

THE CONSCIOUS ENTREPRENEURIAL COMMUNITY SCHOOL

ITS DISTINCTIVENESS REGARDING OTHER
INTERNATIONAL EDUCATIONAL INITIATIVES

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EXECUTIVE SUMMARY

The Conscious Entrepreneurial Community School (ECEC, in French *École communautaire entrepreneuriale consciente*) is an educational model designed to meet the challenges of the 21st century and whose mandate is to be replicable in any public or private school of elementary, secondary, professional or collegial level. Approximately sixty initiatives of various scales were identified across the world for comparative purposes with the ECEC, and three complementary perspectives were adopted (school systems, specific-vocation schools and entrepreneurship-focussed initiatives).

The comparison has demonstrated that, when considering its fundamental components (school-system, specific-vocation school and entrepreneurship-focussed initiative), the **ECEC fits within broader global trends**.

The **distinctiveness of the ECEC** lies precisely in the synthesis of its tri-dimensionality, which is at once systemic, entrepreneurial and pedagogical. In this regard, the ECEC is likely to become a **strategic and governance framework** between all stakeholders of the school community, thus allowing existing initiatives: 1) to find a strategic legitimacy within the ECEC context and 2) to better succeed with their implementation insofar as the ECEC provides a suitable systemic, organisational and human framework.

The **conscious dimension** of the ECEC stands out as its main original feature. The ECEC intends to empower all students – future citizens, decision-makers, managers, employees, leaders, entrepreneurs – in the perspective of a “triple bottom line” (People, Planet, Profit) development of communities, which implies raising the conscience level of each and everyone, at all levels of the system.

Such comparative work also made it possible to **highlight distinctive elements of the ECEC** in relation to the identified initiatives: 1) the ECEC acts coherently with challenges and realities of the communities in which it is implemented; 2) the ECEC approach aims to generate strong bidirectional community mobilisation (students in the community and community members within the school); 3) the ECEC is inclusive and takes charge of all students independently of their academic or behavioural difficulties, or of their cultural and socioeconomic origins; 4) the ECEC offers a coherent approach that enables students to regularly undertake entrepreneurial activities throughout their schooling; 5) the ECEC pedagogical approach is integrated, which means that entrepreneurial activities should be carried out from a pedagogical standpoint (integration of school subjects) and from a reflexive standpoint (development of conscience).

The **next coherent step for the ECEC**, which has successfully been implemented in 127 schools throughout the world, is to provide a scientific validation of the positive impacts that it brings forward, at the student, teacher, school and community levels.

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INTRODUCTION

*No problem can be solved from the same
level of consciousness that created it*
Albert Einstein

The Conscious Entrepreneurial Community School (ECEC) is based on the *Partenariat en Formation : École-Communauté (PFEC)* (partnership in training: school-community) concept, which emerged, in many Canadian provinces, from the desire to protect small French-speaking communities in a linguistic minority context (Levesque & Boudreau, 2005). Two experiments carried out in two community schools, one in British-Columbia and one in Saskatchewan, were at the source of a progressive transformation of the PFEC. These two experiments gave rise to a more complex educational strategy that was soon be tested, as soon as 1999, within a **Quebec City** public institution, the École Coeur-Vaillant elementary school (Levesque, Boudreau & Langlais, 2007; Pepin, 2009). The latter then became the first Entrepreneurial Community School¹, prior to the expansion of the concept across different regions of the world.

On the basis of a pilot project implemented on its territory from 2004 onward, the **New Brunswick Department of Education** progressively introduced the ideas that shape the ECEC in several of its institutions (Department of Education and Early Childhood Development, 2008). There, the ECEC is present under the specific name of New Brunswick Entrepreneurial Community Schools (NBECS). Since 2013, all French-speaking schools – elementary and high schools – of this Canadian province are based on the ECEC model (i.e. 93 schools).

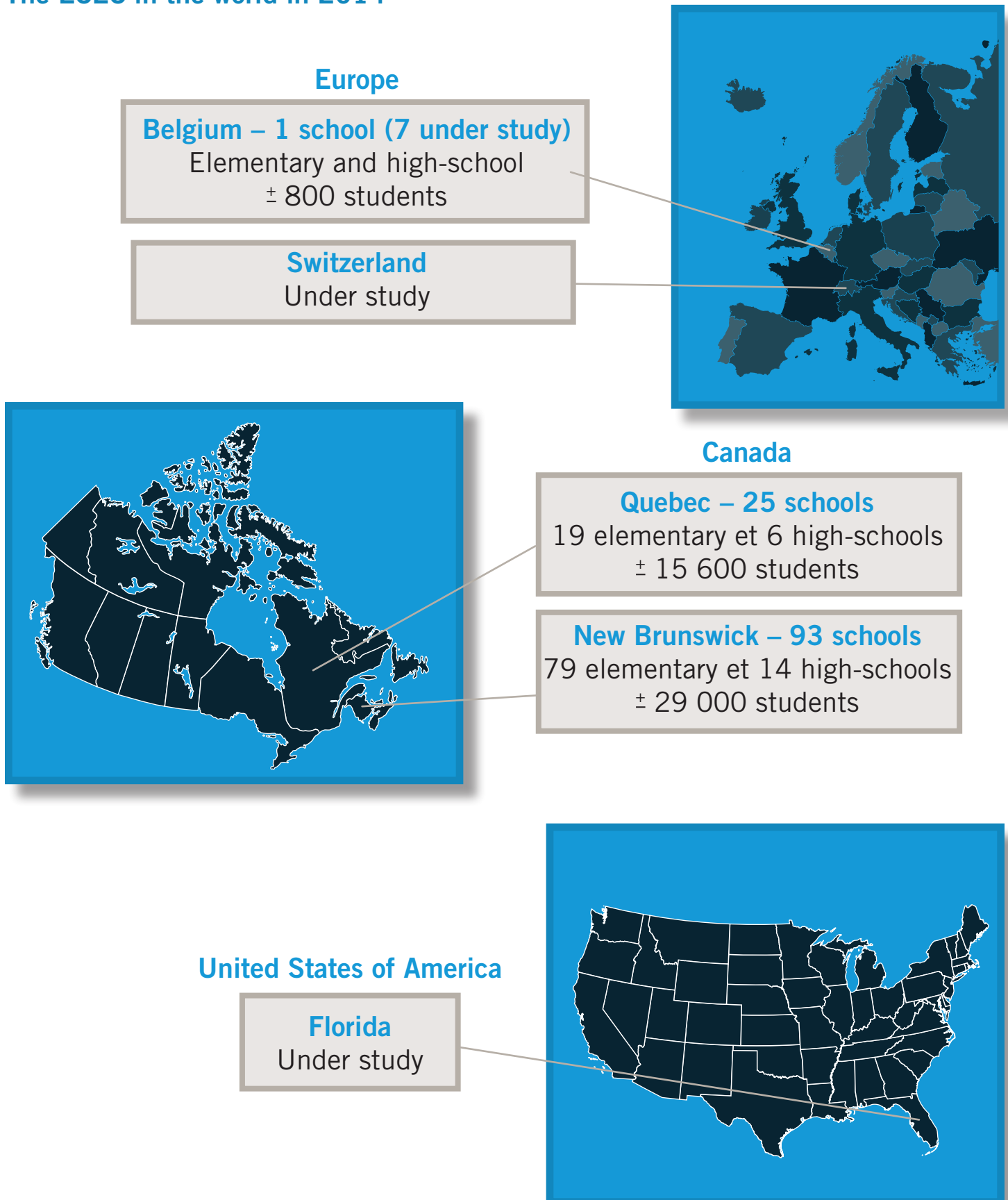
In 2007, the ECEC was implemented in **Benin**, within the La Cité school complex, in Cotonou. From 2011 onward, with the leadership of the Commission scolaire Marguerite-Bourgeoys in **Montreal**, twelve public schools (elementary, high-school and professional) adopted the ECEC model². Meanwhile, the International Organization of Conscious Entrepreneurial Community Schools (OIECEC) was created to support the internationalisation program of the ECEC. OIECEC's Website was launched in 2014 (www.oiecec.org). That same year, a first Quebec private school adopted the ECEC model. Also in 2014, three ECECs were jointly created in **Ivory Coast**, within a school complex (elementary, high-school, technical and professional). Also in 2014, one ECEC opened in **Belgium**, and four other schools are likely to follow the same path in the Brussels-capital region, and three others in the Namur region. Six schools in **Morocco** will soon become ECECs. Moreover, implementation projects are under study in **Switzerland, Florida, Democratic Republic of Congo, Republic of Congo, Colombia** and **Argentina**.

¹ At the time of its implementations in the École Coeur-Vaillant elementary school, the term « conscious » was not yet part of the ECEC acronym, which is why the expression Entrepreneurial Community School is used here.

² Five additional schools have become ECECs in Montreal since then, for a total of 17 ECECs, in June 2014

Figure 1:

The ECEC in the world in 2014



Africa

Morocco – 6 schools

3 elementary and 3 high-schools
± 2800 students

Ivory Coast – 1 school complex (3 schools)

From elementary to professional
± 900 students

Benin – 1 school complex (3 schools)

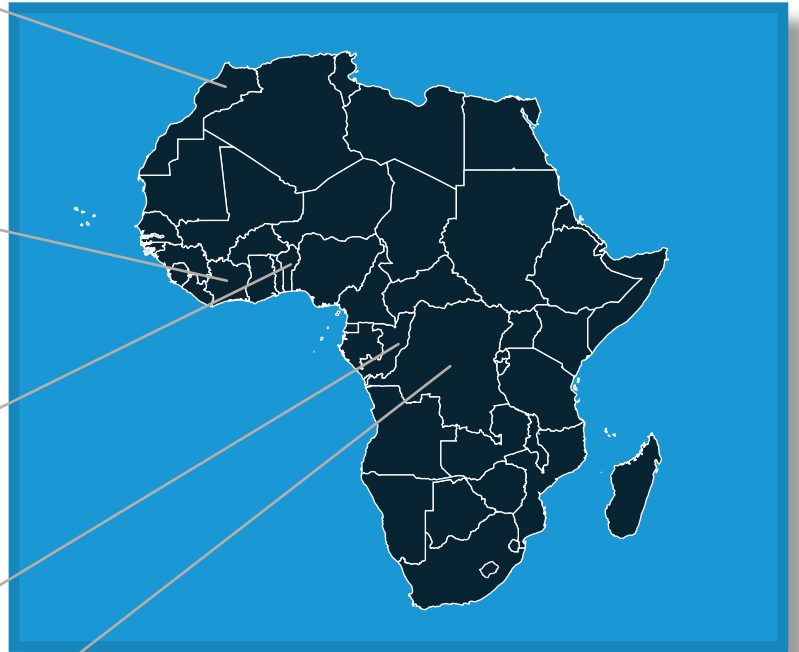
From elementary to professional
± 2000 students

Republic of Congo

Under study

Democratic Republic of Congo

Under study



South America

Colombia

Under study

Argentina

Under study



Before getting into specifics and in order to provide context, it seems necessary to broadly introduce the concept of the conscious entrepreneurial community school (ECEC)³, recalling its origin, its educational philosophy and the educational model that it provides. The ECEC draws its relevance from a set of observations and of socio-economic issues specific to the global economy of the 21st century and to the regional challenges that have been identified. The main goal is to strengthen the regional economies, namely by putting aside people's dependence to employment provided by large companies and government in order to counter rural depopulation and exodus of human potential towards urban centres or abroad (Levesque & Boudreau, 2005). At the root of the ECEC, as its name is suggesting, there is therefore both a community and an entrepreneurial concern. However, the entrepreneurial purpose of the ECEC is to be understood properly. The central observation on which the ECEC is based relies on the idea that it is not possible to maintain unrestricted growth in a world with necessarily limited resources. This is why the ECEC orients its entire educational philosophy on the original notion of a **conscious entrepreneurship** in the perspective of the viable and sustainable development of society, at the economic level, but also at the societal and environmental levels⁴; what is referred to as "triple bottom line" (People, Planet, Profit) in both for-profit and nonprofit organizations, that is, the "three pillars of sustainability" (social, environmental/ecological, financial).

The societal project carried by the ECEC thus represents a development both endogeneous and viable within the Global economy. This ambition is reflected in at least three important contemporary challenges faced by education. Such challenges derive from the ones that contributed to shape schools as they are known today:

- 1) the **necessity to develop the ability of individuals to be resourceful and empower themselves**, to take their future in their own hands instead of waiting on solutions that come from elsewhere (large business, Welfare state, etc). This is what Peters (2001) calls the development of an "entrepreneurial self", Aubrey (2000) "self-entrepreneurship", and others "the empowerment" (LeBossé, 2003); all contemporary concepts flourishing to evoke the same challenge.
- 2) the **necessity to invent and offer in continuity new development models for individuals**. Self-realization does not simply mean to be employed anymore – and definitively not in the same position throughout one's entire life – nor to find the meaning to life exclusively in a perspective of employment. A professional life is only one aspect, at times constitutive, at times peripheral, of human beings and their activities. Developing a life path in the 21st century is a global task (Savickas & al., 2010) that requires enabling individuals to fully accomplish themselves in relation to all fundamental sectors of human nature.

³ The ambition is however not to present the ECEC in a comprehensive manner. We refer to Levesque (2005, 2011, 2013). The purpose is not either to look critically at the concept of ECEC itself. We refer here to Pepin, Levesque, Lang & Deveau (2013).

⁴ The same idea can be found in the field of economics, namely with the writings of Brown (2011, undated) and Mackey & Sisodia (2013) who talk about conscious capitalism; a notion that seeks to reconcile level of consciousness, economic growth and sustainable development.

