh mentions in his article, *Competency-Based Training: A Recipe for Success*, appearing on page 12 of this publication, these are the skills that will very often make a difference in the final stages of staffing processes. But it would be wrong to say that having such skills stops being important the day you are hired. On the contrary, generic skills become all the more important once you get a job.

According to a chart on *The Balance Careers* website, some of the main causes of layoffs include wasting time at work or disrupting co-workers, using the Internet for non-work-related activities, false excuses for sick leave, frequent lateness, and even posting shocking or inappropriate things on social media.[1] All of these reasons have an impact on generic skills in one way or another. Indeed, as I explore this topic to learn more about why employers retain employees and provide them with opportunities for advancement rather than leaving them behind or firing them, generic skills seem to be at the heart of this discussion.

So, what generic skills are important to keep a job? Based on my research into the most common reasons employers dismiss employees, I have developed a list of critical generic skills that must be mastered, divided here into three categories: self-discipline, professionalism and attitude.

[1] Alison Doyle, "Top Ten Reasons For Getting Fired," *The Balance Careers*, published January 29, 2020, **https://www.thebalancecareers.com/top-reasons-for-getting-fired-2060732**.



Self-discipline

[organizational skills, time management skills, punctuality and timeliness]

Arriving late, taking longer breaks and being absent from work frequently are obviously behaviours that cause frustration among colleagues and have a significantly negative impact on a good working atmosphere. This is why self-discipline—being well organized, timeliness, being present and on time—is a quality much sought-after by employers. Being frequently absent for all sorts of reasons costs the organization and the employee greatly. An organization cannot rely on an employee who is regularly absent. Projects move more slowly and the quality of services provided is affected, not to mention the frustration this can create among colleagues.

But self-discipline does not end with punctuality. It is good to be physically present at work but if you spend all your time on your cell phone or using the computer for personal purposes, you are not really present. Time spent not working is time lost to the organization and that is why timeliness is an indispensable quality.

Professionalism

[respect, honesty and performance]

Professionalism is a big part of why an employee will keep their job and have more opportunities for advancement. What does professionalism mean? Respect for policies and others, among other things. Businesses put policies in place to set rules that are fair and reasonable for everyone, and it is important to respect them. Respect is the foundation of any relationship, whether it's with colleagues or executives. An employee who shows insubordination, for example, will inevitably encounter problems. Yes, you may not always agree with the decisions made by your supervisor but it is important to discuss it with him or her in a respectful and professional manner, keeping in mind that the final decision rests with that person. Respect creates order and peace, and working in such an environment benefits everyone. It is inconceivable to think about moving to a higher position without this crucial skill.

Professionalism is also based on honesty and integrity, which are paramount in maintaining a job. We often hear people say that taking a bit of paper, a few pencils, or other inexpensive items from the office is okay and that no one will notice anyway. We need to rethink this. This material belongs to the organization, not to the employee! This kind of behaviour suggests that you could steal something much more important and it doesn't inspire confidence in your employer.

Finally, being professional also means performing well on the job. Arriving at the office fresh and available, and leaving personal problems at home makes all the difference to the success of the organization. Having these skills will help us avoid serious mistakes and oversights. Of course, everyone makes mistakes but when we make them repeatedly, it can lead to dismissal, and that's what we want to avoid.

Attitude
[self-confidence, teamwork, initiative and independence]

Being positive and focusing on problem solving is an asset within a team. A negative employee or leader will certainly not move projects forward; rather, they will discourage their colleagues. This is why good individual and collective performance is crucial.

For a team to be successful, it must be comprised of successful employees who adopt a positive attitude and demonstrate autonomy, initiative, self-confidence, and who are able to use these individual skills to the benefit of the team. Yes, you have to show your employer that you can work well on your own, that you can take the initiative and willingly take on projects but you also have to prove that you work well with others and that you are an asset to the team. No job is a one-man show. Demonstrating your ability to work with your colleagues, showing leadership as appropriate, and recognizing your own strengths as well as those of your teammates in order to solidify the team: these skills are all added assets to any organization and are practically a guaranteed way to make your employer recognize your value.

It is understandable that for an organization, all these generic skills are indispensable. It is therefore important for all employees to take a moment to reflect by asking themselves these questions: Have I mastered these skills? Am I missing some of them? What could I improve?

FOR A TEAM TO BE SUCCESSFUL, IT MUST BE COMPRISED OF SUCCESSFUL EMPLOYEES WHO ADOPT A POSITIVE ATTITUDE AND DEMONSTRATE AUTONOMY, INITIATIVE, SELF-CONFIDENCE

With this rising need to master generic skills in order to be able to hold a job and advance to the next level of our careers, those responsible for the Programme de formation à distance at the Coalition ontarienne de formation des adultes recently looked into this matter and thought it would be useful to create training that would focus on some of the generic skills needed to excel in the workplace. Among other things, this training will address topics such as teamwork, organization, time management, professionalism, punctuality, respect, honesty, initiative, autonomy and self-confidence.

The methodology emphasized in this training is reflection. Each subject will be approached using scenarios that will encourage learners to analyze the behaviours of the actors and discuss good practices to be adopted. Together, the learners will be able to share their experiences and opinions while obtaining advice and tips to help them acquire knowledge about these skills.

We often talk about essential skills and their importance but we should not overlook generic skills, as they are equally important in the workplace. Getting people to develop such skills through training that emphasizes their importance contributes to the labour market by developing a workforce with the key skills that will help them maintain their jobs and shine within their organizations. ♦

SOURCES :

ProSES. "9 Top Reasons Employees Lose Their Jobs." *OnPoint Employment Solutions*. May 21, 2018. **https://www.onpes.com/reasons-employees-lose-their-jobs/**.

Jean Vézina. "*Les dix principales raisons de la perte d'un emploi (suite)*." *Portail RH RI. Ordre des conseillers en ressources humaines agréés*. Accessed January 31, 2020. **http://www.portailrh.org/impression/default.aspx?f=12551**. [Availaible in French only.]

2

HORIZON

LITERACY, ESSENTIAL SKILLS AND FUTURE SKILLS

By Linda Shohet // LPS Consulting
and Isabelle Coutant // Centre de documentation sur l'éducation des adultes et la condition féminine

This article is a summary of the report "Influences: Lessons from Policy and Practices in Literacy and Essential Skills in Canada, 1990–2019"[1], presented by Linda Shohet and Isabelle Coutant to the Canadian Union of Public Employees.

