บทความวิจัย

ทุนทางอารมณ์และประเด็นทางการศึกษา Emotional Capital and Education Issues

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บทคัดย่อ

งานด้านการศึกษาในสังคมตะวันตก อารมณ์ (emotions) มักไม่ได้รับความสนใจเท่าที่ควร จนกระทั่งแนวคิดด้านประสาทจิตวิทยา (neuropsychology) ได้เกิดขึ้นมา ส่งผลให้เกิดการปฏิเสธ ลัทธิแบบทวินิยม (cartesian body-mind dualism) ที่ว่าด้วยธรรมชาติของมนุษย์ซึ่งประกอบด้วย กายและจิต โดยแนวคิดด้านประสาทจิตวิทยาเห็นว่าคุณลักษณะด้านจิตพิสัย (affective domain) และ ด้านพฤติกรรม (conative domain) ไม่สามารถแยกออกจากพุทธิพิสัย (cognitive domain) ได้อีกต่อไป ในบทความนี้ผู้เขียนได้นำเสนอรูปแบบความคิดของทุนทางอารมณ์ (Emotional Capital: EK) ที่ได้พัฒนาขึ้นในปี 2004 ได้รับรางวัล Académie Française ในปี 2006 โดยให้ความหมาย ของทุนทางอารมณ์ว่าเป็น "ทรัพยากร (สมรรถนะทางอารมณ์) ที่ฝังอยู่ในตัวของบุคคล มีประโยชน์ สำหรับการพัฒนาตัวบุคคล อาชีพและองค์กร รวมทั้งมีส่วนร่วมในความผูกพันทางสังคมด้วย ผลตอบแทนที่ได้รับทั้งในส่วนบุคคล เศรษฐกิจและสังคม" ทุนทางอารมณ์เป็นทุนสำคัญสำหรับ ทุกคนและในด้านการศึกษาเป็นทุนสำคัญที่จะส่งผลต่อกระบวนการเรียนรู้ของทุกคน โดยเฉพาะ อย่างยิ่งสำหรับเด็กและคนวัยหนุ่มสาวกลุ่มที่อาจมีความเสี่ยง ช่วยพัฒนามนุษย์ มีความสำเร็จใน การกำรงชีวิตในสังคมของพวกเขาในอนาคต รวมถึงการยังคงเรียนอยู่ในโรงเรียนและประสบความสำเร็จใน

คำสำคัญ: ทุนทางอารมณ์ สมรรถนะทางอารมณ์ อารมณ์ กระบวนการเรียนรู้ การศึกษา

Abstract

In education as at work, in western societies, emotions have always been put out of the door. Since new insights from the field of neuropsychology have emerged, time has come to reject the cartesian body-mind dualism and to consider that the affective

ผู้นิพนธ์ประสานงาน

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and conative domains cannot any longer be separated from the cognitive domain. In this paper, I will present the conceptual model of Emotional Capital (EK) that I developed in 2004, awarded at the Académie Française in 2006, defined as "the set of resources (emotional competencies) that inhere to the person, useful for personal, professional and organizational development, and participates to social cohesion, with personal, economic and social returns". EK is an essential capital for all and precisely in education. EK is a crucial capital as it impacts people's learning processes, especially for children and young people at risk, enables their balanced human development, which participates in social cohesion, smoother human relationships, their future successful life in the society and already to their school retention and success.

Key words: emotional capital, emotional competencies, emotions, learning process, education

1. Introduction

In education as at work, in western societies, emotions have always been put out of the door. Since new insights from the field of neuropsychology have emerged, time has come to reject the cartesian body-mind dualism and to consider that the affective and conative domains cannot any longer be separated from the cognitive domain. Also, learning environments are social environments, and learners are highly complex beings whose emotions interact with their learning process in powerful ways. Psychologically-based theories have provided influential explanations of how emotional experience is produced and how it affects behaviours and can affect learning processes and lives' construction.