- 3) the **necessity to develop a conscience** allowing each person to be aware of and take into account contemporary societal challenges and to locate their actions in relation to those around, their neighbourhood, community, city, region, country and finally, in relation to the environment and the world in general. The conscience that has to be developed towards a viable and sustainable growth, and this is probably the biggest challenge, must be both local and global, and both individual and collective (Brown, 2011).

To meet these challenges, the ECEC introduces a new educational model to prepare and educate the 21st century youth. Attentively reading the ECEC literature helps to identify four distinctive and interdependent pillars underpinning its discourse and which could be summarized as follows:

- **Empower oneself:** knowing our needs and desires and being able to express them, becoming aware of who we are and confident to autonomously and proactively undertake projects of different kinds: personal, interpersonal, academic, professional or others.
- **Raise consciousness:** knowing ourselves in order to progressively move away from ourselves and set our actions and projects coherently with the ones of others, keeping in mind societal needs and environmental constraints at both the local and global scale.
- **Develop entrepreneurship:** undertaking real projects, while operating within the educational dimension of “doing” at the academic level (school subjects) as well as the reflexive level (critical thinking). Working in interdependency and coresponsibility in order to conceive and experiment collective projects that exceed the sum of individual interests and contributions. Through action projects, finding innovative solutions to the problems encountered.
- **Increase community spirit:** acting locally and demonstrating solidarity with the community by organizing individual and collective projects towards an interdependent and joint future, at the economic, social and political level and for the quality of the “coexistence” of the community.

Finally and more concretely, the ECEC is organized around an original school-architecture supported by 7 strategic axis and 21 structuring components (see Appendix 1) that are progressively implemented by a school in order to obtain one of the five ECEC accreditation levels. Each ECEC determines its specific orientation coherently with its environment through its Conscious Entrepreneurship Learning Program (CELP). The common educational driving force for all ECEC is the Pedagogical and Educational Approach in Conscious Entrepreneurship (PEACE) that organizes itself around pedagogical micro-businesses, action and reflection projects as well as other experiential activities (see Levesque, 2011).

As this overview reveals, the school-system embodied in the ECEC has been developing for over 30 years and has now reached maturity. It is important to truly understand that the ECEC does not primarily suggest the opening of new schools, but rather the transformation of existing schools following a progressive and structured model, of which past experience has demonstrated its success in various cultural contexts, at various school levels and with the support of various institutional partners.

The foundations of the ECEC having been explained, **the mandate that brought about this report** was to take an inventory of worldwide initiatives similar to the ECEC for comparison purposes, in order to position the ECEC within an international panorama and to highlight its specificities. For the sake of this comparative review, the focus was on initiatives where the scale was either local or global, at the elementary, secondary or professional level, since this is where the primary range of action of the ECEC lies. The postsecondary level, where entrepreneurial initiatives are abundant, was therefore not considered. The aspiration of this review was not to be comprehensive either⁵. An Internet scanning in both French and English was carried out and specialists working in the education field in Quebec and internationally were further consulted⁶. In this case, the conducted survey is mainly focussed on North America, Europe and Australia. South America, Asia and Africa are underrepresented in this report, which does not imply that nothing comparable to the ECEC exists in those parts of the world. It is a limitation of the methodology employed that could be corrected in a subsequent work. Furthermore, it is understandable that this comparative work is based on the various inventoried initiatives' discourses instead of their concrete actions in schools; an offset between discourses and practices may therefore exist. Ultimately, this review is a time-sensitive inventory; to be up to date, it should be revised periodically.

Once these limitations are set, the conducted **review gathers slightly more than sixty initiatives of variable scale worldwide** (see *Appendix 2*). In the first part, we will begin by positioning all the initiatives in relation to educational challenges of the 21st century. In the second part, we will take three different perspectives to address the basic question of this report. We will first compare the ECEC with other existing school-systems, then with specific-vocation schools and finally, with initiatives more specifically focussed on the development of entrepreneurship. To prevent any misunderstandings, it should be noted from the outset that while the mandate of this report will lead to adopt the ECEC perspective in order to highlight its distinctive features, all of the inventoried initiatives should be equally valued.

5 *Appendix 2* includes all of the inventoried initiatives. Initiatives in Quebec and Belgium are overrepresented. Our thorough knowledge of entrepreneurial initiatives in these two contexts brought us to inventory them all, even the smaller ones. At the international level, we focussed on the most developed initiatives and did not conduct the same meticulous work than we did for Quebec and Belgium, to the extent that small initiatives are not comparable from the outset to the ECEC and to its systemic dimension. Nevertheless, we are aware that several initiatives that were not identified for the necessities of this comparative work exist worldwide. On this topic, one can read documents from the European Commission (2004, 2005, 2012) or other existing reviews (ENTLEARN, ENTREDU, Entrepreneurial School).

6 We wish also to thank all the specialists that were consulted – school board managers, school principals, academic advisors and teachers – who shared their intimate knowledge of initiatives we undertook to compare and took the time to read and comment the previous versions of this report.

FIRST PART: POSITIONING THE ECEC WITHIN A GLOBALIZED PANORAMA

Call for the development of 21st century skills

As stated in the introduction, the ECEC takes into account the mutations of society and adapts education consequently. If still given the mandate to prepare students to become citizens and workers of tomorrow, education as designed in the past centuries is called to adjust to new realities of the 21st century, namely by providing students with general skills that will enable them to take on, and even to invent, societal roles and jobs that do not yet exist today. In this regard, knowledge, which has long prevailed as the organizing principle of educational systems, puts emphasis on the idea of skills, which effectively mobilizes various resources into action. In order to cope with current and upcoming societal changes, a large number of actors and organizations, at the national and international levels, advocates collectively for the development of what is commonly called 21st century skills. Here, a brief comparison work between the European Union (EU), the United States ([Partnership for 21st century skills](#)) and the OECD reveals that these competencies more or less overlap (see also Hart & Ouellet, 2013)⁷.

KEY COMPETENCES FOR LIFELONG LEARNING (EU, 2006)	FRAMEWORK FOR 21 ST CENTURY LEARNING (USA, 2009)	21 ST CENTURY CORE COMPETENCIES (OECD, 2009)
Communication in the mother tongue Communication in foreign languages Mathematical competence and basic competences in science and technology	Core Subjects (English, reading or language arts, World languages, Arts, Mathematics, Economics, Science, Geography, History)	Effective oral and written communication (strength in mother-tongue/ multilingual asset)
Digital competence	Information, Media and Technology Skills (Information Literacy, Media Literacy, ICT Literacy)	Accessing and analyzing information, including digital information
Learning to learn	Learning Skills (Critical Thinking and Problem Solving, Communication and Collaboration)	Agility, adaptability, and capacity for lifelong learning, Critical Thinking and Problem Solving
Social and civic competences	Core Subject (Government and Civics) 21 st century interdisciplinary themes (Civic literacy)	Collaboration across networks
Sense of initiative and entrepreneurship	Innovation Skills (Creativity and Innovation) 21 st century interdisciplinary themes (Financial, economic, business and entrepreneurial literacy)	Initiative and Entrepreneurialism
Cultural awareness and expression	21 st century interdisciplinary themes (Global Awareness, Health Literacy, Environmental Literacy)	-

Table 1: 21st century skills (comparison)

⁷ Appendix 3 offers a more complete comparative work between the ECEC and 21st century skills

Beyond the reaffirmation of the 21st century skills framework of the importance of subjects and themes usually undertaken by schools, there is the emergence of new concerns such as an emphasis on interdisciplinary themes instead of compartmentalization of subjects, the development of digital competencies, tips to live harmoniously with oneself, others and the environment, and perhaps more surprisingly, the development of competencies and knowledge related to entrepreneurship.

On this last point, it is notable that the stable and linear **socio-professional integration paths** that prevailed during the last fifty years have been out-dated today. In this regard, Lewis & Massey (2003) underline that the knowledge economy requires enterprising individuals, both as employees and employers, who make use of innovative and creative approaches. Hitty & O’Gorman (2004), for their part, mention that uncertainties linked to evolutions of the labour market imply frequent career reorientations (*portfolio career*). Both arguments advocate, on one hand, for the acquisition of skills transferable in various professional fields and, on the other hand, for the need to present to students that working freelance, becoming one’s own employer and creating one’s own business are among professional paths to consider as part of the alternatives in the frequent career changes caused by the current socio-professional context. In this changing and evolving context, the position that is jointly held by skills development and by entrepreneurship within the 21st century skills framework can be better understood. Henceforth, it is expected that individuals use their knowledge and skills in a competent manner and acquire new ones according to the problems and needs that they encounter in their activities.

The ECEC at the heart of a worldwide entrepreneurial trend

It can be noted that the ECEC is part of a wider worldwide trend that places entrepreneurship at the heart of educational practices. Beyond the 21st century skills framework, justifications brought forward to introduce entrepreneurship in educational processes generally vary between, the need to train the next generation of entrepreneurs particularly in the so-called postindustrial economies (narrower perspective) and the importance of training enterprising individuals in all spheres of activities of their lives (broader perspective). Recent research literature reveals that the **development of enterprising individuals** rather than of entrepreneurs only, should be favoured at early stages of students’ schooling (Hitty, 2008; Seikkula-Leino, 2008; Surlemont, 2007).

From the 1980s, Ball (1989), who writes for the OECD, noticed that the training of enterprising individuals would be one of the next challenges in education. His pioneering work remains a reference in the research field of entrepreneurial education in basic education. Fifteen years later, UNESCO, in collaboration with the International Labour Organization (ILO), advocates in turn for more entrepreneurship in schools (Bahri & Haftendorn, 2006). Different definitions of what being enterprising means can be found along the same line.

An **enterprising individual** has a positive, flexible and adaptable disposition towards change, seeing it as normal, and as an opportunity rather than a problem. To see change in this way, an enterprising individual has a security borne of self-confidence, and is at ease when dealing with insecurity, risks, difficulty, and the unknown. An enterprising individual has the capacity to initiate creative ideas, and develop them, either individually or in collaboration with others, and see them through into action in a determined manner. An enterprising individual is able, even anxious, to take responsibility and is an effective communicator, negotiator, influencer, planner and organizer. An enterprising individual is active, confident and purposeful, not passive, uncertain and dependent (Ball, 1989, p. 36).

Being enterprising is developing productive ideas and using initiative, innovation and industry to create something of value – even when things are difficult and uncertain – and involves the risk of losing something valuable. [...] **Enterprise** is taking advantage of what ‘might be’ (possibilities), rather than accepting what ‘will be’ (fate). Many enterprising people have a heightened desire to make things happen and sometimes with a particular style, such as tenacity or flair. In a business setting it is called entrepreneurialism, but you also need enterprise to run a club, a household, a good classroom or to help yourself and others (Kearney, 2009, p. 10).

Following these calls for the introduction of greater entrepreneurship in schools, many governments worldwide entered this **specific focus in their respective education programs**. This is the case for instance of Quebec (Ministère de l'Éducation, du Loisir et du Sport, 2001; Secrétariat à la jeunesse, 2004), of Sweden (Ministry of Education and Research & Ministry of Enterprise, Energy and Communication, 2009), of the United Kingdom (Office for Standards in Education, 2004) or of Australia (Ministerial Council on Education, Employment, Training and Youth Affairs, 2008).

The *Howard Davies report* (2002, p.17-18) and others that followed (Pilsh & Shimshon, 2013; Young, 2014) demonstrated that **key-competencies in entrepreneurship** were useful for the population in general. This is particularly true for the first two competencies, namely the enterprise capability and financial literacy; the third one, economic and business understanding, falls within an interest from the outset more specific to individuals wishing to establish themselves as entrepreneurs.

Figure 2:

Key Competencies in Entrepreneurship (Davies, 2002)

Enterprise capability

The capability to handle uncertainty and respond positively to change, to create and implement new ideas and new ways of doing things, to make reasonable risk/reward assessments and act upon them in one's personal and working life. This depends on the development of:

- Knowledge and understanding of concepts - organisation, innovation, risk, change;
- Skills - decision-making (particularly under conditions of uncertainty), personal and social, leadership, risk management, presentational;
- Attitudes - self-reliance, open-mindedness, respect for evidence, pragmatism, commitment to making a difference;
- Qualities - adaptability, perseverance, determination, flexibility, creativeness, improvisation, confidence, initiative, self-confidence, autonomy, action-orientation.

Financial literacy

The knowledge, skills and attitudes necessary to become a questioning and informed consumer of financial services and the ability to manage one's finances effectively. Financial literacy can be divided into three interrelated themes:

- Knowledge and understanding - familiarity with a range of concepts such as money, credit and investment;
- Skills and competence - budgeting, financial planning and personal risk management;
- Attitudes - taking responsibility for the wider impact and implications of money and financial decisions on individuals, business and the community.

Economic and business understanding

A process of enquiry, focused on the context of business, central to which is the idea that resources are scarce so that choices have to be made between alternative uses. This includes:

- Knowledge and understanding - familiarity with a range of economic concepts such as the market, competition, price, efficiency and economic growth;
- Skills - the ability to take decisions and make judgements on issues with an economic dimension, investigate simple hypotheses and apply theoretical understanding to practical situations;
- Attitudes - an interest and concern in: economic affairs, responsible use of resources, challenges of business and its importance to society, responsibility of employers to the community and the environment.

The ECEC fits within those standards of key competencies in entrepreneurship, focussing particularly on the most global skills, which aim at developing enterprising attitudes and potential in learners (broader perspective). This does not exclude the possibility that a number of these students thereby trained could become entrepreneurs (narrower perspective) who, and this is the ECEC wager, will be more conscious and responsible, developing viable and sustainable communities. The parallel is easily seen when reading the **exit profile** that is pursued by the ECEC.