In order to inform the adult literacy and training communities about one of the most significant changes in this area in Canada in recent years, we have retraced the development of the Essential Skills Framework. We examined how this framework evolved, the links between major international adult skills surveys, and literacy and training programs, their impact in selected provinces and territories and their influence on adult literacy practises. A further objective was to inform thinking on current federal programs and policies related to future skills development and training for or in the workplace. The study was conducted through an extensive literature review covering thirty years, and interviews with nineteen expert informants.

The federal government developed the Essential Skills Framework over several years, based on rigorous research and task analysis in the workplace. An initial objective of the Essential Skills Research Project was to promote the employability of people in trades that require less than a high school diploma and, in particular, to encourage training in the private sector. Informants noted that in the first years, these objectives were

[1] https://cupe.ca/sites/cupe/files/report_literacy_essentialskills_eng_2019_2.pdf.

> *« Canada must adopt a broader vision for adult education and training and a pan Canadian strategy in this respect, taking into consideration individuals with the weakest skills from all cultural communities and consistent with their needs. »*

generally achieved, with positive impacts. For example, the use of the essential skills (ES) terminology enabled discussions about training with employers, using language better suited to the workplace without the stigma associated with literacy.

On the other hand, informants perceived negative impacts after the federal government began to broaden the use of the ES outside the workplace. Towards the end of the 2000s, community literacy organizations and education institutions were pushed to use the Essential Skills Framework, although it had not been designed for these sectors. In many organizations, this change highlighted a conflict of values. The Essential Skills Framework was seen as emanating more from a market-driven philosophy than a socially progressive one.

In addition, funding for literacy organizations gradually became conditional on programs assessing adults at the "advanced" Level 2 on the scale of international surveys on adult skills. However, research shows that these surveys are only demographic statistical studies designed to provide a demographic portrait, not to assess individuals. Furthermore, the definition of Level 3 as the "acceptable threshold" to function in society was initially proposed to facilitate understanding of the results. It unfortunately came to mistakenly be accepted as a scientific "fact".

According to informants, the Essential Skills Framework was designed taking into account only the country's English-speaking majority. Official Language Minority Communities (OLMCs) and Francophones in Quebec did not participate in its development, and the funding conditions attached to the ES generally had a negative impact in OLMCs. Overall, the specific needs of minorities (immigrants, Indigenous) were barely taken into account during the development and implementation of ES.

In today's political discourse, the future of skills development lies within advanced technologies and the digital world. While these currently are and will be in great demand in the workplace, basic literacy skills remain fundamental in all spheres of life. Our informants agreed that Canada must adopt a broader vision for adult education and training and a pan Canadian strategy in this respect, taking into consideration individuals with the weakest skills from all cultural communities and consistent with their needs. ♦

DEVELOPING SKILLS AT THE DAWN OF THE *fourth* INDUSTRIAL REVOLUTION

By Diane Bellemare // Senator, Senate of Canada

This article is an adapted version from the Senator's speech pronounced at the opening conference of the Réseau des cégeps et collèges francophones du Canada in Regina on November 6, 2019. Read the full speech here: **https://www.coalition.ca/wp-content/uploads/2020/04/Speech-Bellemare.pdf**.

Are we ready to face the fourth industrial revolution? To meet the challenges posed by the arrival of artificial intelligence on the labour market? As citizens, are we ready to deal with the digital and new ways of doing things that will become the norm in everyday life?

This is the point of view of a labour economist concerned about employment and labour training issues. I will first touch on the skills for the future, the state of current skills in the Canadian workforce, and concrete policy levers to address the challenge of developing lifelong learning skills.

You know that technological innovations such as artificial intelligence will transform the labour market and that changes will occur at a continuous and accelerated pace. Specific impacts are impossible to predict. It is possible to identify the sectors where job losses will occur, but not all new requirements can be specifically identified. However, the Organisation for Economic Co-operation and Development (OECD) predicts that in the coming years, 14% of jobs in OECD countries are likely to be automated and 32% will most likely be radically transformed.[1] The impact will be different from one country to another, but certainly important.

All these changes will nevertheless be accompanied by new business opportunities. Although certain jobs will disappear, other job titles will appear.

But one thing is certain. In the future, employers will rely more on the mobility and adaptability of the people they hire than on the value of diplomas alone.

A study conducted by the Royal Bank of Canada entitled Humans Wanted clearly reflects the nature of the skills that will be sought in the immediate future:

"We discovered that the four million Canadian youth entering the workforce over the next decade are going to need a foundation of skills that sets them up for many different jobs and roles rather than a single career path. [...] **We found that Canada is shifting from a jobs economy to a skills economy**, and yet employers, educators and policy makers are not prepared."[2]

In other words, employers will look for and are already looking for people who can perform tasks that are still unknown, and less for people who can perform one-time tasks in a

[1] Organisation for Economic Co-operation and Development, "Job automation risks vary widely across different regions within countries," published September 18, 2018, accessed February 18, 2020, **http://www.oecd.org/employment/job-automation-risks-vary-widely-across-different-regions-within-countries.htm**.

[2] Royal Bank of Canada, "Humans Wanted: How Canadian youth can thrive in the age of disruption," last modified July 3, 2018, accessed February 18, 2020, **https://www.rbc.com/dms/enterprise/futurelaunch/humans-wanted-how-canadian-youth-can-thrive-in-the-age-of-disruption.html**.

given job. Job descriptions as found in the National Occupational Classification will change more and more quickly and may become obsolete.

This means that today's youth and the current workforce must have the necessary skills to adapt to the ever-changing labour market. What does this mean? To adapt to an unpredictable world, you have to be able to grasp your environment, learn new tasks, new knowledge and new ways of doing things. To this end, we must properly interpret the texts we read, know how to count, be able to use digital tools, work in a team, and know how to communicate. In short, the fundamental competency is the ability to learn, because it encompasses all the key competencies. This is the competency for the future.

I am not alone in emphasizing the importance of key competencies. In its report entitled *What Skills for a Digital World*, the OECD emphasizes that in our changing and evolving economic world, the focus must be not only on digital literacy but on the development of strong core competencies, critical thinking and good social and emotional skills.

Young people must therefore be prepared accordingly. The various ministries of Education have understood this, and it is already reflected in the curricula.[3] The work of the Council of Ministers of Education bears witness to this.

But what about the workforce? Are Canadian adults prepared for these new realities? To this end, the results of the Programme for the International Assessment of Adult Competencies[4] survey are revealing. Canadians perform moderately well internationally in literacy, numeracy and problem solving in technological environments. And there is room for improvement.