But today's trend of the increased emphasis on the accountability of schools and their efficacy leadsschool leaders and educators to focus solely on improving students test results or academic performance in the core areas of certain domains (such as the 3R, reading, writing, arithmetic...). Under these pressures, teachers have to focus on teaching content and less on preparing students to learn how to build their sustainable development, or to be a good citizen as to feel happy; all those behaviour and social skills called emotional competencies to allow a real and complete "Education" with a big caps "E". Still, few educators, youth development



practitioners, and student support services personnel question the importance of helping children to develop those skills necessary to be successful at school and in the workplace, make ethical decisions, to be engaged and contributing citizens or feel happy. Social, emotional, and ethical skills development cannot be ignored in the name of better academic preparation, especially in the face of data showing that students are more disengaged or stressed than ever.

The process of acquiring the skills to recognise and manage emotions, develop caring and concern for others, establish positive relationships, make responsible decisions, and handle challenging situations effectively, prepare citizens and also have impact on academic performance... refer to emotional competencies. And emotional competencies have an impact on every aspect of children's development-their health, ethical development, citizenship, learning process, academic learning, and motivation to achieve. But these competences are still rarely taught explicitly and effectively in France.

I will present in this article the conceptual model of Emotional Capital (EK)¹. This conceptual model won a National Prize of the *Académie des Sciences Morales et Politiques from the prestigious Académie Française*, in November 2006 and more recently in 2012 the Research Award of the AFPSSU for its applied side on impacts on students health and quality of life.

From the field of emotional intelligence and management sciences combined with economic, sociological and psychological approaches. First, I will define the emotional capital concept and its psychological and economics bases. In a second point, as a capital, I will study its sources and effects and I will show that emotional capital participates in the successful learning process. Also, more than an additional capital, the emotional capital as a booster optimizes the use of the social and cultural capital and human capital. To end, as emotional capital can be developed and trained, but also damaged. I will present the EK characteristics and will raise educational and curriculum challenges and policies issues connected with it.

 $^{^{1}}$ In standard international economicsí abbreviations, the letter K is used to name the term < Capital >.Thus, I use the abbreviation EK for Emotional Capital.

2. From Emotional Intelligence to Emotional Capital

2.1 Emotional intelligence and Emotional Competencies

The term 'emotional intelligence' was introduced to psychology in a series of papers by Mayer and Salovey (1993), though it was Goleman who brought wide popular recognition to the concept of emotional intelligence in his 1995 book Emotional Intelligence. Emotional intelligence is the ability to sense, understand, and effectively apply the power and acumen of emotions as a source of energy, information, creativity, trust and connection. Cherniss and Goleman (2001) have also argued that by itself emotional intelligence probably is not a strong predictor of performance. Rather, it provides the bedrock for competencies that are. They tried to represent this idea by making a distinction between emotional intelligence and emotional competencies and divided it up in two kinds of emotional competencies: personal and social competencies. This set of emotional competencies (EC) compounds the emotional capital (EK) (Gendron, 2004). The personal emotional competencies are characterized by two categories of competencies related to self-awareness and self-regulation.

Self-awareness concerns knowing one's internal states, preferences, resources, and intuitions. This competence allows one to identify and name one's emotional states and to understand the link between emotions, thought and action. It refers to how much we understand ourselves and have confidence in our feelings and abilities. Equipped with this awareness, an individual can better manage his own emotions and behaviours and better understand and relate to other individuals and systems. Self-regulation or self-management refers to managing ones' internal states, impulses, and resources i.e. to manage one's emotional states - to control emotions or to shift undesirable emotional states to more adequate ones. This competence refers to how well we behave under stress, or how it can be counted on to use emotions to help us achieve ends without harming ourselves or others.

Social competencies include social awareness and social skills of communication. Social awareness refers to how people handle relationships and awareness of others' feelings, needs, and concerns. Social skills concern the skills or adeptness at inducing desirable responses in others. Those competencies are related to communication, influence, conflict





management, leadership attitude, change, catalyst, building bonds, collaboration, team synergy etc. as they allow entering and sustaining satisfactory interpersonal relationships. Those competencies are important to create a positive atmosphere in the classroom when developed in a balanced way.