At the end of his/her schooling in an ECEC, each student is expected to have developed, by regularly being brought to assume the three roles of initiator, go-getter and project manager: **3 competencies** (empowering him/herself, being enterprising and creating innovation in a conscious, responsible and independent manner), **3 attitudes** (pride in identity and culture, constant search for innovation and community engagement), **12 qualities** (self-confidence, respect for others, team spirit, organizational skills, solidarity, responsible, sense of initiative, ingenuity and creativity, leadership, entrepreneurial awareness, independent learning and humanization) and **3 strengths** (diagnosis, dynamism and determination) (Levesque, 2011).

To conclude by focussing more specifically on the development of entrepreneurship in the classroom, it can be noted that several authors sought to determine the **characteristics of pedagogy with entrepreneurial value**, that is a pedagogy going in the direction of developing the enterprising competencies previously mentioned and, consequently, the ECEC exit profile. The *Table 2* below is an appropriation of the work of Jonhson (1988), and is enhanced with the contributions of Surlemont & Kearney (2009) and of Kearney (2009), Leffler (2009) and Leffler & Falk-Lundqvist (2014) among others. The listed characteristics reveal that a teacher can work various aspects of his/her educational and pedagogical *habitus* to tend towards a global approach presenting value-added entrepreneurship. The socioconstructivist inspiration that characterizes the elements of such pedagogy will be noticed here. It should be noted that whereas the presentation in table form leads to an interpretation where elements of each column are put in opposition to each other, it is suggested instead to consider them as many tensions whose poles represent indicators rather than normative judgements.

	Conventional approach	Pedagogy with entrepreneurial value	
Learnings	Managed by the teacher	Managed/negotiated by the student/group	Empowering Learning
Expectations from student	Dependence	Independence	
Student's role	Passive/receptive	Active/generative	
Student's status	Deficient/in needs for help	Active/can help	
Teacher's role	Expert	Facilitator/guide	
Student's choices	Limited	Encouraged	
Themes	Imposed	Negotiated	
Emphasis	Knowing what	Knowing how	Experiential Learning
Goal	The practice in the theoretical/abstract	The theory in the practical/concrete	
Knowledge	General/decontextualized	Specific/contextualized	
Lessons	Pre-determined	Flexible/opportunistic	
Horizon	Turned to the past	Oriented towards the future	
Structure	Programmed	Flexible/negotiated	
Context	Disciplinary	Authentic/multidisciplinary	
Learning locations	Mainly the classroom	Multiple (classroom, school, community)	
Determined by	Expectation of evaluations	Local needs/challenges encountered	
Errors	To avoid	To draw conclusions from	
Working method	Generally individual	Small/big groups	Cooperative Learning
Philosophy	Competitive	Collaborative	
Value system	Impersonal/formal	Communitary/Engaging	
Collaboration	Left to chance	Planned	
Help from adults other than teacher	Rare	Frequent/planned	
Other students	Can be distracting	Collaborators/are collaborating	
World vision	Certainties	Meanings	Reflexive Learning
Target	Facts	Possibilities	
Transfer of knowledge	Focusses on content	Focusses on process	
Evaluation	Exams/restitution/demonstrations	Profile/amelioration	
Evaluation executed by	Teacher	Collaborative process	
Reflection	Left to chance or accidental	Organized	
Results	Short-term	Long-term	

Table 2: Characteristics of pedagogy with entrepreneurial value

SECOND PART: COMPARING THE ECEC WITH OTHER EDUCATIONAL INITIATIVES

Once the ECEC is positioned within a globalized panorama, we turn henceforth towards the more focussed mandate of this work, which is highlighting the ECEC specificities in comparison to other educational initiatives, both local and international. As presented in the introduction, three complementary perspectives that also represent three fundamental ECEC components will be adopted. Anticipating slightly on what will be presented in the subsequent text, this comparative work will lead, within these complementary perspectives, to compare the ECEC more directly with five other large-scale educational initiatives. We will first focus on the ECEC systemic dimension, through the school-architecture that it brings forward (see *Appendix 1*). This will lead to compare the ECEC with two other initiatives designed to meet 21st century challenges, namely the **Expeditionary Learning Schools** (ELS) and **The Leader in Me** (LiM). We will then focus on the ECEC conscious entrepreneurial philosophy that will be weighed against specific-vocation schools, which are increasingly present in the educational landscape. The **International baccalaureate organisation** (IBO) will represent here the main initiative compared to the ECEC. We will close by comparing the ECEC to other entrepreneurship-focussed initiatives in schools. We will here compare the ECEC to the **Réseau québécois des écoles entrepreneuriales et environnementales** RQEEE (Quebec Network of Entrepreneurial and Environmental Schools), at the Quebec level, and to **Junior Achievement** (JA), at the international level.

Table 3 below offers a first synoptic overview of the five initiatives directly compared to the ECEC. This table presents general factual data that is found on each initiative's Website. It shows from the outset that the ECEC is **one approach amidst others within a variety of specialized** initiatives and that it is not the most developed throughout the world nor in terms of the number of students impacted. This table will also be used as a basis for more nuanced comparisons with the five chosen initiatives. The ECEC's distinctive features should indeed be found in what qualifies its approach. One will find more complete and precise tables in the following text that will make possible to deepen the comparisons in order to highlight what distinguishes the ECEC.

	Expeditionary Learning School	The Leader in Me	International baccalaureate organization	Junior Achievement	Réseau québécois des écoles entrepreneuriales et environnementales	Conscious entrepreneurial community school
Philosophy	Students learn by doing long-term scientific investigations based on problems that mirror contemporary world	Every child is a leader. Various activities aimed at developing the seven main habits of a leader	Developping world citizens from a cultural, linguistic and harmonious coexistence standpoint	Offer a business world experience. Students set up micro-businesses that are ideally profitable	Responsible entrepreneurship; policy on sustainable development. Students set up environmentally-friendly micro-businesses	Philosophy of conscious entrepreneurship. Students learn through micro-businesses and through action and reflection projects based on community needs
Focus	Real-world problems, scientific investigations	Leadership and its seven main characteristics	International awareness and participation in the globalized society; facilitation of geographical mobility	Increase entrepreneurial intentions of youth; economical dimension of entrepreneurship	Responsible entrepreneurship, sustainable development	Viable community development, conscious entrepreneurship, students' exit profile
Origin	USA	USA	Switzerland	USA	Quebec	Canada
Launching	10 pilot-schools in 1993	Since more than 30 years	Diploma program since 1968; middle years in 1994; elementary years in 1997; career-related in 2012	1919	1999	Development since 1991, 1st school in 1999
Nb of schools (students) in 2014	160 (53 000)	1958 (undisclosed)	3 930 (1 233 000)	Undisclosed (10 200 000)	94 (21 800)	127 (51 100)
Targeted audience	From elementary to college, public or private, in the USA	From elementary to post-secondary establishments, public or private, internationally	From elementary to pre-university (from 3 to 19 years old), public or private, internationally	14-25 years old, public or private, internationally	Elementary and high-school, French-speaking public schools of Quebec	From elementary to college, public or private, internationally
Scale in 2014	33 American states	Is or was present in 50 American states and 150 countries, on the 5 continents	147 countries	121 countries	Quebec	2 Canadian provinces, 5 countries, on 3 continents
Implementation process and learning programs	Transforming existing schools or creating new ones. Specific learning programs for ELS (ELA, Sciences, Social sciences). Improvement of academic results	Transforming existing schools in a 3-year transformation process. Some mandatory activities during the 3 years of implementation; activity guide suggested in 6 levels. Improvement of school atmosphere	Implementation in existing schools; a school obtains the status of "IB World School" after an intensive 2-years authorization process; regular follow-up and evaluation process. Four distinct programs that are added to national curriculums; management of students' academic schedule	Micro-businesses, from their development to their closure, overseen by a teacher entering the program for a group of volunteer students. Knowledge development related to entrepreneurship and business world; business creation and management skills	Development under the leadership of the school direction (and associate leaders). Historically: mandatory implantation of a micro-pulp mill from 1999 to 2009; no formal pedagogical approach since then. Card game representing enterprising characteristics	Transforming existing schools or creating new ones, 3-years transformation process, 2-years consolidation; 5 accreditation levels. Personalized CELP to each ECEC; fits into the national curriculum; school-architecture including 7 strategic axes and 21 structuring components

Table 3: Synoptic overview of compared initiatives

1st comparison perspective: 21st century school-systems

It should be mentioned that some reviews of entrepreneurial life in elementary schools and high-schools already exist in Europe, mainly. Among them, there are the **ENTLEARN** and the **ENTREDU** projects. The first one aims to determine the most efficient way to learn entrepreneurship and to analyse how existing programs are likely to respond to it. It refers more to the secondary and postsecondary levels. The second relates to the basic schooling of students and aims in a general manner at distinguishing the orientations of various countries in matters of educational entrepreneurship (see European commission, 2012; Hitty, 2002). Moreover it seeks to create a resources inventory of European educational practices allowing the development of interdisciplinary approaches based on entrepreneurship.

Another initiative that goes along the same line is the **Entrepreneurial School**. As opposed to what the name might lead to believe, this initiative is not a school model, but rather a project aimed at taking inventory and pooling exemplary practices related to educational entrepreneurship, in addition to offering training for teachers who wish to engage in the entrepreneurial adventure. On that topic, it is noticeable, namely after the European commission (2011), that the training of teachers towards entrepreneurship remains to be greatly improved (see also Young, 2014). The various reviews **do not lead to the conclusion that there is an existing school-system comparable to the ECEC in Europe** relying explicitly on an entrepreneurial approach. Indeed, the inventoried entrepreneurial practices often remain isolated projects developed at the scale of one teacher, or at best, of one school.

To succeed in comparing the ECEC in its systemic dimension, we undertook a broadening of our researches to all school-systems presenting a goal comparable to the one of the ECEC, through a desire to develop 21st century skills with their students, without necessarily referring to an entrepreneurial approach. The case studies of the *Partnership for 21st century skills* are an interesting starting point. The initiatives that are reported involve entire school institutions, instead of isolated teachers and classes. Nevertheless, reported initiatives in these case studies do not always have the aspiration to be duplicated.

The question thus remains. Beyond national education systems and single programs, is it possible to identify school models, such as the ECEC, that generally aim at transforming and adapting the school to better meet the 21st century challenges and at developing consequently 21st century skills? Two of them seemed to be sufficiently developed to become the object of a comparative work. They are the **Expeditionary Learning Schools (ELS)** and the **Leader in Me (LiM)**. *Table 4* below offers a comparative overview, in relation to the ECEC.

	ELS	LiM	ECEC
Philosophy	Science-based approach. Students learn by doing long-term investigations (in and outside school) of important topics that mirror real world challenges. They create products that have value in the world beyond their classrooms.	Every child is a leader. Based on <i>The 7 Habits of Highly Effective People</i> , The Leader in Me equips students with the self-confidence and skills they need to thrive in the 21 st century economy.	Philosophy of conscious entrepreneurship. Students learn through micro-businesses as well as through action and reflection projects based on community needs and bringing a value-added to this community.
Focus	Real-world problems, scientific investigations	Leadership	Community needs, Conscious entrepreneurship
Origin	USA	USA	Canada
Launching	10 pilot-schools in 1993	Since more than 30 years	1 st school in 1999
Number of school (students) in 2014	160 (53 000)	1958 (undisclosed)	127 (51 100)
Targeted audience	From elementary to high school, public or private	From elementary to post-secondary schools/institutions, public or private	From elementary to college, adult training, public or private
Implementation process	Transforming existing schools or creating new ones	Transforming existing schools in a 3-years transformation process	Transforming existing schools or creating new ones, 3-years transformation process, 2-years consolidation; 5 accreditation levels
Scale in 2014	33 American states	Is or was used in 50 American states and 150 countries, on 5 continents	2 Canadian provinces, 5 countries, on 3 continents
Learning programs	Specific learning program for ELS (ELA, Science, Social studies)	Some mandatory activities during the 3 implementation years, activity guide suggested in 6 levels	Personalized CELP valuing the diversity of the environment and aiming to generate a strong mobilisation; fits into the learning program of the country/province
Benefits	After 3 years, students are 10 months ahead in maths and 7 months ahead in reading (researches available)	Increased student achievements; reduced discipline problems; engaged staff; satisfied parents (book available)	Better integration of school subjects; maintenance or improvement of academic performance; increased motivation of students; reduction of behavioural problems, two-ways community mobilisation (testimonies and observations)
Recognition	Set as a national model by President Barack Obama	Undisclosed	Recognized by the UNESCO; Innovative school Microsoft Corp.

Table 4: Comparison of ELS, LiM and ECEC

ELS, LiM and ECEC: three school-systems designed for 21st century challenges

The ELS, the LiM and the ECEC are three systems aiming at an in-depth transformation of schools, including learning processes, relevance of education in relation to 21st century challenges, the environment and educational culture. Obviously, these three models are not founded on the same philosophy: the ECEC adopts the conscious entrepreneurship approach; the ELS is based on empirical processes of a scientific nature⁸ and the LiM focuses on leadership in each student and on its seven main manifestations. Nevertheless, when reading about the three initiatives, it is understandable that they all go in the same direction, though with slightly different principles, favouring systematically educational practices that place the student in action and in situations of responsibility requiring them to undertake initiatives⁹. LiM does not seem, however, to attach much importance to community involvement, as opposed to the other two initiatives: the emphasis is on the improvement of the general school environment, the adults-adults, adults-students and students-student relationships.