In literacy, almost half (49%) of Canadians have a skill level considered low or insufficient (i.e. a threshold below level 3 on a scale of 0 to 5). We are talking about 11.8 million people between the ages of 16 and 65 who would not have the skills expected to obtain a high school diploma and find decent work today.

In terms of numeracy, 55% of the working-age population obtains less than the basic level expected today (less than level 3). As for the ability to work in a technological environment, it is estimated that 64% of Canadians do not have the minimum skills (they are between 0 and 1 on a scale of 0 to 3).

Yet Canadians are doing well in terms of education. But over time, skills erode, and without continuous training, many need to update their basic skills.

What can be done about it? It is certainly necessary to have concrete means and time to learn. There is certainly a need for a coherent and effective system of lifelong learning or continuous training.

This is not currently the case in Canada, where the continuing education system, as in the United States, is decentralized, with education and training services being provided by the provinces. In Canada and the United States, continuing adult education is often considered an individual responsibility. It is not a right, as in many European countries. Nor is it an employer's obligation except in Quebec with the 1% rule.

In this context, the Canadian adult education system has evolved in an uncoordinated and sometimes disorderly manner. Private and public schools as well as colleges and universities occupy a large part of the lifelong learning sector and offer a wide range of short training options to meet the needs of adults. There are also training courses that are often offered for a fee on the Internet, the value of which is not always known. In the absence of a common frame of reference, it can become difficult for individuals and companies to find their way around.

In the United States, where there is a phenomenal number of certifications, they talk about credential chaos. What about Canada? We would certainly need an overall picture to assess that.

As for Canadian companies, their investments in training have declined following the great recession of 2008. However, the latest Conference Board of Canada data shows their investments have recently increased. Nevertheless, they still invest less than their American counterparts.[5] As a result, Canadians aged 25 to 65 spend on average fewer hours on job-related training than elsewhere in the world.[6]

TODAY'S YOUTH AND THE CURRENT WORKFORCE MUST HAVE THE NECESSARY SKILLS TO ADAPT TO THE EVER-CHANGING LABOUR MARKET.

[3] The Council of Ministers of Education ensures a useful exchange of information between the different ministries of Education on the development of key competencies, an objective that is viewed seriously.

[4] Organisation for Economic Co-operation and Development, *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills* (Paris: OECD Publishing, 2013), **http://www.oecd.org/skills/piaac/publications/**.

[5] Chris Sorensen, "The future of jobs in Canada. Skills mismatch may mean 1.5 million vacancies by 2016," published March 19, 2013, accessed February 18, 2020, **https://www.macleans.ca/work/jobs/the-future-of-jobs-in-canada/**; Conference Board of Canada, *Learning Cultures Lead the Way: Learning and Development Outlook—14th Edition* (2018).

[6] Diane Bellemare, *Créer et partager la prospérité* (Presses de l'Université du Québec, 2013), 143.
These numbers were taken from table C5.1a in the OECD publication *Education at a Glance 2013*.

Canada certainly needs a collective strategy for lifelong learning. Unfortunately, this is not easy to do in Canada, where there are a large number of political and economic actors. Nevertheless, we can draw inspiration from what is being done elsewhere, such as in Singapore, Australia and European countries, to identify concrete means and the essential elements of a strategy.

The analysis of foreign experiences combined with the work of university experts, consulting firms such as ADECCO, the World Economic Forum and the International Labour Office makes it possible to identify three pillars on which a Canadian strategy for lifelong skills development can be based. Firstly, agree on a common language for skills. Secondly, provide shared and effective funding for continuing education. Finally, develop a culture of lifelong learning.

This brings me to my last point. What is the role of continuing education institutions in this major project? It is obvious that they have a major role in the development of basic skills in initial training.

One thing is certain. Their role will expand with the workforce in the development of lifelong learning skills. Many of them are already working with companies to develop skills for employed workers. This role will certainly intensify in the future.

Also, continuing education institutions may need to intensify their activities to develop competency profiles. To this end, it has been demonstrated that an individual will be encouraged to continue training following an assessment of the skills already acquired. For this reason, it will be important that expenditures associated with the development of competency profiles be recognized as eligible expenditures in financial programs to support continuing education.

Continuing education institutions' role will also expand to include the assessment and certification of skills acquired in the workplace or informally.

In closing, I would like to mention that, as francophones, we have an additional challenge to meet: protecting French in the workplace. That is why it seems essential to me that mastery of French be recognized as a key competency in the competency reference frameworks that are being developed in Canada and not only in Quebec. It's non-negotiable.

In conclusion, back to the initial question: are we ready to face the fourth industrial revolution? Despite the efforts made with young people, we still have a lot of work to do. In terms of the workforce, we must double our efforts.

To this end, we certainly need a clear and effective strategic vision. However, let us not forget that a Canadian skills development strategy is primarily a provincial one. Clearly, the federal government cannot impose its model. However, it can propose an effective and shared funding strategy as it does for employment insurance, retirement, education and health.

Concerted efforts are therefore very important to ensure that provincial actions converge in support of Canada's prosperity, which requires flexible and more uniform regulations and a mobile and skilled workforce across the country. To this end, federated business and labour associations, union associations and groups of training institutions such as yours can play an important role in bringing together the various provincial strategies.

> “
>
> CANADIANS AGED 25 TO 65 SPEND ON AVERAGE FEWER HOURS ON JOB-RELATED TRAINING THAN ELSEWHERE IN THE WORLD.

And there is hope on the horizon, because it is easier for labour market partners to reach agreement among themselves than it is for governments to do so. ♦

UNIVERSITY IN THE ERA OF COMPETENCY

By Marc L. Johnson // Staff Member at the Université de l'Ontario français

In the 21st century, accumulating knowledge is not enough to support development and independence. Knowledge is good, but knowing how to use that knowledge, how to act on it to deal with or change reality, is better. This is how we now talk about skills, those efficient competencies for action that develop from knowledge, but that also require "knowledge", "know-how" and "behaviour".

This paradigm shift is well understood in adult and college education, and although it is slowly being introduced in school environments, it is having trouble making its way into universities.

CHALLENGES FOR UNIVERSITIES

Many universities say that students are placed at the centre of their concerns, but it is not easy to implement a change in organizational culture that would make such an aspiration possible. Universities want students to competently exercise their citizenship, create new ideas and endeavours, and enter the workforce. However, universities are facing many constraints, thus leaving such aspirations unfulfilled or incomplete.