Thus, if technical competencies or experiences referring in the French language to the concept of "Savoir-Faire" and in general knowledge to "Savoir" constitute the Becker's human capital (BHK) as measured by Gary Becker (1964) in his restricted definition of BHK², the emotional competencies referring to the "Savoir-être" have not been taken into account in Becker's measurement. Because of the recognised impact of emotional competencies on performance (see Emotional Intelligence research) and on the learning process, those emotional competencies have to be included in the human capital (HK) in a broader sense and in its measurement. Those emotional competencies are as important as the technical and general ones to "be competent" (see the "3S" of Being competent, figure 1, Gendron, 2008b).

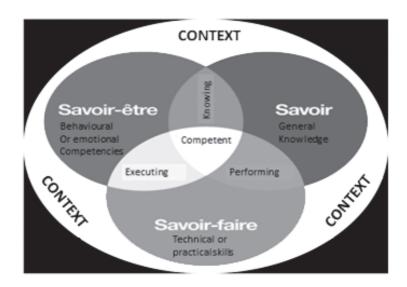


Figure 1 Being competent. Translated into English from Gendron (2008b)

² Human Capital estimates (individual or aggregate) have been applied in economics for the determination of the dynamics of the employment earnings market (earning functions), for the analysis of the income distribution, for the investigation of the economic growth and for the measure of the social costs of emigration. But, despite the wide definition given by Gary Becker, in most empirical studies human capital is estimated solely by the education level of the subject referring to knowledge (Savoir) and the number of year of experience referring to practical or technical skills (Savoir-Faire), that we named (BHK) due, in part, to the difficulties of measuring all components of human capital.

2.2 Emotional competencies and emotional capital

I defined the emotional capital as "the set of resources (emotional competencies described above) that is inherent to the person, useful for personal, professional and organizational development, and participates in social cohesion and has personal, economic and social returns" (Gendron, 2008a). It can be developed as emotional competencies are learnt capabilities. This set of emotional competencies is learned in informal ways from the early age until adulthood, through family, neighbourhood, peers, communities, sports clubs, religions, societies and school contexts.

For instance, for the emotional competence of empathy, Braten's (1998) collective research work shows that 'if empathy is regarded primarily as a primitive experience of affective sharing, then it probably has early origins in the playful exchanges shared by mothers and babies'. Empathy is one basis for moral action. As a motivator for helping and altruism, it is part of the emotional connection between people that fosters mutual sensitivity and reduces selfish concern. Scholars concerned with culture and society as well as developmental

psychologists agree that the growth of empathy reveals a young child's capacity to respond to another's emotional experience, which is a foundation for social and emotional understanding. This emotional competence, which constitutes only one example, is crucial and essential in social situations like the class situation (and not only to people adjusting and coping). Indeed, individual differences in very young children's understanding of other's emotions and inner states are marked. These differences not only show considerable stability from early in the preschool period to the school years, but are related to a wide range of other developmental outcomes, including moral sensibility, perception of others' reactions and of self-competence, and adjustment to school' (Braten, 1998).

2.3. Emotional Capital, an essential capital

"Capital" in economics, refers to a stock of capital identified by its sources and its returns or effects' returns on performance and socio-economic situations. Regarding the emotional capital sources, EK is a component of the human capital defined in a broader sense, but its process of production differs from Becker's human capital elements and measurements as described above; it is not only based on cognitive skills as in Becker's models but also on affect and conative dimensions. It is mainly and still developed via nonformal education, produced in diverse life contexts since the early age (family, communities, clubs, religions..., referring to the contexts of socialization).