The three initiatives are globally geared towards the same audience (from elementary to college, in both the public and private sector) and began at about the same time, with only a few years' apart. The transformational process of the three initiatives is well structured, with support from the organization overseeing it (costs for the transformational process and the announced support are not always mentioned). In addition to the transformational process of existing schools, ELS and ECEC also offer the development of new schools, which distinguishes them from the LiM. In terms of results, LiM presents benefits mostly with involvement (of students and teachers) and school environment, whereas the advantage of the ELS is found mostly in the academic performance. **The ECEC brings results that simultaneously join both aspects, while adding a two-way community mobilisation** (students in their community and partners in the school). In the case of the ELS and LiM, the announced results are scientifically substantiated, which is a weakness of the ECEC, although some of its components are supported by research.

LiM has a much higher number of schools involved in the transformational process than the two other initiatives. According to this analysis, the difference is due to the fact that LiM's process seems less demanding than the two others. Only some activities are mandatory over the course of the transformation process in three years and there seems to be no specific rules relating to the number of weekly hours to allocate to leadership-focussed activities. In the LiM website section dedicated to the available activity guide, it is stated that: "The lessons in the guides are flexible and can be assigned daily, semi-weekly, or weekly according to the available time in each classroom".

⁸ The existence of the [Recherche-action pour la résolution de problème communautaire](#) model (RA: RPC), which is a program focussed on the environment and citizenship, developed in several Canadian provinces, as well as in some other countries can be noted. In this program, students start from community issues to undertake projects aimed at learning from the issue and implementing a concrete solution. Though very interesting, the scale of this program is not comparable to the other chosen initiatives, besides, it is not a school-system, which is the reason why it was not included in this comparison.

⁹ In this regard, there is also the [Design for Change](#) program, that hails from India and is implemented in over 330 000 schools, in 34 countries. This program goes in the same direction as the other three initiatives compared. However, it is not a school-system and it is based on a challenge lasting for one week, without obligation to be perpetuated within a school, which is the reason why it was not included in the comparison, despite its high value.

This can be considered as a strength, since the LiM is likely to be implemented more easily in a school, but also as a weakness, to the extent that there is no guarantee that leadership will be effectively used in an equitable and coherent manner from classroom to classroom, in a school that implements the program. It can also be noticed that the LiM expects to take charge of school-teams that have already improved their internal cohesion, whereas the two other initiatives are committed to support any school-team.

The ECEC and the ELS stand out as much more complete initiatives, though complex and demanding. Their respective data relating to the number of schools and students involved are more comparable¹⁰. In order to become an ECEC, a school will have to determine its Conscious Entrepreneurial Learning Program (CELP) linked to the strengths and needs of its community. Many structuring components must mandatorily be implemented to obtain the minimum accreditation level. In the case of an ELS, a school has to adopt the specific and pre-determined program that was created in order to undertake the transformational process. In both cases, the professional development of teaching staff has to be ensured. LiM and ECEC do not offer, on the other hand, a fixed curriculum: they both adopt the program of the country/province/region in which they are implemented. This can moreover be seen as the primary reason why LiM and ECEC have become worldwide initiatives, whereas the ELS is confined to the United States, which is the country where its mandatory program was created, thus putting a limit to its reach across borders (if the goal of the ELS is indeed to become worldwide, which is not mentioned in any document).

Ultimately, pros and cons can be found for each of the compared initiatives (ECEC, ELS and LiM), depending on the chosen perspective, and **none of them clearly stands out from its competitors**: they represent three significant school-systems, well designed for the development of 21st century skills, supported by a structured transformational process and based on different approaches yet coherent from an educational standpoint.

If the elements characterizing the ECEC had to be highlighted in relation to the two other initiatives, the emphasis could be put on **its educational approach, which aims at generating a strong community mobilisation around its Conscious Entrepreneurship Learning Program (CELP) that goes beyond changes within the school**. The creation of a CELP specific to each ECEC indeed stands out as a distinctive asset, in the perspective of a school-system whose aspiration is to be replicable. What is offered by the ECEC is neither a prescribed curriculum to implement (like in the ELS) nor some activities to organize around a given theme (like in the LiM), but rather a school-architecture supported by an educational philosophy. Besides, it is expected that working on the creation of the CELP, in consultation with the ECEC facilitators, lead to more enthusiasm about the school transformational process: it will become a collective educational project with a shared educational vision.

¹⁰ It can be noticed that the conscious entrepreneurial philosophy of the ECEC encompasses schools from the Réseau Québécois des Écoles Entrepreneuriales et Environnementales - RQEEE (Quebec Network of Entrepreneurial and Environmental Schools), for a total of approximately 22 000 students. The Quebec ECEC that are also members of the RQEEE were included in the number of schools impacted by the ECEC.

Consistently, the “community spirit” dimension of the ECEC also stands as a distinctive element¹¹. As previously seen, LiM does not consider such a dimension. Within the ELS, external experts are brought in to intervene during the “expeditions” of students who then present the results of their research to the community. However the school-community interaction does not appear to be as structured as within an ECEC. First of all, it was said, each ECEC has to determine its CELP based on the specificities of its surrounding, either its economic, social, community or cultural life. An ECEC in a rural environment could therefore choose an orientation based on agriculture whereas an ECEC located in an urban setting could set itself in a different dynamic. In other words, in the ECEC, there is the recognition that a school must be integrated harmoniously within its environment. The flexibility offered by the CELP is beneficial. If the ECEC seeks to prepare its students in overcoming the challenges of a globalized economy, through its exit profile, it also invites students to pay equal attention to the strengths and challenges inherent to their own environment.

Then, entrepreneurial activities experimented by students within an ECEC have to fit into their school orientations, and hence, into their community. The very idea of an entrepreneurial approach is to start from a community need, either local or global, and to seek an answer through an action project. Finally, key partners within the community are invited to enter the ECEC according to the needs that emerged from entrepreneurial activities in which students take part. The school-community network is therefore set in a double dynamic: students, through their entrepreneurial activities, become a decisive part of their community, and the community, through targeted partnerships, is mobilised and contributes to the education of students and to the success of their activities. This school-community network does not occur randomly along projects, but is rather planned and structured. A member of the school staff is even assigned to the creation and perpetuation of partnerships.

2nd comparison perspective: specific-vocation schools

In Quebec and elsewhere, a significant number of specific programs have appeared in public schools following an initial expansion of such programs in private schools. These programs are focussed on heteroclite approaches: they include global health programs, sports studies, arts studies, alternative schools¹² (Freinet, Montessori, Waldorf, etc.), scientific schools, international schools etc. This is what is commonly called **specific-vocation schools**, specific pedagogical projects, or academic profiles. These programs intend to give a specific colour to a given academic institution. In public schools, they firstly emerged to better meet student interests in order to contend with student drop-out and to compete with private schools that were attracting an increasing number of students, gradually taking away the public schools’ best students and leading to the progressive ghettoization of public schools struggling with the most difficult public: students with learning or behavioural disabilities, drop-outs, etc.

11 The ECEC does not however have the exclusivity of this community spirit dimension. The concept of community school (in French école communautaire, EC) and its implementation worldwide was moreover the object of a recent review, in the perspective of a development of the school-family collaboration (Bédard, 2009). The particularity of the ECEC is to add partnerships with socioeconomic partners supporting the school.

In the Quebec context, there is a tendency to compare the ECEC to those specific-vocation schools, and especially to the Programme d'éducation intermédiaire (PEI) (*IB Middle Years Program, MYP*) of the International Baccalaureate Organization (IBO), which is also implemented internationally. If the ECEC indeed offers a conscious entrepreneurship philosophy to schools in which it gets implemented, the comparison with specific-vocation schools does not seem to go much further. We will begin with some general distinctive elements, before providing a more thorough comparison between the ECEC and the IBO.

First and foremost, in the specific-vocation schools, the specific orientation represents only one of the aspects (except in alternative schools, mostly implemented at the elementary level). Within specific-vocation schools, two parallel systems coexist: the regular program and the specific program: students from each one not or barely mingling. This is not the case in an ECEC where the **philosophy of conscious entrepreneurship permeates the entire school institution**.

Moreover, in order to attract the best students, since the goal is indeed to compete with private schools and their specific programs that have a reputation of excellence, specific-vocation schools, even when they are part of the public system, are authorized to require selection criteria for the admission of students in a particular program. Generally, students have to present high academic results and must not show any serious behavioural problems. Thus, it is ensured that only the best and the brightest of students that have not been seduced by the private schools are selected, at the detriment of weaker or average students. **Within an ECEC, such a selection process of students does not exist**. All students, regardless of their academic or behavioural difficulties, are included.

Finally, specific programs often involve additional fees for parents, and are another way to restrict program access to any student; wealthy and middle-class families being favoured from the outset. With all of those criteria, it is arranged in a barely hidden manner to select and train an elite. The fees referred to do not apply to the registration to the particular program (which is mostly, but not always, taken in charge by the school board), but rather to the cost of required specific academic material and mandatory special activities (such as cultural travel within the MYP). If the ECEC also involves the commitment of extra funding to ensure the educational monitoring and annual membership to the OIECEC, it is the school instead of parents that pay such fees. The creation of new activities (projects and micro-businesses) also requires funds that are obtained through the micro bank created in the school (microcredit principle). **Student's access to the ECEC and its conscious entrepreneurial activities could never be restricted by financial reasons**.

¹² Alternative schools could have represented another comparison perspective. A Freinet school, for instance, is similar to a school-system. Nevertheless, these alternative schools are mostly based on a particular pedagogical approach and changes are more visible at the classroom level than at the school level. Alternative schools, in Quebec at least, further benefits from arrangements in relation to ministerial expectations, which is not the case of the ECEC. It would be worthy to push the comparison further, namely with Freinet schools, which present striking similarities with the ECEC (pupil council and school council, community involvement, active pedagogy).

Now that these elements have been presented, a table is provided below. It is a specific comparison between the [International Baccalaureate Organization](#) (IBO) that is associated here to a specific-vocation school and the ECEC.

	IBO	ECEC
Educational purpose	Developping world citizens from a cultural, linguistic and harmonious coexistence standpoint	Developping, from the youngest age, conscious entrepreneurship and an autonomous learning culture supporting the global health of students, educators and community stakeholders
Emphasis	International awareness and participation to the globalized society; facilitation of geographical mobility	Endogeneous and viable socioeconomic development in a globalized economy; fulfilment of the person in his/her community
Approach	4 distinctive programs (elementary years, middle years, diploma and career-related)	School-system (7 strategic axis, 21 structuring components)
Head office	Switzerland	Canada
Launching	Diploma program since 1968; middle years in 1994; primary years in 1997; career-related in 2012	Development since 1991, 1 st school in 1999
Number of schools (students) in 2014	3 930 (1 233 000)	127 (51 100)
Scale en 2014	147 countries	5 countries
Targeted group	From elementary to pre-university (from 3 to 19 years old)	From elementary to college, adult education
Type of impacted facilities	Half public institutions, half private institutions	Primarily public schools, some private schools
Selection	Criteria and selection exams, admission committee, elitist (in Quebec)	No selection, inclusive
Implementation process	Implementation in existing schools; a school obtains the status of a "IB World School" after an intensive two-year authorization process; regular process of follow-up and evaluations	Transformation of existing school or creation of new ones, transformational process in 3 years, with 2 additional years of consolidation; 5 accreditation levels
Learning programs	International specific programs offered are added to national programs; management of student's academic schedule	Personalized CELP highlighting the diversity in the school environment and aiming at generating a strong mobilisation; integration to the learning program of the country/province

Table 5: Comparison of IBO and ECEC

The IBO and the ECEC: two distinct educational approaches

It should be noted from the outset that the IBO and the ECEC do not have the same educational purpose: it has already been seen that the ECEC focusses on conscious entrepreneurship, whereas the IBO is explicitly oriented towards international education. It generally defines this orientation as the willingness to develop citizens of the world in relation to culture, language and learning to live together, which implies reinforcing student's sense of identity and cultural awareness, while allowing them to develop universal human values. Nevertheless, the IBO and the ECEC, as international educational organizations, target the same **clientele**. For this, the IBO offers four distinct programs, namely the Primary Years Program (PYP, from 3 to 12 years old, offered since 1997), the Middle Years Program (MYP, from 11 to 16 years old, offered since 1994), the Diploma Program, better known as the International Baccalaureate (from 16 to 19 years old, offered since 1968) and the recent Career-related Program (from 16 to 19 years old, offered since 2012). On the very extensive IBO website, it is stated that its uniqueness relies namely on its capacity to offer a **continuum of education**, through its four programs. This seems to be true only if a student attends an elementary school, then a high school and finally a college offering these programs, which is not guaranteed. The exact same thing can also be said about the ECEC. The IBO and the ECEC do not differ in this respect.

As shown in Table 5 above, **the scale of the IBO far exceeds the one of the ECEC**: 3 930 schools¹³ and 1 233 000 students impacted by the IBO in 147 countries, against 127 schools and 56 300 students for the ECEC in 5 countries. Two elements can provide explanations to these differences. Firstly, the IBO generally stands out as **a more mature organization than the OIECEC**. The IBO thus benefits from an experience that started in 1968, even if its elementary years and middle years programs were added more recently. This being said, if comparing the ECEC solely to the MYP that was developed by the IBO in the same time than the ECEC began to emerge (in 1994), the difference is striking: 1 094 high-schools currently offer the MYP, representing an average annual growth of more than 50 additional schools, over 20 years. **The planned development strategy of the IBO seems thus very effective**. It should be precised however, to qualify the comparison, that the determination to expand internationally (of the ECEC), through the IOECEC, only began in 2012. The comparative work should therefore be reiterated in a few years, so that the development strategy of the OIECEC, which is only in its early stage in terms of international expansion, can be adequately assessed. It will also be noted that the development strategy of the IBO and the ECEC are relatively similar since both are establishing partnerships with various public and private institutions.