Universities are institutions that have survived through centuries and continue to attach a great deal of importance to tradition and ways of doing things that have shown little change. This historical legacy brings light, for example towards our ideals of universality and depth of knowledge, wisdom, ethics, and action for oneself or for society. This historical legacy is closely tied to discipline, which makes teamwork and awareness of complexity difficult. It is challenging for universities to follow models different from those based on didactic teaching, individual achievement, and competition.

It is not uncommon to hear about advanced academic knowledge, its superior nature, and transfer of knowledge or, worse,

“

THIS APPROACH WILL BREAK WITH TRADITIONAL TEACHING THAT IS BASED ON PRESENTING THEORIES, AND WILL FURTHER ENGAGE STUDENTS IN BUILDING KNOWLEDGE.

instilling of knowledge. From this perspective, it would be acceptable for professors to instill their knowledge on their students and to evaluate success based on retention of knowledge. Fortunately, we are past those times, or at the very least, working to move away from them.

EDUCATIONAL SIGNATURE OF THE UNIVERSITÉ DE L'ONTARIO FRANÇAIS

The Université de l'Ontario français is a new institution that is managed by and for Francophones. It is designed to set down roots in the learning environment and to develop 21st century competencies. As such, the university places its students and their learning needs at the centre of its activities and has created its own educational signature which sets itself apart from other institutions.

First, its programs of study are designed on the basis of the **competencies** that students must develop, rather than the knowledge they should acquire. The *21st Century Competency Framework*[1] and the *Ontario Qualifications Framework*[2] serve as frameworks for this development.

Then, the learning environment follows a transdisciplinary approach. Rather than seeking to master knowledge crammed into the silos between common disciplines, students will instead be led to develop knowledge, concepts, and methods related to skills that will enable them to understand and solve complex contemporary problems.

Learning will also be **inductive**. Students will discover realities through the systematic observation of facts, experience, and the use of conceptual and theoretical explanatory tools. This approach will break with traditional teaching that is based on presenting theories, and will further engage students in building knowledge.

Finally, learning will be **experiential**. This means that it will be experienced through direct contact with realities, whether through classroom exchanges, field visits, observations, internships or testing exercises. A process of reflection will then allow students to gain a clear sense of what happened, explain it using conceptual and theoretical tools, and draw lessons for their own practice.

The university's educational signature undoubtedly promotes **collaboration** between students and their networks. It also focuses on **innovation** to help students overcome today's challenges, whether this means promoting sustainable development, protecting the environment, or learning to compose with or take advantage of human plurality, the digital world, globalization, etc.

In short, it is evident that this educational signature has a positive impact on adult education, and we are pleased by that! This is also a way to encourage other post secondary institutions to place their students at the centre of their activities and help them develop new competencies. ♦

KNOWLEDGE IS GOOD, BUT KNOWING HOW TO USE THAT KNOWLEDGE, HOW TO ACT ON IT TO DEAL WITH OR CHANGE REALITY, IS BETTER.

[1] Ministry of Education, *Phase 1: Towards Defining 21st Century Competencies for Ontario* (Winter 2016), **http://www.edugains.ca/resources21CL/About21stCentury/21CL_21stCenturyCompetencies.pdf**.

[2] Ontario Ministry of Colleges and Universities, "Ontario Qualifications Framework (OQF)," last modified December 14, 2018, accessed January 22, 2020, **http://www.tcu.gov.on.ca/pepg/programs/oqf/index.html**.

3

RECOGNITION

THE LITERACY AND BASIC SKILLS (LBS) PROGRAM: AN *Important Asset* FOR USING DIGITAL GOVERNMENT SERVICES

By Guy Levesque // Project Coordinator, Coalition ontarienne de formation des adultes

In the last 30 years in Canada, and particularly in Ontario, digital strategies and policies for private and public sector services have been developed at the speed of light.

In the late 1990s, we first realized the importance of the digital infrastructure when people around the world were frightened that computers might stop working on December 31, 1999, before moving into the year 2000. Governments around the globe invested astronomical sums of money in their computer systems to ensure that their databases would continue to function in the new millennium and that data would not be erased.

Since this event, major transformations have occurred in the Canadian and Ontario governments, particularly in the delivery of programs and services in digital format. Strategies and policies have been developed to put in place an architecture that meets the requirements related to data security and blocks any intrusion by digital hackers.

In 2008, both levels of government offered the community sector financial incentives to transform websites into information portals, accessible to all communities using the Web. Then, they had to accelerate the pace of digital transformation in the delivery of services and programs, as well as the collection and use of confidential data for public statistics, which leads us to the process adopted by these two levels of government.

At the federal level, the Treasury Board *Policy on Service and Digital* was published as part of *Canada's 2018–2020 National Action Plan on Open Government*.[1] This action plan

[1] Government of Canada, "Canada's 2018-2020 National Action Plan on Open Government," last modified September 18, 2019, accessed January 23, 2020, **https://open.canada.ca/en/content/canadas-2018-2020-national-action-plan-open-government**.

incorporates requirements with respect to services, information technology, information and data management and cyber security components, and highlights the importance of following "the principles of transparency, accountability, and accessibility in implementing new and evolving government digital technologies and services"[2] and to continue to focus efforts on citizens.

At the provincial level, the Treasury Board Secretariat of Ontario is responsible for implementing digital technology. Since 2012, the Government of Ontario has made significant progress with launching its platform, the Ontario.ca site, and creating in 2018 the Ontario Digital Service "with a bold government-wide mission to improve the online experience of government and make services simpler, faster and better."[3] On August 6, 2019, the *Simpler, Faster, Better Services Act* came into effect to improve the way government operates and the services it provides to individuals. In addition, the Ontario Digital Service launched digital service standards for online service delivery with respect to policies, programs and services provided by the Government of Ontario.

At the international level, "governments around the world have realized the need for more responsive, people-focused online services",[4] and rightly so. According to the Ontario Digital Service, 92% of Ontarians use the internet and 66% of Canadians feel technology saves them time.[5] It is true that technology makes it easier than ever to use applications in real time, particularly to monitor traffic, book appointments, pay invoices, share photos, find information and communicate with one another. But what does this mean for individuals with low digital skills?

The public must now use many services that are only available digitally. In spite of government action plans and policies for simplification, while we encourage individuals to use digital technology more and more, we need to make sure that training is available as not all citizens have the digital skills required to access such services. So, how can we ensure that individuals with poor digital skills are able to use all online resources?