Emotional Capital is an essential capital for all. Precisely in education, it's a crucial capital as it impacts people's learning processes and especially for children and young people at risk to enable their balanced human development which participates in social cohesion, smoother human relationships, for their future successful life in the society and already for their school retention and success

3. Emotional Capital and the "Successful Learning Process"

Regarding its effect or returns, neurosciences see the project on "Learning Sciences and Brain Research" introduced to the OECD's CERI Governing Board on 23 November 1999, and Damasio, 1995, reporting on the brain and learning process, brought the evidence that emotional competencies impact the learning process. According to the capacity of regulation of emotions, referring to emotional competence, an appropriate EK can facilitate the learning process.

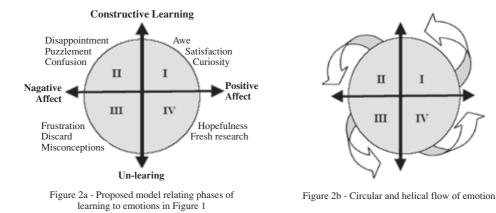
3.1 Emotion, Emotional Competencies and Brain

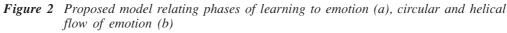
The brain has different components. The limbic system of the brain is the primary part of the brain that regulates emotion. The limbic system contains the amygdala complex, the hippocampus, the thalamus and the hypothalamus. The amygdala complex is one of the main areas to process emotional content of behavior and memory. The main purpose of the amygdala is to filter the important sensory information from the unimportant. The hippocampus converts objective versions of events from short term to long term memory. The amygdala receives its input from many other sources (hippocampus, prefrontal cortex, sensory cortex, thalamus, hypothalamus, septum, brainstem) to form our emotions. The hippocampus, prefrontal cortex, sensory cortex, thalamus, hypothalamus, septum, brainstem all contribute their information to be processed into emotion by the amygdala.



3.2 "Affective Model of Interplay between Emotions and Learning" (Kort, Reilly & Picard, 2001)

Emotions and the brain interplay in the learning process. Teachers or educators rarely have modeled the learning process. When they present material to the class, it is usually in a polished form that omits the normal steps of making mistakes (feeling confused), recovering from them (overcoming frustration), deconstructing what went wrong (not becoming dispirited), and starting over again (with hope and enthusiasm). Also, a typical learning experience involves a range of emotions, moving the learner around the space as they learn according to Kort, Reilly and Picard (2001) from Media Laboratory, M.I.T. They proposed an "Affective Model of Interplay between Emotions and Learning" which stressed out the emotions interfering in the learning process. They designed a frame (figure 2), which combines those different aspects; precisely, they designed a multidimensional combinations model of emotions where in the horizontal axis, the positive valence (more pleasurable) emotions are on the right; the negative valence (more unpleasant) emotions are on the left.





Source: Kort, B., Reilly, R. & Picard, R.W., (2001). "An Affective Model of Interplay between Emotions and Learning"

The vertical axis is called the "Learning" axis, and symbolizes the construction of knowledge upward, and the discarding of misconceptions downward. Typically, movement would be in a counter-clockwise direction. The learner ideally begins in quadrant I or II: he or she might be curious and fascinated about a





new topic of interest (quadrant I) or he or she might be puzzled and motivated to reduce confusion(quadrant II). In either case, the learner is in the top half of the space, if his or her focus is on constructing or testing knowledge. At this point it is not uncommon for the student to move down into the lower half of the diagram (quadrant III), where emotions may be negative and the cognitive focus changes to eliminating some misconception. As the learner consolidates her or his knowledge-what works and what does not-with awareness of a sense of making progress, he or she may move to quadrant IV. Getting a fresh idea propels the leaner back into the upper half of the space, most likely quadrant I. The Kort et al. model is a novel model attempting to interweave different emotions' axes with the cognitive dynamics of the learning process underlining the impact of the regulation of emotions.