The second element to take into account is that the IBO is not a full-fledged school-system and therefore can probably be more readily implemented. This does not suggest that the transformational process of the IBO is not rigorous or demanding. Instead, this process appears highly standardized and any institution cannot aim to become an "IB World School" so easily. Besides, after obtaining the certification, a follow-up and evaluation process of the school is implemented in order to ensure that the high standards of the IBO continue to be respected.

¹³ This number does not account for the implantation of the recently added career-related certificate that increases to 4909 the total of schools reached by the IBO. Those schools are under authorization and cannot deliver IBO diplomas.

The difference is rather that it is not the entire school that is required to undergo a transformational process. Indeed, **the IBO programs often only reach part of the school population**¹⁴, at least in Quebec, precisely those who chose the international orientation. It is therefore an educational stream, in this case – that operates in a given school. This distinguishes the approach with that of the ECEC that offers, on its part, a transformation of the institution as a whole. Such process is probably more complex to implement and also more likely to meet resistance insofar as it requires rallying progressively the entire educational staff of a school to the ECEC project.

It can also be noted that students attending the IBO schools have usually been subject to a selection, even for the elementary years program. Thus, students must not only present good academic results from the outset, but also succeed in “home-made” selection exams to prove their capabilities. **It is difficult not to notice the elitist orientation that was preferred by the Quebec schools to implant the IBO programs**¹⁵. IBO programs have moreover been developed predominantly in private schools, before reaching public or state-funded schools, to reach today’s parity at the international level. The ECEC is primarily implemented in public schools, which appear to be coherent with its inclusive vision. This being said, the very demanding character of the IBO program can probably justify the students’ selection process. Indeed, these programs do not replace national standards and programs, but are added to them. In other words, students committed to an IBO program must not only succeed in national exams, but also in those of the IBO (standardized at the international level). In this respect, the students’ academic schedule goes through a special reorganization so that school subjects of both the national program and the IBO program can be covered.

Pedagogically, **research is at the heart of IBO methods**. Research situations are for the most part imposed to students in order to cover the topics that have to be addressed. These research situations are framed within a general question and must be linked to key concepts, related concepts, real-world contexts/transdisciplinary themes (previously called areas of interaction), as well as to specific objectives of subject groups that are part of the IBO program. This approach is coherent with the IBO internationalization mission that places research, knowledge and international sensibilization at the heart of its practices. However, it differentiates itself from the ECEC that favors action and reflection projects emerging from needs that are ideally identified by students themselves. The group will then be brought to imagine a project that will be used, at the same time, to structure the identity of students, to address the content of educational programs and to organize reflection time aimed at developing the conscience of students.

14 In order to become a « IB World School » at the elementary level, the international program must reach the entire school institution. In smaller high-schools, it can also be the case that all students are impacted. However in Quebec, the international program is more widely implemented at the secondary level and represents generally an educational stream.

15 The enthusiasm of Quebec schools for the IBO programs is such that an association, the IB World School Society of Quebec and the French-speaking countries (in French *Société des écoles du monde du Baccalauréat international du Québec et de la Francophonie*, SÉBIQ), networks all of the Quebec international schools in addition to overseeing a hundred school elsewhere in Canada and elsewhere in French-speaking countries. One may think that the Quebec development model therefore extends to the Francophonie, which is also the main target of the IOECEC up to now. It should be noted that the selection process is not an IBO prescription ensuring that its programs be generally available to a diverse clientele. This remark refers precisely to the case of Quebec.

If looked at from the perspective of relative costs, the two compared initiatives are differentiated once more. *Table 6* below provides a comparative financial scenario on the basis of available information on the respective website of the two compared initiatives. In the case of the IBO, it is assumed that the school has already received its authorization to deliver the IBO program since the costs related to the accreditation process are not communicated¹⁶. The calculation associated to the IBO relates therefore to a fictional high-school that delivers the MYP (10 330 CAD), to 300 students¹⁷ (300 x 80 CAD) and moderates 5 school subjects (5 x 825 CAD). These costs do not include the fee-based mandatory training for the educational staff, nor the cost of the diplomas granted at the end of the program. In the case of the ECEC, the most expensive formula leading to a full accreditation of an elementary or high-school was taken. The training of educational staff for the first five years is included in the amounts mentioned. The fees to be paid as of year 6 are for the yearly membership to OIECEC. **The total cost of the IBO over 10 years is considerably higher than that of the OIECEC; ie more than triple.** The most notable difference is mainly due to the fact that the amounts required for the IBO remain constant over time, whereas those to pay to the ECEC are greatly reduced once the accreditation is obtained. These numbers give an order of magnitude, but are nonetheless to be taken with caution insofar as the two initiatives do not announce all of the service fees on their Websites.

	IBO's Middle Years Program	"Accreditation" formula of the OIECEC (days of support)
Year 1	38 455	25 000 (14)
Year 2	38 455	25 000 (14)
Year 3	38 455	25 000 (14)
Year 4	38 455	15 000 (8)
Year 5	38 455	15 000 (8)
Year 6	38 455	2 500 (1/2)
Year 7	38 455	2 500 (1/2)
Year 8	38 455	2 500 (1/2)
Year 9	38 455	2 500 (1/2)
Year 10	38 455	2 500 (1/2)
Total	384 550	117 500

Table 6: Financial scenario over 10 years IBO/OIECEC (in CAD)

16 The fees paid by a school during its authorization process to become an « IB World School » are probably less than those paid once the accreditation is obtained. Indeed, during the accreditation (ie, 2 to 5 years), no IBO degree can be conferred to students. It is the reason why the cost of diplomas has not been included in the financial scenario.

17 This number represents the average impact claimed by the IBO, that is 1 233 000 students impacted in 3 930 schools. It represents 10 classes of 30 students per impacted school facility.

Ultimately, **none of the two compared initiatives, the IBO and the ECEC, stand out significantly from one another.** Both take different approaches: the IBO gets implemented by means of one of its four programs, while the ECEC offers first and foremost a change of the school's architecture and philosophy. The impact of the IBO is greater than that of the ECEC. Its experience and its reputation of excellence also stand out as assets. Nevertheless, from Quebec's viewpoint, the IBO approach appears more exclusive, with regard to student selection, to the use of educational streams and to the costs associated with the implementation of its programs.

3rd comparison perspective: entrepreneurship-focussed initiatives

As noticed earlier in the text, there seems to be, according to our research, no school-system other than the ECEC that is explicitly based on an educational philosophy of entrepreneurship, nor on the even more original notion of conscious entrepreneurial education. The majority of the identified initiatives related to entrepreneurship (see *Appendix 2*) represent in fact ad hoc programs rather than school-systems¹⁸. Moreover, the scope of these initiatives generally comes down to offering students experiences that are relatively limited in time. One conclusion can already be drawn from this difficulty to find initiatives comparable to the ECEC: if, as was seen, calls for the development of entrepreneurship in educational setting have been increasing and intensifying across the world for several years, or if educational entrepreneurship arises as a global challenge to education, the fact remains that there is few or no global responses for it. **The ECEC, and its school model, therefore stands as a leading global player in the development of educational entrepreneurship.** It will be seen further that two initiatives can nonetheless be compared to the ECEC, namely the **Quebec Network of Entrepreneurial and Environmental Schools**, in Quebec, and **Junior Achievement**, at the international level.

This being said, if all the identified initiatives explicitly focussing on entrepreneurship are taken into consideration, disregarding the systemic dimension of the ECEC, it is possible to compare them from the perspective of the education goal that they advocate. In this respect, **three main educational visions linked to the introduction of entrepreneurship in education** are distinguished (Breen, 2004), which themselves resonate with the key-competencies in entrepreneurship presented above (Davis, 2002). The first vision considers entrepreneurship as academic content and aims to teach students notions related to the economic and business world, in order for them to better understand what is implied when the notion of entrepreneurship is evoked. This refers to **education about enterprise** (or entrepreneurship education). A second vision considers entrepreneurship in its professional orientation dimension and seeks to develop among students the skills necessary to create and manage businesses, in order to train future entrepreneurs. This refers to **education for enterprise** (or small business education). These first two visions are closely linked. A third vision considers entrepreneurship as a teaching and learning tool and intends to help students acquiring innovative and entrepreneurial qualities for life in general. This refers to **education through enterprise** (or enterprise/entrepreneurial education). (For a complete synthesis, see Pepin, 2011b). These different visions together with their respective and distinct educational finalities are summarized in *Figure 3*.

¹⁸ Results of the recent call to participation of the OECD, within its *Entrepreneurship 360* program, show several European initiatives whose main language is different than the ones used as part of this review: <http://www.oecd.org/site/entrepreneurship360/home/articles/callforcasesstudiesresults.htm>. Initiatives similar to the ECEC are found there, like *Entrepreasium* (Netherlands) that promotes social entrepreneurship.

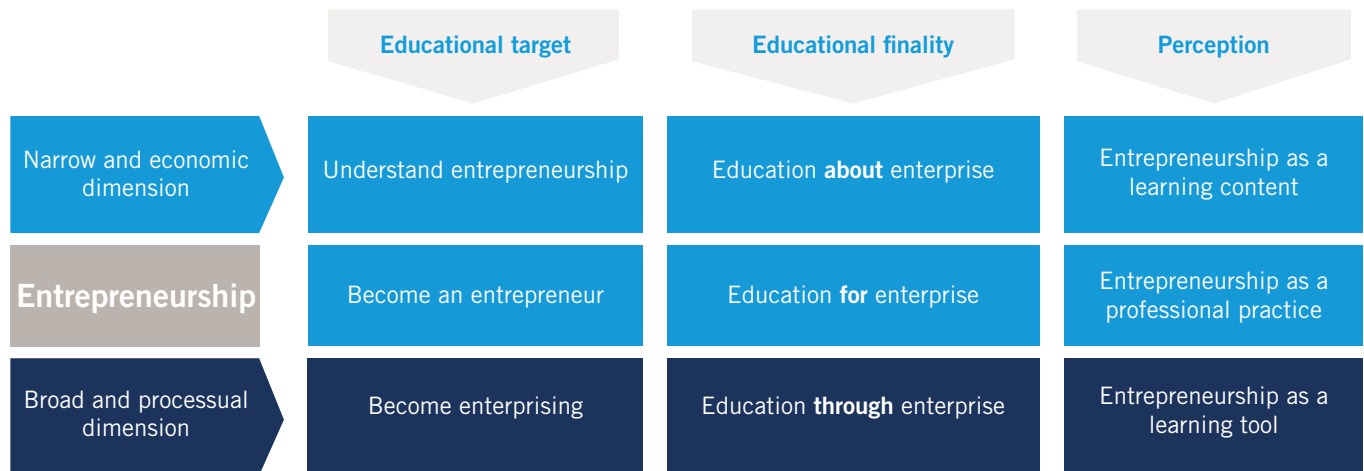


Figure 3: Educational finalities in entrepreneurial education

It would be tedious to offer a comprehensive classification of all identified entrepreneurship-focused initiatives, but it can be noted that they are distributed between the three presented visions. To take only examples from the Quebec context, **Ekomini** and **BIM** are two initiatives that intend to teach notions of financial literacy to students, namely through concepts of saving, spending, income, money, gain, budget planning, barter and scarcity. **Jeune Coop**, **Academos**, **Explonaria** and also **Bungee** are part of a perspective of professional orientation aiming towards the exploration of career choices and the development of useful business creation and management skills. **Presque Héros**, **Passe à Go** and **Vitamine E** focus on the development of entrepreneurial characteristics in students but from a wider perspective. The ECEC fits primarily in this third vision, namely the desire to prepare more enterprising individuals in all aspects of life. The possible emergence of future and more conscious entrepreneurs only stands as a secondary resulting effect. As seen earlier in the text, society needs citizens that are more enterprising, proactive and conscious, since the businesses of today rely on more enterprising, flexible and innovative employees. **Targeting solely the training of entrepreneurs would be limitative since the ECEC intends to reach a large audience.**

In regard to its entrepreneurial dimension, the ECEC is again part of a trend that promotes entrepreneurship in various dimensions. This being said, if most of the identified entrepreneurship-focused initiatives have, as the ECEC, the aspiration to be replicable, they are short-term initiatives, to be experienced only once and with a limited scope in that they only reach some groups instead of schools in their entirety. In fact, these initiatives could all be integrated and experienced within the ECEC framework. Therefore, **the ECEC is likely to become a strategic and governing framework** between all stakeholders of the community around the school, thus allowing other existing initiatives: 1) to find a strategic legitimacy within the context of the ECEC and 2) to better succeed with their implementation, insofar as the ECEC provides a suitable systemic, organizational and human framework. It should be noted nonetheless that the educational philosophy of the ECEC is comparable to the Australian **enterprising education** movement (Kearney, 2009) that promotes exactly the same educational vision and relies on the same kind of pedagogical practices. Nevertheless, in spite of its great interest, the movement does not represent, according to our research, a program or a school-system that could be compared in terms of scope or impact in schools. **Once more, the ECEC stands out for its systemic organization.**

The RQEEE and the ECEC: two distinct approaches, organizations and support methods

At the Quebec level, the initiative that is most comparable to the ECEC is the **Réseau québécois des écoles entrepreneuriales et environnementales** (RQEEE) (Quebec Network of Entrepreneurial and Environmental Schools). This network has been in operation since 1999 and could expand with public funding of the Youth Entrepreneurship Challenge (in French *Défi de l'entrepreneuriat jeunesse*), under the umbrella of the Secrétariat de la jeunesse (2004). The RQEEE has slightly less than one hundred member schools in its network across the province of Quebec, mainly at the elementary level (80 schools involving about 15 000 students), but also at the secondary level (14 schools totalizing about 6 800 students impacted by the RQEEE¹⁹). The distinctive feature of the RQEEE, which brings it closer to the ECEC, although the terms that are used vary, is to promote **responsible entrepreneurship**²⁰ implying to consider interaction between environment, the economy, society and ethics in a general perspective of sustainable development. **Micro-pulp mill** – a student micro-business that seeks to recover scrap paper in classrooms and transform it into finished products made of recycled paper to be sold (Pepin, 2009, 2011a) – is moreover a good synthesis of the entrepreneurial and environmental philosophy of the RQEEE. Until 2009, schools that were becoming RQEEE members mandatorily had to establish a micro-pulp mill, which is not the case today. Like several entrepreneurship-focussed initiatives in Quebec, the RQEEE aims to develop a set of enterprising characteristics²¹ in students, which are also represented as part of the ECEC exit profile.