This is where the LBS program plays an important role. Its online courses help improve "access for Ontarians who choose or are in need of independent distance learning. In particular, e-Channel provides better access for persons with disabilities and those who live in rural and remote communities."[6] Most importantly, LBS training organizations provide opportunities for individuals seeking continuing education to acquire or upgrade technological skills. Training programs and the way educators teach fit well with the needs of the population with lower levels of digital literacy. Using the LBS program to educate the community ensures that citizens take advantage of and make full use of digital government services.

“

USING THE LBS PROGRAM TO EDUCATE THE COMMUNITY ENSURES THAT CITIZENS TAKE ADVANTAGE OF AND MAKE FULL USE OF DIGITAL GOVERNMENT SERVICES.

As we can see, significant changes have been made since 2000. The transformation of digital technology in the public sector and in government has affected both users and developers of services and programs. Public and community organizations wanting to deliver their services digitally must adopt principles that promote the development of technological skills within their organizations. Customer service, while meeting the needs of adult learners, represents new values that organizations must adopt in order to navigate the digital realm. The Coalition ontarienne de formation des adultes has made this one of its central priority through its network of LBS centres, the *Programme de formation à distance* and, especially, with the FONCE.ca pilot project, which provides adult learners in Northern Ontario with online information, assessments and referrals in the field of adult education, and training for Francophone adults in Ontario. ♦

[2] *Ibid.*

[3] Government of Ontario, *Start with users. Deliver together. Ontario's path to simpler, faster, better government* (2018), **https://d2khazk8e83rdv.cloudfront.net/books/digital_action_plan.pdf**.

[4] *Ibid.*

[5] *Ibid.*

[6] Ministry of Colleges and Universities of Ontario, "Literacy and Basic Skills (LBS)," last modified October 1, 2018, accessed January 23, 2020, **http://www.tcu.gov.on.ca/eng/eopg/programs/lbs.html**.

CREATING DIGITAL BADGES

WHY, HOW AND FOR WHAT PURPOSES?

By Hervé Dignard // Research and Development Officer, Institut de coopération pour l'éducation des adultes

This article is a synthesized and adapted version of a comprehensive publication available at: **https://icea-apprendreagir.ca/creer-des-badges-numeriques**. [Available in French only.].

Digital badges, which emerge from Web 2.0 technologies, are a relatively new reality in adult education. Inspired by renowned scout badges, the digital badge is an online image that reflects an achievement, knowledge or skills. It is awarded to an individual based on specific criteria that have been defined by the issuing organization.

There are generally several major uses for a digital badge, such as ***motivating*** people, ***recognizing*** skills or learning, and ***certifying*** mastery of such skills or learning.

Those who would like to learn more about this topic can do so by reading many articles that explain what these badges are, what their purposes are and how we can use them. It is rather rare, however, that people want to know how badges are designed. The following article contains simple answers to questions about why digital badges should be created, how to do so and for what purposes.

WHAT IS A DIGITAL BADGE?

This is the first question that needs to be answered before identifying reasons and grounds for creating digital badges and contexts for their use.

CHARACTERISTICS OF THE DIGITAL BADGE

It's an image.

The digital badge is an online image that is used to recognize an achievement, knowledge or skills based on award criteria and evidence. This image links to a web page that contains information confirming the value of what is being recognized. This information includes the name of the issuing organization, the title of the badge, its description, the award criteria, the date it was issued, details about its validity and evidence of the achievement.[1]

figure 1

It's an open source and free tool.

The digital badge is part of the free software movement. A badging system requires an open structure that can be put online and shared by anyone who has access to a computer and the Internet.[2]

It's a powerful and versatile recognition tool.

The visual aspect of the digital badge makes a person's learning progression concrete and visible (for example, when a badge shows the progression through quarters or stages). It promotes recognition and certification of knowledge and skills that are difficult to recognize and certify, in particular because little information is available on the place, context or manner in which they were acquired, and on their usefulness or conditions of use. It may even help recogne skills retroactively.[3] Moreover, its value depends on the recognition it receives. Thus, its power depends on the number of people and areas that give it value.

It's something other than a diploma or a certificate.

The digital badge fulfils a less instrumental function than a diploma or certificate. This tool is directly linked to the objects it recognizes and makes visible. It is primarily a record of how far a person has come, what they have successfully learned and what skills they have mastered. Thus, it helps reinforce the self-esteem of the person who receives it. It also helps to strengthen the ties that unite the people who make up a group or an environment directly concerned by a set of digital badges.[4]

THE MATERIAL DESIGN OF A BADGE

figure 2

The digital badge consists of metadata that provides information about its authenticity, source and value. Figure 2 shows an example of a digital badge *Nos compétences fortes* (NCF) [available in French only] received by email. It shows the badge's image, title and description. This description explains that the badge serves to recognize an individual's active participation in NCF workshops. It also presents the learning objectives achieved by this person during the workshops.

To find out more about this badge, click on its image. This will take you to the badge's web page to discover its other components. In particular, this page allows you to validate the badge and identify the issuing organization, to know when it was awarded and on the basis of which criteria. This page may even contain evidence of achievements that demonstrate mastery of what is being recognized by means of a digital badge.

1 ICÉA, *Comprendre mes badges numériques, Fiche 3* (2019), **https://icea.qc.ca/sites/icea.qc.ca/files/NCF_Fiche3_Comprendre-badges-numeriques_Mars2019.pdf.** [Available in French only.]
2 ICÉA, *Les badges numériques, DOCUMENT DE VULGATISATION* (2017), **https://icea.qc.ca/sites/icea.qc.ca/files/badges_numeriques_presentation_fev2017.pdf.** [Available in French only.]
3 *Ibid.*
4 *Ibid.*

USES OF THE DIGITAL BADGE

Digital badges have three major uses: ***motivating*** a person, ***recognizing*** what this person has accomplished and ***certifying*** the value of the learning that they have achieved and the skills that they are being recognized for.

The idea of motivating a person may seem to be reason enough to create a digital badge. However, it should be noted that much of the motivation that can be derived from it comes from the recognition and certification it provides. Motivation is therefore presented as one of the least important objectives associated with the use of a badge; its value being directly related to the idea of recognition and certification it offers.

HOW THE DIGITAL BADGE WORKS

A digital badge is designed on the basis of three components. First, there's the issuing authority, which consists of the individuals or organization delivering the badge. Then, there are the recipients, which are the individuals who receive the digital badge. Finally, there are the observers, who are the individuals and organizations that will give it value (Figure 3)[5] [in French only].