3.3 The equation of the "Successful Learning Process" (Gendron, 2010c)

Psychology has traditionally identified and studied three components of mind: cognition, affect, and conation (Huitt, 1996; Tallon, 1997). Cognition refers to the process of encoding, storing, processing, and retrieving information: the process of coming to know and understand. It questions "how we learn" and is generally associated with the question of "what" (e.g., what happened, what is going on now, what is the meaning of that information). Affect refers to the emotional interpretation of perceptions, information, or knowledge. It is generally associated with one's attachment (positive or negative) to people, objects, ideas, etc. and asks the question "How do I feel about this knowledge or information?" It questions "how we feel regarding the topic"; it's about the *emotional interpretation of perceptions, information, or knowledge*.

Conation refers to the connection of knowledge and affect to behavior and is associated with the issue of "why": "why I should learn it". Precisely, it is closely associated with the concept of volition, defined as the use of will, or the freedom to make choices about what to do. It is the personal, intentional, planful, deliberate, goal-oriented, or striving component of motivation, the proactive (as opposed to reactive or habitual) aspect of behavior. It is absolutely critical if an individual is successfully engaged in self-direction and self-regulation as it refers to the intentional and personal motivation of behavior (e.g., the proactive direction, energizing, and persistence of behavior). Indeed, many researchers believe volition or will or



freedom of choice is an essential element of voluntary human behavior and that human behavior cannot be explained fully without it, suggesting that conation is especially important when addressing issues of human learning. And more recent literature has focused on the concept of self-regulation as an aspect of conation (Bandura, 1977), adding an additional dimension to the study of self (self-concept, self-esteem, self-reflection, self-determination).

One reason researchers in the areas of cognition and attitudes have not demonstrated a strong ability to predict behavior is because the construct of conation has been omitted. Indeed, at the beginning of modern psychology, both emotion and conation were considered central (Wallon, 1938); however, interest in these topics declined as overt behavior and cognition received more attention (because of Piaget ideas' domination). One reason that the study of conation has lagged behind the study of cognition, emotion, and behavior is that it is intertwined with the study of these other domains and often difficult to separate (as opposed to *reactive or habitual*) (Snow, 1989).

Conation is necessary to explain how knowledge and emotion are translated into behavior in human beings. Some of the conative issues one faces daily are: what are my intentions and goals; what am I going to do; what are my plans and commitments? Goals must be difficult, but attainable (Franken, 1997). Following the Yerkes-Dodson law (Yerkes & Dodson, 1908), moderate amounts of difficulty lead to optimal performance. Setting goals that are perceived as too easy or too difficult does not increase behavior. Specific cognitive, affective, and volitional components of goal-oriented motivation have developmental aspects and can be impacted via the social environment (Heckhausen & Dweck, 1998). Bandura's (1977) theory of social cognition suggests that helping students to be successful is one of the best ways to assist the learner. These mastery experiences are the most profound influence on self-efficacy, which subsequently predicts future success in that domain. Parents and educators can also use social persuasion, being careful to praise the effort and striving, not the learner's ability (see Mueller & Dweck, 1998). Providing opportunities for learners to experience success vicariously through the success of others is also important, as it can impact a learner's perceptions of what is possible. Seligman and Csikszentmihalyi (2000) suggest that we teach children to "capture" their



automatic thoughts, which are often negative, evaluate them for accuracy, and replace them with more positive and optimistic thoughts (similar to Cognitive Therapy). Ziglar (1994) and Helmstetter (1995) propose we adopt a more proactive approach and teach the use of self-talk techniques. In this approach, statements are developed specifically for an individual and/or situation and the learner recites the self-talk statement at regular intervals. While goals associated with these latter paradigms are deeply enmeshed in our schools today (e.g., basic skills, critical thinking). Barell (1995) proposes that helping students develop the conative attitudes and skills associated with selfdirection and personal efficacy is one of the most critical tasks presently facing parents and educators.

As the learning process refers to three components of the mind, Cognition, Affect, and Conation described above, thus, the function or equation of the learning process should be redefined and not only focus on cognition. *From those three components, I define the equation* of the "Successful Learning Process" (Gendron, 2010b) as following:

"Successful Learning Process" = f [Conation, Affect, Cognition] (Gendron, 2010a)

Regarding educational issues, it is important that parents, educators, and other individuals concerned with the development of children and youth work towards developing the conative components of mind that enhance self-direction, self-determination, and self-regulation. Specifically, young people need to imagine possibilities in their lives, set attainable goals, plan routes to those goals, systematically and consistently put goals and plans into actions, practice self-observation, reflect on results, and manage emotions. These need to be addressed in a spiraled curriculum because of the developmental aspects of their successful utilization.