According to published information, **the support offered to RQEEE members is awareness**. The training offered by the RQEEE is however barely documented on its Website. When they join, school teams (teachers, principals, other staff) receive a one-day training: one-half focussing on entrepreneurship, and the other half focussing on sustainable development²². Once a school becomes a member of the RQEEE, the support is essentially carried out through two yearly events, the fall meetings and the annual conference of the RQEEE, the last one (2014) having been organized jointly with OIECEC. The participation of RQEEE schools to these activities is however voluntary, as is the ECECs participation in the OIECEC international annual conference. For further comparative purpose, **the OIECEC offers three distinct development and support options** to sustain the transformational process of a school into an ECEC. The training days mentioned are offered to the entire educational staff of a school: 1) the “school” option spans from 5 to 7 years and leads to a partial accreditation. It gives right to a maximum of 20 training days; 2) the “progressive” option spans over 7 years and leads to an advanced accreditation. It yields a maximum of 42 training days and 3) the “accreditation” option spans over 5 years and leads to a complete accreditation. It yields 58 training days. Once the chosen option is implemented, ECEC may cover the cost of adding structuring components, on a personalized basis, and benefit moreover from a half-day remote support.

19 The RQEEE development at the secondary level took place as of early as 2011, through funding linked to the Quebec entrepreneurship strategy. At this level, all students of a member school are not impacted by the RQEEE vision that relies on educational profiles and concentrations..

20 It is to be noted that the cofounder of OIECEC, Rino Levesque, was previously, among other positions, advisor to the RQEEE general director, at a time during which the RQEEE was promoting conscious entrepreneurship, before orienting its mandate on responsible entrepreneurship. During those years, the ECEC philosophy and structure exerted an influence on the general discourse of the RQEEE and the support method offered to schools, especially at the secondary level.

21 Enterprising characteristics advocated by the RQEEE are represented by a card game, the Brave Superheroes, around which the RQEEE member schools develop their own animations.

22 This is true for the majority of RQEEE elementary schools whose membership was funded by the Youth Entrepreneurship Challenge. Secondary schools that became RQEEE members as of 2011 benefited of some additional coaching days. It should be noted that several of those secondary schools are also ECECs. A ECEC can indeed also be a RQEEE member. In this case, the school benefits from one of the development and support options offered by the OIECEC.

Since the implementation of a micro-pulp mill in a school that becomes a RQEEE member is no longer mandatory, no pedagogical approach seems to have been formally offered by the RQEEE. According to our research, RQEEE member schools are not required to implement a minimal number of activities or programs to ensure the dynamism and sustainability of their schools' entrepreneurial and environmental mission. Within the RQEEE, it is more the leadership of the school's administration that will influence the membership level of the educational staff, and consequently, the intensity of the school's entrepreneurial and environmental development. Coherently with this vision, the RQEEE uses associate leaders that are teachers sharing with the direction the responsibility of developing an entrepreneurial and environmental culture in their school. Among these, some are also regional associate leaders, who act as resources for other RQEEE member schools at the regional level. A similar approach can be found with the ECEC, in relation to structuring component 7.1 that deals with a shared mobilizing leadership (see Appendix 1). In continuity, the RQEEE created a virtual community aimed at enabling teachers throughout the province to exchange and discuss their practices. According to the available information, this service is not particularly active. It should also be noted that such networking strategy is also undergoing development within the OIECEC, as the management of distance between ECEC worldwide is a major challenge.

Ultimately, The RQEEE school insertion approach appears to be **distinct from ECEC and its school-architecture**, whose purpose is to ensure that the conscious entrepreneurial philosophy is sustainably implemented in a school that becomes an ECEC. Without taking value from the RQEEE who, in Quebec, played a key pioneering role in the communication and acceptance of a the entrepreneurial culture in school setting, **the ECEC approach stands out as being more developed**, through its pedagogical architecture and its support offering to schools. Nevertheless, as was mentioned, the educational philosophy of both initiatives is comparable to some extent. It should also be noted that the RQEEE is a network exclusive to public and French-speaking schools in Quebec and thereby does not display any international ambition, which also differentiates it from the ECEC, in that reaches both private and public schools, in Quebec and internationally, in French, English and Spanish. *Table 7* below, provides a comparative summary of two initiatives.

JA and ECEC: two distinct entrepreneurial philosophies

At the international level, only the world federation Junior Achievement Worldwide (JA) – and its local branches (Junior Achievement-Young Enterprise (JA-YE), in Europe; Les Jeunes Entreprises du Québec; Junior Achievement Canada, etc.) – appears to be an initiative comparable to the ECEC. In both cases, it is about international initiatives that stand out as global responses to calls for the introduction of more entrepreneurship in schools. Global responses do not mean indifference to national specificities: the ECEC, as well as JA, are two initiatives sufficiently coherent to offer generic models, while sufficiently flexible to adapt them to the contexts in which they are implemented. Founded in 1919 (Francomano, Lavitt & Lavitt, 1988), JA benefits from a much longer experience than the ECEC. Furthermore, JA is implemented in 121 countries, supported by 400 000 volunteers and it reaches 10.2 million students worldwide, mostly at the late high-school and postsecondary levels (JA Worldwide, 2013). **These numbers exceed considerably the international impact of the ECEC.**

Just like the ECEC, JA bases its approach on the use of student micro-businesses (Pepin, 2011a). In this regard, JA and the ECEC fit into a general trend that is confirmed in all entrepreneurship-focused initiatives, that is that **they are all systematically based on an hands-on approach** (practical or active), through action projects, micro-businesses or even business modeling, with a willingness to develop the power to act of students, by empowering them to action, to making a difference at the local and/or global scale (the name of other identified initiatives is explicit about it: **Design for Change, Everyone a Changemaker**, etc.). This being, **within the ECEC, the micro-businesses only represent a pedagogical tool among several others** to organize education around the conscious entrepreneurship philosophy. Besides, the educational purpose of micro-businesses differs between JA and the ECEC. JA intends to develop knowledge about entrepreneurship as well as business creation and management skills in students. It seeks to raise the entrepreneurial intentions of youth, in the prospect of training future entrepreneurs; where it was seen that the ECEC, through its exit profile, primarily seeks to develop more enterprising individuals for life in general.

One can therefore understand that the micro-business, as a pedagogical strategy, can be operated differently (Pepin, 2011a), either from a narrow conception by addressing notions related to economics and by developing creation and business management skills (like with JA), either from a broad conception (like with the ECEC). In an ECEC, it is planned that the entrepreneurial activities be conducted according to an **integrated approach** that includes at least two important expected benefits. On one hand, a school sets its general orientations, by means of the CELP, ensuring the coherence of activities lived by students. On the other hand, it is expected that the activities, in addition to contributing to the development of students' exit profile, integrate learning of academic nature (school subjects) and develop the conscience of each student about the activity and the impact of the privileged orientations on him/herself, others, the environment and the society in general. **Integration of school subjects and development of students' conscience constitute thereby two distinctive features of the ECEC.**

One further important difference is that JA does not represent a school-system with a transformative purpose: instead it is about offering to varied school groups a business experience of miniature scale, from its creation to its liquidation by year-end (Lewis & Massey, 2003), along a well rounded process. JA is moreover a program implemented by dedicated teachers and students' participation in a JA experience usually occurs only once and on a voluntary basis (Champy-Re-moussenard, 2014). This allows highlighting a distinctive feature of the ECEC: within it, students are brought **to experience entrepreneurial activities regularly and during their entire schooling**. Yet, one can think that in order to be developed, the components of the ECEC's exit profile must be regularly worked on in the long-term.

	RQEEE	ECEC
Launch	1999	Development since 1991; 1 st school in 1999
Number of schools ²³ (students) in 2014	94 (21 800)	127 (51 100)
Targeted public	Quebec public schools, elementary and secondary	Private or public schools, from elementary to professional, in Quebec and internationally
Languages used	French	Mainly French, English, Spanish
Philosophy	Responsible entrepreneurship since 2014; policy on sustainable development	Conscious entrepreneurship since 2001; viable development; school-community ecosystem
Membership	Membership to a school network	Implementation of a school architecture and membership to a school network
Structuration	Historically: mandatory implementation of a micro-pulp mill from 1999 to 2009; no formal pedagogical approach	Compulsory implementation of 12 of the 21 structuring components of the school architecture for a minimum accreditation, pedagogical and educational approach in conscious entrepreneurship (PEACE)
Development	Public funding linked to the Youth Entrepreneurship Challenge, then to the Quebec Entrepreneurship Strategy until April 2015. Some private fundings	Various funding partnership strategies (public or private)
Transformational process	Awareness from the school educational staff	School transformation and training of educational staff, as well as of community partners
Method of support	1 training day upon accession; as of 2013, 1 to 2 hours training for school directions/principals; as of 2014, a training offer between half and 3 training days is proposed only to new member schools	Between 20 and 58 coaching days spread over 5 to 7 years, according to the chosen support option
Other activities	Fall meetings and annual conference	Annual conference; celebration of success stories in conscious entrepreneurship in each ECEC

Table 7: Comparison of RQEEE and ECEC

²³ It should be stated that, on the 94 RQEEE member schools, 15 are also ECEC, including 4 secondary schools and 11 elementary schools, totalling about 10 000 students. These schools are therefore accounted for in both columns.

Within JA, micro-business activities are added to the general curriculum of students, which results in activities taking place during lunchtime or after school. In an ECEC, entrepreneurial activities are primarily organized **during school hours or along a scheduled extracurricular organization** and are part of the regular pedagogical situations to experiment while studying. All students are therefore invited to get involved each year in entrepreneurial activities. Furthermore, it can be stated that within JA, national and international competitions take place to reward micro-businesses that are considered to be the most successful and efficient. In the ECEC, the focus is rather set on local recognition of all activities during the annual celebration of success stories in conscious entrepreneurship. In the end, it remains difficult to compare the ECEC and JA to the extent that the two initiatives are based on distinct entrepreneurial philosophies and do not intend to reach the same education goals. Whereas the impact of JA ultimately remains significantly higher than the one of the ECEC, this comparative work allowed emphasizing some distinctive features of the ECEC, presented in *Table 8* below.

	JA	ECEC
General conception	Narrow and economic conception of entrepreneurship	Broad conception of entrepreneurship based on processes
Targeted public	14-25 years old	From elementary to college, adult education
Approach	Implemented in a classroom by a volunteer teacher	Implemented in a school: all the educational staff as well as several community partners are involved
Pedagogical driving force/vehicle	Student micro-businesses	Student micro-businesses, action and reflection projects, experiential activities
Frequency	Experienced once	Entrepreneurial activities experienced each year and along the entire schooling
Organization	Lunchtime/out-of-school	School hours/extracurricular
Students reached	Volunteer students	All students
Exploitation of the micro-businesses	Developing knowledge in entrepreneurship; developing business creation and management skills; improving the entrepreneurial intention of youth	Integrated approach: exploitation along a pedagogical perspective (integration of school subjects) and critical perspective (reflexivity leading to the development of conscience)
Recognition	National and international competition to reward most successful student micro-businesses	Local recognition of all entrepreneurial activities through the celebrations of success stories in conscious entrepreneurship

Table 8: Comparison of JA and ECEC approaches

CONCLUSION AND HIGHLIGHTS

In this report, we drew the context in which the ECEC finds its relevance, namely and essentially the challenges of the 21st century, whose primary one is, for the ECEC and with the support of Brown (2011, undated), the elevation of the consciousness level of individuals and organizations to bend towards the endogenous and viable triple sustainability of communities (i.e. economical, societal and environmental). We also presented the answer expected from the world of education faced with these challenges, through the development of 21st century skills, including entrepreneurship, which stands at the heart of the ECEC in its conscious dimension.