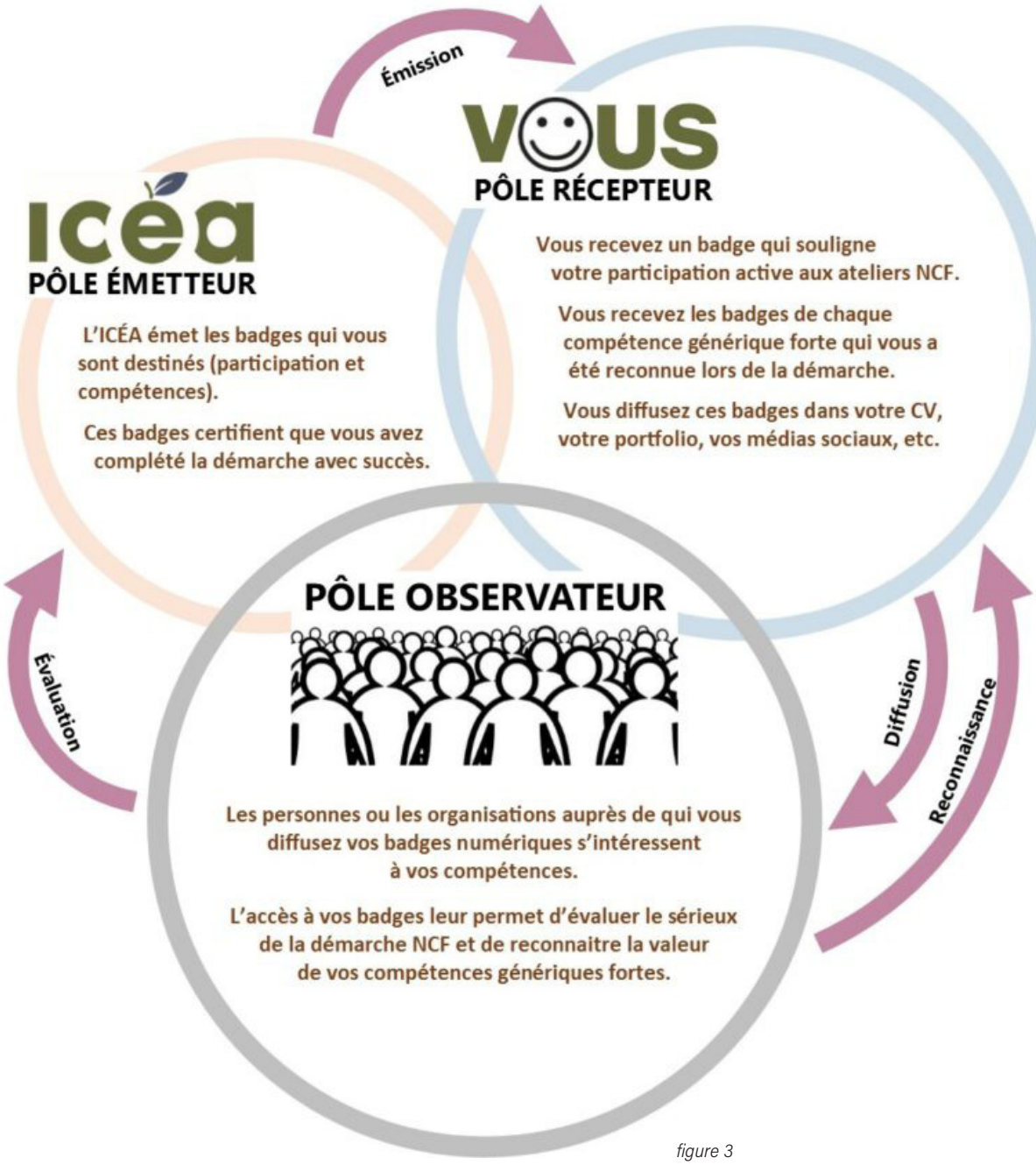


figure 3

[5] ICÉA, *Comprendre mes badges numériques, Fiche 3* (2019), **https://icea.qc.ca/sites/icea.qc.ca/files/NCF_Fiche3_Comprendre-badges-numeriques_Mars2019.pdf**. [Available in French only.]

Interoperability

These three components work in harmony and together form what some call the "triangle of trust." They are different parts of a system with interdependent components. If using an expression in the digital world, we are talking about interoperability here.

The issuing organization that creates a badge must, on the one hand, meet the recognition needs of the recipient and, on the other hand, highlight the skills and knowledge that are recognized and sought after by the individuals and organizations that are included in the recipients' component. The recipient is at the centre of the triangle dynamic. This person is engaged in a lifelong learning process and wants to make their skills visible. They are the one who will recognize the value of the badge and of the organization issuing it. They will wear and share the badge with observing individuals and organizations (peers, community, school, employers, etc.). Finally, observers are called upon to recognize the relevance of the badge and what it recognizes, as well as how it is used.

This is why a wide variety of people and organizations active in adult education should come together during the creation process of a digital badge. The goal is to identify new, concrete and practical ways of collaboration so that stakeholders in all three components can play a role in the success of the badging system. Indeed, the badge must be recognized and used by these stakeholders, as its value depends on it.

CREATING A DIGITAL BADGING SYSTEM

Definition Process

Once the decision to create a badge has been made, important work on definition begins. The list below includes the numerous tasks to be completed to create a digital badging system. These tasks all appear to be important and essential. They are presented in a chronological order. For example, the actual creation process of a badge can hardly occur before the tasks that precede it are completed. However, it is possible to define conditions of use or to develop a privacy policy before creating a badge.

1. Defining a Framework for Testing

One of the first tasks is to define a framework for testing. This means asking a number of questions such as: Which individuals is the badge being designed for? What tool will this badge be linked to? What will be its purpose? What major steps will need to be undertaken in the testing phase? Which organizations and individuals will be targeted at each testing phase? What human, material and financial resources can be dedicated to this project? Who are the financial sponsors that can provide assistance? Does the issuing organization have the necessary resources to keep the badging system running once it has been developed? Etc.

All organizations engaged in adult education benefit from looking at this type of project as an experiment and answering the various questions in this article. Moreover, this list is not complete and the framework for testing may evolve. Questions, unforeseen events and delays will require you to adapt it to the demands of the situation. This framework is a starting point. It is intended to cover a variety of contingencies, but it will need to be constantly revised in light of what can and should be done.

2. Defining Objectives, Specifying Uses and Targeting People

Before you begin to create a digital badge, it is important to define your objectives. The certification provided by digital badges certainly does not carry the value of an official diploma. However, it does allow observers to see the seriousness of the issuing organization's approach.