4. Emotional Capital: a booster of Becker's Human Capital and of Coleman, Putman, Bourdieu Cultural and Social Capitals

Emotions, affects and conation interact in the building of knowledge and in the classroom atmosphere.



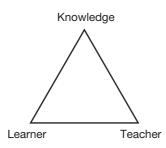


Fig 3. Houssaye's Pedagogical Triangle, (1988). Source: Houssaye J. (1988) Le triangle pédagogique. Berne: Peter Lang.

4.1 The relationships between teacher-learners and knowledge building

In Houssaye's Pedagogical Triangle (1988) describing the interactions between teacher-trainer, subject, and learner, the learning relationship is the link that pupils, students, learners or trainees build with the knowledge to be able to learn.

The Houssaye's triangle is essentially based on three pedagogic relations: the learning, teaching and training process relations. The learning process relation shows the direct relationship between Learner-knowledge. This relationship is favoured and the teacher is the organiser of external learning processes. She or he is a mediator and there is a stronger bond between the learner and knowledge. The teaching process relation refers to the teacher-knowledge relationship. The teacher structures lessons for the learner. He looks for the content. And the training process relation is centred on the relation teacher-learner. They are constantly in

interaction. The teacher presents situations for the learners to resolve and when the learners can't they turn to the teacher for remediation. Thus, to allow knowledge formation and enhance the learning process, a researcher interested in the learning process and cognitive knowledge building mechanism cannot reject or ignore the interplay between all of the social, cultural, environmental and psychological factors in the classroom. As early as 1977, Mialaret underlined that education could not be reduced to teacher and students relationships alone. For Mialaret, education is a function at "N' variables which includes the society, the school system, the curriculum, the teaching styles and methods, the school architecture, teachers training and its recruitment process, the community and school location, the teachers team and his collective aim, the classroom and its equipment, the teacher personality and his or her competence, the classmate and its psychological reality, and the classmate relationships and with the teacher... Mialaret suggests eight triads and sees education as a set of asymmetrical relationships which can be gathered in three main groups: teachers-students relationships, studentsstudents relationships and the educational situation and its relationships with the





environment (geographical and social ones).

The revisited model I suggest includes those elements. It is articulated in a triad teachers-students-human capital, which integrates the emotional dimensions of educational situations in a triangle, where this latter is encompassed in a social and cultural sphere, as social and cultural capitals backgrounds and emotional capital as well of the learners and teachers have to be taken into account in the Becker's human capital-(knowledge) constitution process.

Thus, Houssaye's pedagogical triangle has to be completed as emotions, and social and cultural bonds interfere in class situations. I am enlarging its frame to suggest a revisited "human capital formation sphere" framework, including emotional capital and the social and cultural capitals, as social and cultural forces influence what happens in the classroom, and learners discovering new aspects of themselves as well and as teachers and learners may come from different social backgrounds.

4.2 Becker's Human Capital (Knowledge) (BHK), Social and Cultural Capitals (SCK) and Gendron's Emotional Capital (EK) interplays

"Human Capital" defined and measured by Gary Becker has come to refer to knowledge and technical skills, and social and cultural capitals from Bourdieu and Coleman (1991) or Putnam (to networks, norms, values, an inherited culture, traditions of a given society)³. Becker's human capital triangle is embedded in a social and cultural sphere as teachers or trainers and students or learners come into the classroom with different capital backgrounds. Even in the context of lived teaching reality, certain factors in learning such as the learner's social position, the learner's wish to conform, the learnerûs culture as the teacherûs ones influence the human capital constitution process and have to be considered seriously. Nowadays, related with immigration, cultural mixing, social heterogeneity, social inequities, poverty... not all the individuals share the same cultural and social backgrounds and have not developed the same social and