To answer the basic mandate – positioning the ECEC in an international panorama and determining its specificities– we identified approximately sixty initiatives across the world and took three complementary comparative perspectives to compare the ECEC with all of them. In its three dimensions (systemic, entrepreneurial and pedagogical) considered in isolation, we concluded temporarily that the ECEC fits invariably in worldwide trends and is thus comparable to other initiatives. These comparisons also allowed us to **highlight some distinctive elements of the ECEC** that can be summarized as follows:

- In its systemic dimension, the flexibility offered by the Conscious Entrepreneurship Learning Program (CELP), through personalization, allows the ECEC to set its action coherently with the challenges and realities of the communities in which it is implemented;
- This CELP aims moreover to generate a double-way mobilisation between the school and its community: students embed their projects in local needs and the community contributes to the education of students and the success of activities;
- All students are included in the ECEC, regardless of their academic or behavioural situation, or of their cultural and socioeconomic origin;
- Within an ECEC, students are invited to regularly experience, over the course of their entire schooling and according to a coherent approach, entrepreneurial activities that aim to contribute to the development of the targeted exit profile;
- Within an ECEC, it is expected that entrepreneurial activities taking place be operated from a pedagogical perspective, by integrating school subjects, and from a reflexive perspective, by using action and experience as a platform for student's reflexivity with the ultimate goal of developing conscience.

Beyond these distinctive features, it is indeed **in the synthesis of its triple dimension, systemic, entrepreneurial and pedagogical that the ECEC finds its distinctiveness**: at the end of this comparison work, there is arguably nothing comparable to the ECEC that presents these three characteristics simultaneously. Furthermore, if the ECEC fits very well in a trend that seeks to empower students, which is a general characteristic of entrepreneurship-focussed programs, **the ECEC explicitly emphasizes the necessity to develop the conscience of students, in a viable, sustainable and interdependent manner between communities, at the economic, social and environmental levels**. For the ECEC, the point is not then to empower individuals in any direction, nor it is to train entrepreneurs exclusively interested by profit, but it is about raising the conscience of each and everyone – citizens, decision-makers, workers, managers, entrepreneurs, leaders – in the perspective of a viable and interdependent collective growth.

All of these developments lead to offer, as a general conclusion to this work, a figure, representing a target, which seems to encompass both the contributions of this report and the vision of the ECEC to transform the school. The centre of the target is the most general and fundamental goal of the ECEC. Further away from the target, the goal becomes more specific and its scope is reduced, but it also becomes more likely to obtain an adhesion from a higher number in the project of changing the school:

- At its simplest form, in the circle furthest away from the target, there is the organization of the school around a **federative pedagogical project**, aimed at empowering students and at developing their conscience as well as that of educators surrounding them;
- At the second level, it is the systemic dimension of the ECEC that is expressed through a **school-architecture** that aims to transform the school from the inside;
- At the third level, there is a two-way community mobilization aimed at creating a **school-community ecosystem**;
- At the fourth level, the heart of the target, there is nothing less than a **societal project** brought by the ECEC for a triple sustainability, which involve the training of engaged and responsible citizens.

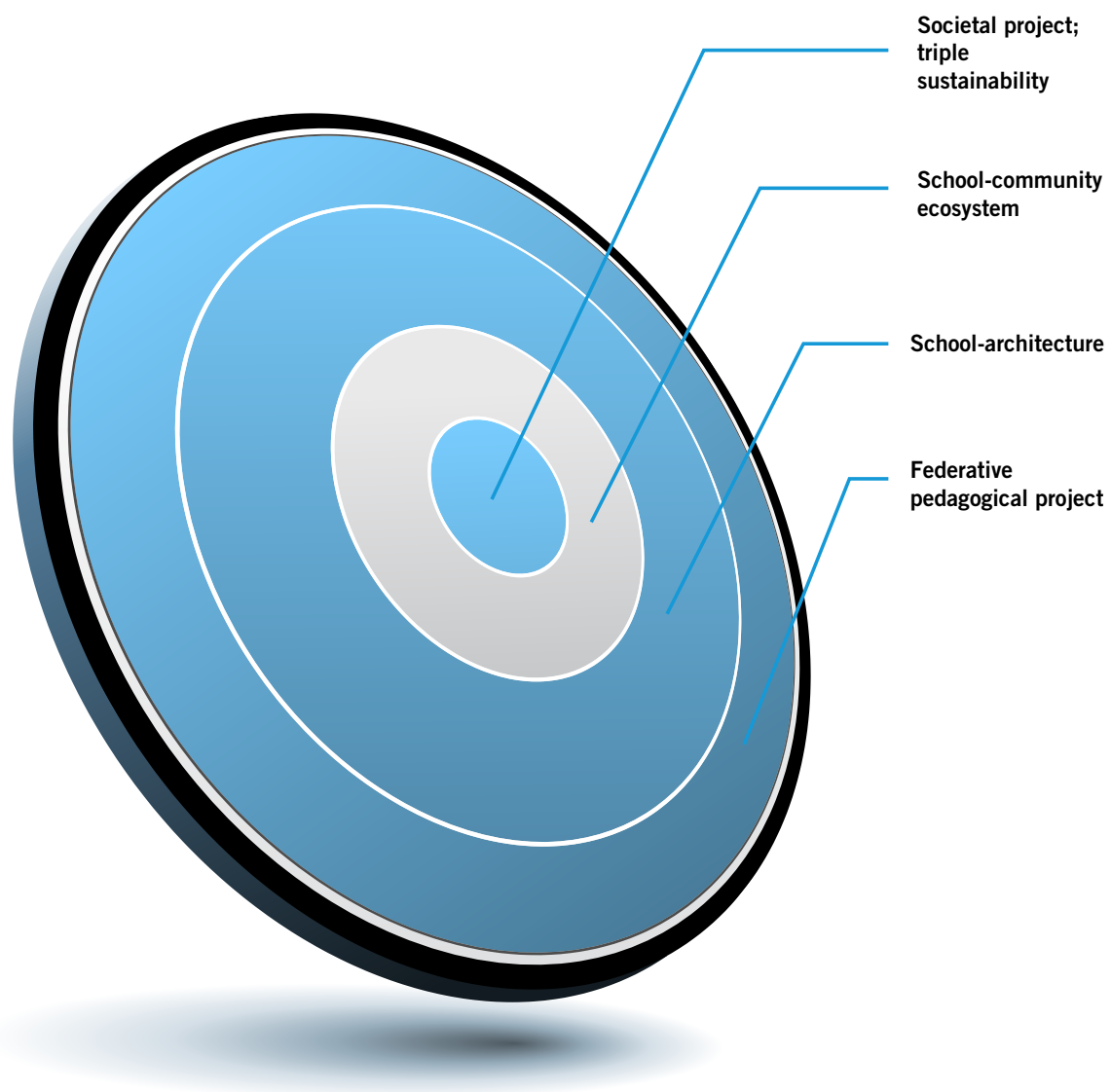


Figure 4: Operational targets of the ECEC

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APPENDIX 1: SCHOOL ARCHITECTURE OF THE ECEC

*7 strategic axis, 21 mandatory or optional structuring components**

Strategic axis 1: Structural base

SC 1.1: Culture, language and community

Strategic axis 2: Learning framework

SC 2.1: Philosophy of conscious entrepreneurship

SC 2.2: Conscious Entrepreneurship Learning Program (CELP) ²⁴

SC 2.3: Pedagogical and Educational Approach in Conscious Entrepreneurship (PEACE)

SC 2.4: Reflection activities, action projects and student micro-businesses in conscious entrepreneurship

SC 2.5: Micro-chamber of commerce for conscious entrepreneurs and enterprising youth

SC 2.6: Self-guided entrepreneurial education formula)

SC 2.7: Entrepreneurial learning portfolio

SC 2.8: Information technologies (IT)

SC 2.9: Micro investment bank (micro funding) for conscious entrepreneurship projects*

Strategic axis 3: Quality learning

SC 3.1: Ongoing follow-up system to monitor learner's progress

SC 3.2: Skills plus – educating, socializing, qualifying

Strategic axis 4: Global health of the child

SC 4.1: Health plan and facilitated sport and health activities

SC 4.2: Healthy and safe environment

Strategic axis 5: School-family-community partnership

SC 5.1: Communication between school-family-community

SC 5.2: Supportive community structure

SC 5.3: Supplementary community services

Strategic axis 6: Recognition and celebration of success stories

SC 6.1: Celebration of success stories in conscious entrepreneurship

SC 6.2: Educational marketing and recognition

Strategic axis 7: Shared mobilizing leadership and school progress monitoring

SC 7.1: Shared mobilizing leadership

SC 7.2: School progress monitoring

²⁴ A CELP includes 4 to 7 pillars whose role is to guide the conscious entrepreneurship pedagogy of a school and to spark the discovery of wealth in the school life environment. Through the CELP, the ECEC intends to construct students' identity through a constant relation between school and life environment. The CELP represents, ultimately, a tool contributing to the socio-economical diversification of a community-region, in the perspective of a viable and sustainable development.

APPENDIX 2: NON-COMPREHENSIVE SURVEY AND LOCALIZATION OF INITIATIVES FOR COMPARISON

L'ENTREPRENEURIAT ÉDUCATIF SUR LA PLANÈTE

RECENSION NON EXHAUSTIVE ET LOCALISATION D'INITIATIVES AUX FINS DE COMPARAISON



APPENDIX 2: LISTING AND NUMBERS OF IDENTIFIED INITIATIVES

NORTH AMERICA

Canada

Province of Quebec

- 1) Recherche-action pour la résolution de problèmes communautaire (RA : RPC)
www.claudepoudrier.com
- 2) Concours québécois en entrepreneuriat <http://www.concours-entrepreneur.org/>
- 3) Le Voyage de Célestine http://www.voyagecelestine.com/crbst_3.html
- 4) Trousse Vitamine E <http://www.vitaminee.net/francais/Trousse.html>
- 5) Presque Héros <http://www.presqueheros.com>
- 6) Ékomini <http://ekomini.com/fr>
- 7) BIM <http://bimenligne.qc.ca/fr/fgj/Pages/LitteratieFinanciere.aspx>
- 8) Academos <http://www.academos.qc.ca/>
- 9) Aventure entrepreneuriale <http://www.aventureentrepreneuriale.com>
- 10) Jeunes coop <http://www.coopquebec.coop/fr/jeune-coop.aspx>
- 11) Coopérative jeunesse de service <http://www.coopquebec.coop/fr/cooperatives-jeunesse.aspx>
- 12) Caravane Coop <http://www.coopquebec.coop/fr/caravan-coop.aspx>
- 13) Coopérer pour apprendre et entreprendre <http://www.evb.lacsq.org/actualites/nouvelle/news/trousse-pedagogique-cooperer-pour-apprendre-et-entreprendre/6/>
- 14) Passe à Go <http://www.passeago.com/>
- 15) Explonaria & Anna Desidées et les animaux aux valeurs entrepreneuriales <http://cjesag.qc.ca/page/ateliers-en-milieu-scolaire#.VBBuPEswKdI>
- 16) Entreprends ton savoir <http://www.entreprendstonsavoir.com/#/accueil/>
- 17) L'économie sociale, c'est entreprendre autrement <http://www.economiesocialejeunesse.ca/Outils-pour-intervenants>
- 18) Entreprendre sa vie en Mauricie http://www.csenergie.qc.ca/doc_uploads/csenergie/documents/en-seignement-prescolaire-et-primaire/documentation/entrepreneuriat/Entreprendre%20sa%20vie%20en%20Mauricie.pdf
- 19) Entreprends-toi : le mode d'emploi <http://rcjeq.org/entreprends-toi/>
- 20) Bungee <http://www.jentreprends.ca/bungee/>
- 21) Centre d'apprentissage et de formation en entrepreneuriat <http://www2.csenergie.qc.ca/Entrepreneuriat/Intervenants/>
- 22) Réseau québécois des écoles entrepreneuriales et environnementales <http://www.rqeee.qc.ca/>

Province of New Brunswick

- 23) Brilliant Labs <http://labosbrillants.com>
- 24) Apprendre et entreprendre <http://www.apprendreetentreprendre.ca> (modèle de l'école communautaire entrepreneuriale du Nouveau-Brunswick).