Defining your objectives makes it possible to confirm the relevance of creating a badging system in a number of respects, while targeting the individuals for whom the badges are created. Indeed, this type of system must target specific individuals. Targeting one person rather than another helps to make sure that you don't get lost along the way. You create badges that are recognized as valuable and relevant by the individuals for whom they are designed.

3. Developing or Choosing a Reference System

Developing or choosing a reference system is a major step in creating digital badges. Whether your goal is to recognize skills, knowledge or experiential learning, it is important to determine and identify what you are recognizing. One of the best ways to do this is through the use of a reference system.

An organization that does not have a reference system will be able to list the skills, knowledge, practices or behaviours that are recognized by the badges to be created. This list is only a first step in the development of a reference system. Once this list has been prepared, it is crucial to make sure that the elements contained therein are well defined and to specify what knowledge (knowledge, know-how, interpersonal skills) or abilities are required to master these elements.

Ideally, the reference system chosen or developed will be available online so that observers can appreciate it for its true value. Part of the metadata embedded in the digital badge will come from this reference system.

4. Defining Award Criteria

Another important element of the digital badge is the award criteria. You must define criteria for each digital badge you create. These criteria should clearly state what a person needs to do to receive a badge. For example, Figure 4 on the following page [available in French only] shows the award criteria for the Institut de coopération pour l'éducation des adultes (ICÉA) NCF digital badge recognizing resourcefulness.

These criteria are based on the participant's accomplishments and describes the observations that must be made by the workshop facilitator and other members of the group in order to recognize the skills in question. These criteria should be written in simple, clear and precise terms. It is important to avoid any form of ambiguity in their interpretation, as all observers must have the same understanding of these criteria.

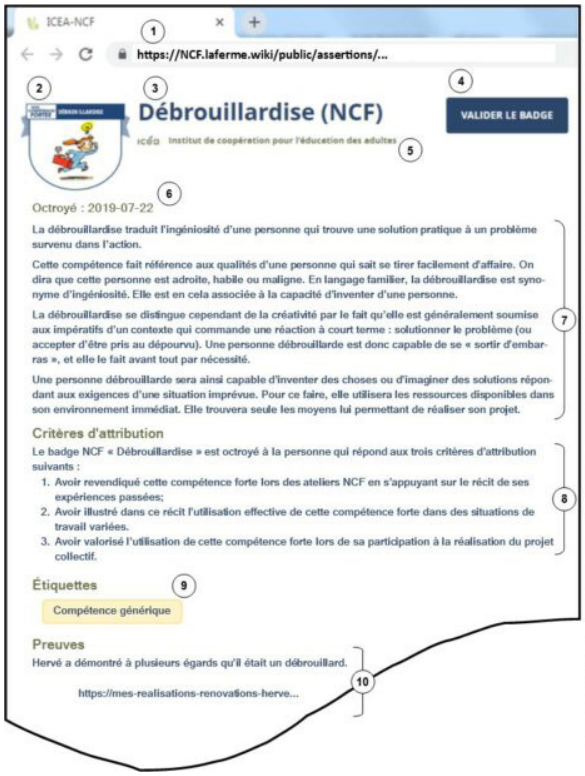


figure 4

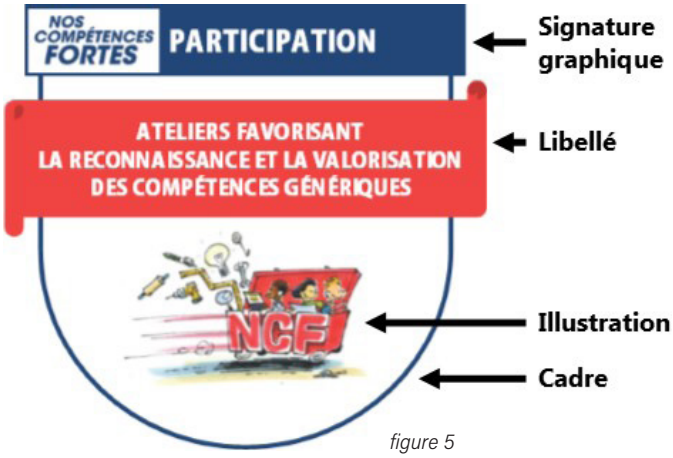


figure 5

5. Creating or Choosing Visuals

It is paramount that a different visual be developed or chosen for each badge that will be created. This visual should ideally consist of a graphic signature, a label and an illustration. The design in its entirety should be bordered. Figure 5 [available in French only] provides an overview of the elements found in the ICÉA's NCF digital badge recognizing participation.

The ***graphic signature*** must help identify the badge.

The ***wording*** must present the purpose of the badge.

Each badge must have its own ***illustration***.

The design process for NCF digital badges was facilitated by using the existing visual for the NCF tool. Organizations that don't have a visual to use as a reference will need to decide to either develop an original visual or to make their selection through online image galleries. The first suggestion might end up being costly in many ways (in time, money and resources) but it is worth it. Digital badges are illustrations, and these illustrations reflect your organization's very own image and tools.

A digital badge should ideally feature an eye-catching image that is not confusing with visual representations of other badges or digital products. Its design should also be coherent and make it easy to understand what it's all about.

Lastly, some digital badge platforms include functions that allow the visual of a badge to be designed. For example, it will be possible to select a frame, insert an illustration and specify the wording of the badge. However, possibilities can be limited and they do not always provide all the flexibility required.

6. Choosing a Platform

Many platforms allow you to create a digital badging system. Some are free (open source) applications that "allow users to run the software for any purpose as well as to study, change, and distribute it and any adapted versions,"[6] others operate on a subscription basis or provide course management platforms. Choosing an open platform might be the obvious choice, especially since the user organization will not be faced with control measures enforced by the program developer.

The ICÉA's NCF digital badging system is based on the open Badgr platform, which allows the creation and delivery of digital badges that are verifiable using a minimum of personal information. Badgr also allows badge recipients to create an account where they can store, organize into categories and share their badges.

While Badgr proved to be a wise choice for the ICÉA, another platform could certainly have been chosen. There are no good or bad platforms, but some are better suited than others to create the badging system you envision. On the other hand, few organizations engaged in adult education have the in-house expertise to make this choice. We don't become specialists in digital badges after a little reading. Hence, if it hasn't done so already, an organization that is close to choosing a platform should consult with one or more individuals who have experience developing a digital badging system. These people will be able to help the organization choose the platform best suited to their needs and will then be able to take charge of the technological aspect of the system.