³Bourdieu's and Coleman's definitions of social capital are similar in that they both emphasize the functional value of social relations as resources available to agents. In Bourdieu's words: "Social capital is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition - or in other words - to membership in a group - which provides each of its members with the backing of the collectivity-owned capital, a " credential" which entitles them to credit, in the various senses of the word." (Bourdieu 1986). Similarly, Coleman defines social capital as connections - "social capital inheres in the structure of relations between and among actors" (p98) - and its use value. Putnam follows on directly from Coleman in his concerns with neighborhood influences and voluntary associations, as well as his conflation of the sources and benefits of social capital : social capital as networks, norms and trust.



cultural capitals and emotional capital. Especially in initial training, since more people have access to education, and higher education, social and cultural capitals of individuals (teachers-trainers, pupils-students-learners...) and emotional capitals composing the "classroom" are diverse and heterogeneous. Students and teachers are endowed with different capitals (in quantity and in values). Those different capitals backgrounds of individuals have to be taken into account in the pedagogical relationships as those differences can enter into conflict with some of the others: for instance, the street corner micro-culture on the moral, social, and behavioural development of many of the youngsters who live in low income urban areas that Foster's work (1974) bears out or subculture that inner-city youth are exposed to, that promotes only callous masculine traits as McIntyre research

(1991) underlines, and can impede or slowdown the Becker's human capital or knowledge constitution. Worse, depending on the context, it can appear even in reverse dynamics, which can generate the emergence of a counter-culture unforeseen by the trainer or teacher. Research and scientific works show that the attitudes and cognitive engagement in learning situations, the behaviour and problemsolving strategies put into operations depend heavily on the representations of the learning situations that the learners form and on the stakes these entail for them. A number of research studies had shown (McDermott, 1976) how, in class, children can develop strategies not to learn. One can even imagine the existence of a counter-instruction, a possible product of Jackson's implicit "nil curriculum" (Jackson, 1968).

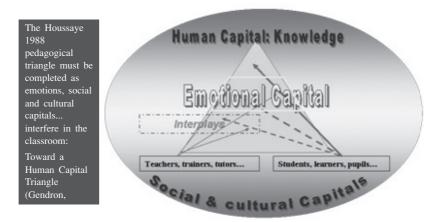


Figure 4. Place of the Emotional capital in the Human Capital Triangle embedded in the Social Sphere (Gendron, 2004).





Example: in the pedagogical relationship, the type of pedagogical interactions (conflictual, serein, calm...) participating in the emotional ecology and emotional climate of the classroom, emotional capital equipment will facilitate, ease or not ease the learning process and thus the Human Capital constitution (arrows reaching the top).

Also, emotional competencies or other non-cognitive learning factors influence the human capital or knowledge constitution process. In all class situations, it is stressed by teachers, trainers or educators that knowledge constitution happens only if the emotional climate and atmosphere of the class situation is favourable to learning. Teachers and students come into the classroom with their own emotions and different emotional capitals, which interact in the class situation and will determine mainly the learning climate or atmosphere (illustrated in the graphs by "interplays" and "arrows"), although it also depends on the way that teachers will handle or manage it (Barnabé and Dupont, 2001). Emotions shape learning and teaching experiences for both teachers and learners, which have a crucial impact on human capital constitution.