Province of Ontario

25) Apprenez à être un entrepreneur <http://www.ontario.ca/fr/affaires-et-economie/apprenez-etre-un-entrepreneur-ressources-pour-les-etudiants>

United States

26) Junior Achievement Worldwide <https://www.jaworldwide.org>

27) Start it up! <http://www.nfte.com>

28) Changemakers Schools <http://startempathy.org/about/changemaker-schools>

29) Expeditionary Learning Schools <http://elschools.org/>

30) The leader in Me <http://www.theleaderinme.org/>

31) All Terrain Brain <http://www.allterrainbrain.org/>

32) Entrepreneurs in Action (middle school) <http://www.theeia.com/>

33) Tinkering School (summer school) <http://www.tinkeringschool.com>

SOUTH AMERICA

Peru

34) Alternate Education for Rural Development <http://www.wise-qatar.org/alternate-education-rural-development-peru-spain>

EUROPE

35) The Entrepreneurial School <http://theentrepreneurialschool.eu>

Switzerland

36) Organisation du baccalauréat international www.ibo.org/

Belgium

37) Capt'en <http://www.ichec-pme.be/capten/>

38) Tous des as <http://www.wallonie.be/fr/outils/tous-des-outils-et-formations-pour-enseignants>

39) Kid Attitude <http://as-e.be/outil/enseignant%20primaire/accompagner/Kid%20Attitude>

40) Notre commune http://www.lesjeunesentreprises.be/index.php?option=com_content&view=section&layout=blog&id=14&Itemid=78

41) J'entreprends@school http://www.boostyourtalent.be/?page=programme&id_article=32&id_rubrique=16

42) Les jeunes entreprises <http://mini.lesjeunesentreprises.be/>

43) CreActive toi <http://www.heracles.be/>

44) Explor'ado <http://as-e.be/outil/enseignant%20secondaire/accompagner/Explor%27ado>

45) E = MC2 <http://planetemetiers.e-monsite.com/>

46) Dream <http://www.step2you.be/>

47) Boost your talent <http://www.boostyourtalent.be/>

France

- 48) Innovons et développons l'esprit d'entreprendre <http://idee.ac-lille.fr/>
- 49) Bâtisseurs de possibles <http://www.batisseursdepossibles.org/>
- 50) Mini-entreprise <http://www.entreprendre-pour-apprendre.fr/fr/nos-outils/mini-entreprise-epa.html>
- 51) Start-up programme <http://www.entreprendre-pour-apprendre.fr/fr/nos-outils/start-up-programme-epa.html>

United Kingdom

- 52) Enterprise Village <http://www.enterprisevillage.org.uk>
- 53) Enterprise Education <http://www.enterprise-education.co.uk>
- 54) Enabling Enterprise <http://enablingenterprise.org>
- 55) Studio School <http://www.studioschoolstrust.org/>
- 56) Enterprising You <http://www.enterprisingyou.co.uk>
- 57) Teach a Man to Fish <http://teachamantofish.org.uk/school-enterprise-challenge>
- 58) School 21 <http://school21.org/>
- 59) Everyone a Changemaker <http://uk.ashoka.org/everyone-changemaker>
- 60) Spice Academy <http://victoriaparkacademy.org.uk/about/spice-academy/>
- 61) Dragon School <http://www.dragonschool.org/the-school/welcome.html>

Scotland

- 62) Excellence in Education through Business Links <http://www.educationscotland.gov.uk/resources/e/eebl.asp?strReferringChannel=learningteachingandassessment&strReferringPageID=tcm:4-628701-64&class=l4+d139792>

Ireland

- 63) The Wow Factor http://www.rewardinglearning.org.uk/microsites_other/employability/documents/wow_factor/year_8/unit2.pdf

Finland

- 64) Me and my City <http://mycity-me.com/>

OCEANIA

Australia

- 65) Enterprising Education <http://www.enterprisingeducation.com/>
- 66) The Enterprising School <http://www.ejam.hu/sites/default/files/kepek/kepek/upload/1-Programok-tananyagok/JAM-tananyagok/5-szakmai-anyagok/Enterprising-school.pdf>

ASIA

India

- 67) Design for Change <http://www.dfeworld.com/>

APPENDIX 3: ALIGNMENT OF THE ECEC WITH 21st CENTURY SKILLS

This appendix to the comparative work undertaken in the review aims to more explicitly link the listed 21st century skills with the general approach of the ECEC: exit profile of students, strategic axis (SA) and structuring components (SC) of the school architecture showed in *Appendix 1*. This work relies on *Table 1* already presented in the text, as well as on a more substantiated document internal to the IOECEC produced in 2009 by Rino Levesque. The intention is to generally draw attention to the fact that 21st century skills are not sufficient in themselves insofar as it is also necessary to think towards a new school organization likely to support their development.

Key competences for lifelong learning (EU, 2006)	Framework for 21 st century learning (USA, 2009)	21 st century core competencies (OECD, 2009)	Conscious entrepreneurial community school (Levesque, 2011, 2013)
Communication in the mother tongue	Core Subjects (English, reading or language arts, World languages, Arts, Mathematics, Economics, Science, Geography, History)	Effective oral and written communication (strength in mother-tongue/multilingual asset)	<p>Strategic Axis 1; Strategic Axis 2, SC 2.3 and 2.4</p> <p>The first comparison perspective of this review reveals that the ECEC adopts the educational program of the country in which it gets implemented. In this regard, a school adopting the ECEC model relies on knowledge and academic competencies planned on the national curriculum. It was also seen in the third comparison perspective that the ECEC approach aims to use the experiential entrepreneurial activities from a pedagogical perspective, using the problems encountered during action to integrate knowledge and academic competencies in a meaningful way. This is supported by an integrated and interdisciplinary pedagogical approach. The challenge today is not to master a certain number of finite and heteroclite knowledge, but rather to know how to collect and analyze information according to the needs that emerge and how to use them competently during action. Languages and mathematics represent unavoidable learning to achieve this goal.</p>
Communication in foreign languages			
Mathematical competence and basic competences in science and technology			

Key competences for lifelong learning (EU, 2006)	Framework for 21 st century learning (USA, 2009)	21 st century core competencies (OECD, 2009)	Conscious entrepreneurial community school (Levesque, 2011, 2013)
Digital competence	Information, Media and Technology Skills (Information Literacy, Media Literacy, ICT Literacy)	Accessing and analyzing information, including digital information	<p>Strategic Axis, CS 2.8; Strategic Axis 6</p> <p>The SC 2.8 explicitly aims to put information technologies (IT) at the heart of activities experimented by students within an ECEC. It is an essential component of our broadly digital and mediatized societies. IT can be sought as part of activities experimented to gather information in order to identify a need, to prepare an action plan answering that need or to overcome a particular problem that emerges. More specifically, the use of IT is recommended to deploy the SC 6.2 aimed at enabling students to advertise and promote their entrepreneurial achievements, with support of social media and technological tools.</p>
Learning to learn	Learning Skills (Critical Thinking and Problem Solving, Communication and Collaboration)	Agility, adaptability, and capacity for lifelong learning Critical Thinking and Problem Solving	<p>Strategic Axis 2, SC 2.1 to 2.4; Strategic Axis 3</p> <p>Within an ECEC, students are brought to regular experience activities based on action and reflection. Reflection can be of a metacognitive nature (learning to learn), but can also serve to: 1) invent innovative solutions to the unusual problems encountered in the carrying out of activities, which involves using judgement and showing creative thinking and 2) to exercise critical judgement in order to constantly evaluate the consequences and impacts of decisions taken in the carrying out of activities on oneself, others, society and the environment. Furthermore, these reflection moments are taking place in groups, according to a democratic organization where everyone is invited to talk.</p> <p>Strategic axis 3 and its two structuring components aim to enable each student to build up traces of learning and success experienced during activities, particularly in the form of a portfolio where concrete demonstrations of the deployment of the ECEC exit profile components must be illustrated.</p>

Key competences for lifelong learning (EU, 2006)	Framework for 21 st century learning (USA, 2009)	21 st century core competencies (OECD, 2009)	Conscious entrepreneurial community school (Levesque, 2011, 2013)
Social and civic competences	Core Subject (Government and Civics) 21 st century interdisciplinary themes (Civic literacy)	Collaboration across networks	<p>Strategic Axis 2, SC 2.5; Strategic Axis 5; Strategic Axis 6</p> <p>The entrepreneurial activities experimented within an ECEC are always taking place in groups (class groups or open groups). In this sense, conducting activities requires students to learn how to collaborate in order to target together the achievement of the objective. Solidarity, team spirit, responsibility and sense of organization are moreover integral parts of the targeted exit profile.</p> <p>The micro-chamber of commerce for conscious entrepreneurs and enterprising youth (SC 2.5) seeks to put democracy and communication at the heart of managing of an ECEC enterprising life.</p> <p>Entrepreneurial activities involve that students bring innovative solutions to the problems and needs identified in their community, thus putting civic engagement at the heart of practices.</p> <p>Civic engagement can be understood in two ways insofar as strategic community partners are invited to collaborate and to participate in the education of students and in the success of their projects. The “community spirit” dimension of the ECEC represents a distinctive feature supported by strategic axis 5 and its structuring components.</p> <p>The culmination of social and civic competencies development and of collaboration between school and its community takes place during the celebrations of success stories in conscious entrepreneurship (SC 6.1) where students are invited to present to school and community members their achievements for which they are the most proud.</p>
Sense of initiative and entrepreneurship	Innovation Skills (Creativity and Innovation) 21 st century interdisciplinary themes (Financial, economic, business and entrepreneurial literacy)	Initiative and Entrepreneurialism	<p>Strategic Axis 2</p> <p>The exit profile of the ECEC is entirely directed towards three main competencies that are to empower oneself, to be entrepreneurial and to create innovation in a conscious, responsible and autonomous manner. This is achieved by making students play regularly and over the course of their entire schooling, the three roles of initiator, go-getter and project manager. According to the nature of the entrepreneurial activities implemented, key competencies in entrepreneurship (see Figures 2 and 3) more directly linked to the economical function of entrepreneurship (financial literacy and business world) can be exploited, although the ECEC puts a greater emphasis on the desire to train more enterprising students for life in general.</p>

Key competences for lifelong learning (EU, 2006)	Framework for 21 st century learning (USA, 2009)	21 st century core competencies (OECD, 2009)	Conscious entrepreneurial community school (Levesque, 2011, 2013)
Cultural awareness and expression	21 st century interdisciplinary themes (Global awareness, Health literacy, Environmental literacy)	-	<p>Strategic Axis 1; Strategic Axis 4</p> <p>Generally, the development of students' conscience is at the heart of the ECEC itself that promotes conscious entrepreneurship. As it was seen in the introduction, the educational philosophy of the ECEC is aimed at raising the level of consciousness of each and everyone in the perspective of a viable and sustainable development of individuals and communities, on a unique planet with limited resources. This is achieved through the Pedagogical and educational approach in conscious entrepreneurship (PEACE) that seeks to put critical reflection at the heart of entrepreneurial activities, which themselves rely on action (see also Figure 3). This critical reflexion leads students to evaluate the impact of their entrepreneurship mode on themselves, but also on others, society and the environment.</p> <p>The development of students' overall health is also an essential part of the strategic axis of the ECEC (see Appendix 1) Strategic axis 4 and its two structuring components (health plan and facilitated sport and health activities; healthy and safe environments) are thus aimed at including the learning of healthy habits at the heart of the ECEC practices, especially in relation with nutrition, the regular practice of physical activity and the reduction of stress. Some ECEC even include this aspect in their Conscious entrepreneurial learning program (CELP), as is the case with the Sports, Arts, Culture (SAC) and Entrepreneurship program of the École Coeur-Vaillant school.</p>

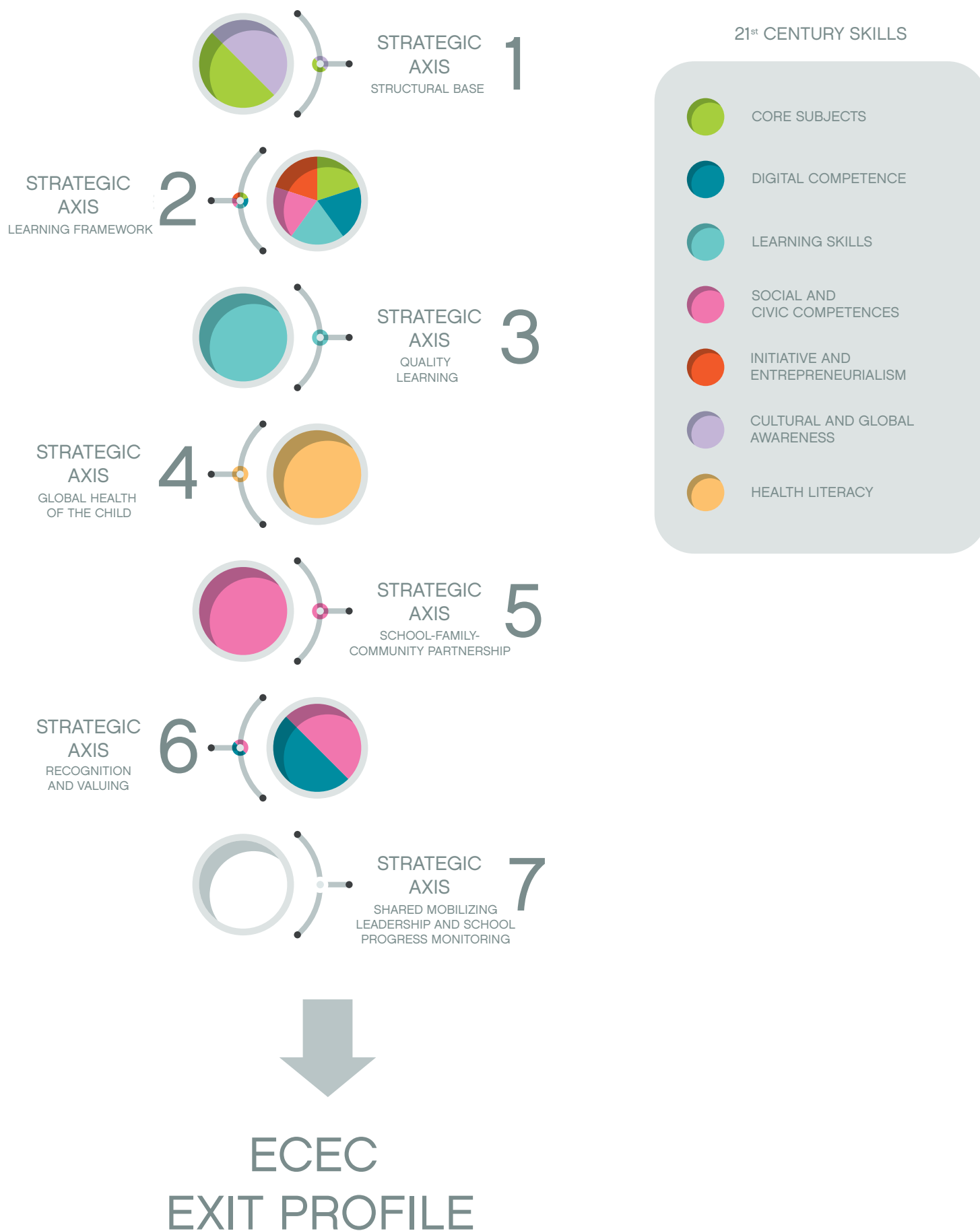


Figure 5: Parallels between the ECEC school-architecture and the 21st century skills