7. Creating Digital Badges

Once all the preliminary steps have been completed, badges can be created. This work will require time, patience and imagination. Time must be allowed for the unexpected. The challenges associated with the creation of badges are multiple and no problem is too big to overcome if you take the time. All in all, an organization that seeks the support of expert resources from the outset will be all the better prepared to respond to the inevitable last minute adjustments.

8. Drafting a Privacy Policy

A privacy policy is an essential component of any online digital tool that requires the use of personal information. At a minimum, a badge is delivered using an individual's email address. The organization that collects this personal information must agree to protect it and use it only for the purposes required to deliver the digital badge.

A statement about the attention given to privacy and confidentiality of personal information collected is a good starting point for any privacy policy. However, the organization will need to recognize elements that are relevant to its badging system and be able to adjust the wording to reflect its commitments and, most importantly, to ensure that it is able to meet such commitments.

Given people's high expectations with regard to privacy, organizations should anticipate concerns of the individuals whose personal information is being collected through their digital badging systems. It is best to develop a clear and easy-to-understand policy that will reassure individuals about the use of their personal information rather than the contrary. It is better to commit to doing your best to comply with the requirements of provincial and federal legislation than to promise to adopt security measures that are difficult to implement.

A good starting point is to refer to the Privacy Policy Generator [available in French only],[7] where individuals are prompted to answer a series of questions, and based on the answers given, a model privacy policy is generated.

Developing a privacy policy is not a small task, and organizations that do not know how to do so should seek the assistance of a legal counsel.

9. Defining Conditions of Use

It's just as important to define the conditions of use of a digital badging system as it is to have a privacy policy. It could even be argued that this new task is just as complex as the latter.

The number of conditions of use and the wording may, of course, depend on the organization or the badging system being created. The most important thing is to cover all strategic aspects regarding the use of the system itself. For example, a system that provides access to a discussion forum should include specific conditions of use for that forum, such as respect for others, the right to remove any content considered to be hateful, racist or otherwise.

Here again, inspiration can be drawn from the many terms and conditions of use available online. Just make a list of related organizations that have a badging system similar to the one you are planning to establish. This would provide several examples of terms and conditions of use that could be analyzed and reviewed in order to determine the strategic elements to be included in the organization's conditions.

Specialists or legal advisers should also be consulted when performing this task.

10. Drafting Documentation for the Use of Digital Badges

Many people with an interest in your digital badging system will have the intuitive or practical knowledge needed to use

[6] "Free software," *Wikipedia*, last modified March 8, 2020, **https://en.wikipedia.org/wiki/Free_software**.

[7] University of Montréal, "*Générateur de politique de confidentialité*," 2008, accessed January 21, 2020, **http://www.politiquedeconfidentialite.ca/questionnaire.php?action=commencer**. [Available in French only.]

it effectively. However, not everyone will. You need to have documentation to provide all the help needed. The ICÉA has produced three fact sheets and a summary sheet which are available online on the ICÉA's website and could serve as a template.

As the administrator of a digital badging system, our responsibility is not limited to the creation and distribution of digital badges. It is our responsibility to establish conditions that promote the effective use of badges. But to do so, we need to have appropriate documentation.

11. Developing a Follow-up Process

Given our willingness to experiment with the implementation of a digital badging system, it is imperative to complete this last step. We developed a follow-up process to learn more about how the recipients use their digital badges.

This process aims to focus on how digital badges are being used, the number of times they are used in a given period of time, and the social media on which they are being shared. It also allows participants to inform the organization of the main objectives they wanted to achieve by using their badges and the people they wanted to share their achievements with. Finally, the process allows participants to assess the relevance and usefulness of their digital badges and the user support documentation provided by the organization.

CONCLUSION

This article sought to reflect the challenges faced by an organization wishing to create a digital badging system. It presented a series of tasks to be accomplished in order to achieve this goal. However, it should be noted that this list is and remains non-exhaustive. It outlines the major accomplishments of the ICÉA in its project to pilot the implementation of a digital badging system. Nevertheless, any attempt by another organization to replicate it in the hope of achieving similar results is discouraged.

A good starting point for interested organizations would be to build on the guidance and cautionary notes provided in this text.[8] The ICÉA's narrative shows that the creation of a digital badging system is within the reach of any organization that takes the time to sit down with the people who have the expertise required, reflect on the matter, and adopt a process that is tailored to its needs and objectives.

In particular, the ICÉA's experience highlights the importance of thinking about badges in terms of their usefulness to the people for whom they are intended. For us, the very idea of producing digital badges is inseparable from their practical usefulness, from the purpose for which they will be used. After all, why create digital badges and give them to a person if that person does not use them? If they do not use them, is it because they do not know how to use them? Is it because they do not recognize their value? Is it finally because the badges created have no real purpose?

Rather than wondering whether it's possible to create a digital badging system, the organization should ask itself whether the badges it wants to create will actually serve a purpose. Who will use them, why and how? Better yet, how can we ensure that the people for whom badges are intended can use them easily and effectively?

The first phases of testing a digital NCF badging system began in 2019. These phases include delivering the first NCF digital badges in June 2019 and conducting the first follow ups with recipients in the fall of that year.

An analysis of the information gathered, planned for 2020, will show whether the ICÉA has risen to the challenge of creating digital badges that are both useful and used. ♦

REFERENCES

Geoffroi Garon-Épaule. *"L'usage des badges numériques dans les différentes sphères de la société." Observatoire compétences-emploi* 6, no. 2 (September 2015). **https://oce.uqam.ca/usage-des-badges-numeriques-dans-le-monde-academique-du-travail-et-social/**. [Available in French only.]

ICÉA. *Identifier des compétences génériques pour favoriser l'autonomie des adultes, Un référentiel de l'ICÉA*. 2018. **https://icea.qc.ca/sites/icea.qc.ca/files/NCF_Referentiel-ICEA_septembre2018_0.pdf**. [Available in French only.]

ICÉA. *Nos compétences fortes, manuel d'animation*. (2013 Edition).

[8] The comprehensive version is available at the following address: **https://icea-apprendreagir.ca/creer-des-badges-numeriques** [Available in French only].

COFA

COALITION ONTARIENNE DE FORMATION DES ADULTES

1-877-464-0504 | 613-842-5369

INFO@COALITION.CA

WWW.COALITION.CA

435 DONALD STREET, OFFICE 301, OTTAWA (ONTARIO) K1K 4X5

EMPLOI ONTARIO

Ontario

Canada

Funding provided by the Government of Canada through
the Canada Job Grant Programs delivered by the Government of Ontario

Opinions expressed in this publication do not necessarily reflect the views of the Ministry.