From anxiety, lowering of self-esteem to confidence, terror to excitement, dispirit to enthusiasm or boredom to fascination, emotions play a powerful role in learning in any subject, at any age and ability level, and for any learner. The research of Ingleton and O'Reagan (1998) underlines the importance attributed to teachers or trainers through a socio-constructivist pedagogy associated with a professional teaching model. In their work, they show that the classroom is the site of constant social interaction centring on approval and disapproval for being right and being wrong. These judgments appear to be largely associated with the absolute correctness or incorrectness of performance, and imply shame and pride emotions, which have a powerful impact in learning and will be well or not well handled according to the individual's EK endowment. In 1997, Feick and Rhodewalt discussed how uncertainty about one's ability leads people to 'self-handicap', to not do well, or not try, for example, in order to discount the effect of failure, in the service of maintaining self-esteem. Therefore, in order to maintain a sense of solidarity and acceptance, some students will deliberately not value academic success,

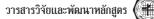


or females will not do well if success in a given area is not valued as genderappropriate, again to maintain their self-identity. As they are part of social bonding, and the basis of self-identity and self-esteem, i.e. part of student identity building, emotions are essential to the protection of self-esteem. And in learning, one works hard at minimising risk, or avoiding risk, to avoid shame and the lowering of self-esteem.

Also, if classmates can act aggressively toward each other or react violently to the teacher's remarks, participating in that way in an unfavourable climate of learning, the teaching style can also put to the test student's emotional competencies. Teachers are not emotionally neutral, or completely formatted by theories or pedagogical practices. They are endowed with a certain personality and EK which determines their teaching style. A number of research studies suggesting typologies of teaching styles (Schön, 1983, Paquay, et al., 1996, Perrenoud, 1999, Barnabé and Dupont,2001) has shown that affective factors and emotional competencies are identified implicitly, even in the expert of learning teacher's style as in the reflective practitioner ones' as well; underlining the fact that all teaching styles involve different emotional competencies and determine partially the learning climate.

Thus, emotions shape learning and teaching experiences for both teachers and students. Some emotional competencies will ease, help or handicap the learning process. And if individuals don't have the appropriate emotional competencies to stay and interact in a proper way in class situations, they likely will not be able to constitute their human capital (in a full way or until the top of the triangle). Those ones are illustrated in the figure by an arrow (scholar trajectory) stopped in the middle on the way to the Becker's human capital constitution-they drop out before they reach the top of the triangle. Such students' trajectories illustrate students dropping out or students kicked out.

Therefore, in a practical perspective, the recognition of emotional significance merits further consideration in both learning theory and pedagogical practice. Which means, in a broader perspective, to facilitate the formation, building or constitution of the human capital, an appropriate emotional capital is essential, and is included in my "successful learning process equation".



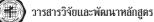
4.3 Emotional Capital: an Individual and Collective Booster of Becker's Human Capital (BHK) and Social and Cultural Capitals (SCK)

First a catalyst capital, emotional capital is essential for the constitution of the human capital as human capital constitution or building might never happen if basic or appropriate emotional capital is not here. But, more than an additional capital, emotional capital is a booster capital. Indeed, emotional capital has a particular place between the two other capitals. Emotional capital is potentializing or a booster capital, as it is essential for utilizing effectively social, cultural and human capitals.

Individuals can use plainly their SCK and BHK if they have the appropriate emotional capital and competencies to utilize them. If not, human capital may not be used at 100% of its potential or the connection between social and human capitals may be not optimal. Many examples can illustrate this point. For instance, in students' lives, emotive students can lose some part of their ability during a student examination because of too much stress or pressure that they don't know how to handle (referring to personal emotional competence of self-regulation). Students with low or not enough self-esteem may not use their SCK optimally like in the case of not using the power of their social network when looking for a job.

As underlined by neuropsychology research, under conditions of real or imagined threat or high anxiety, there is a loss of focus on the learning or acting process and a reduction in task focus and flexible problem solving. It is as if the thinking brain is taken over (or "hijacked") by the older limbic brain. Other emotionrelated factors can be similarly distracting. Processes considered pure "thinking" are now seen as phenomena in which the cognitive and emotional aspects work synergistically; which makes crucial the abilities to manage or regulate emotions to use optimally the other capitals.

EK is also a collective booster which can facilitate an optimal knowledge management. For instance, in the new learning economy context, the success of individuals and firms may reside not only in the ability of individuals to learn but, also, in the rapid diffusion of knowledge within and between firms. And that will depend a lot on emotions and emotional capital. Like a number of research studies have shown, managers with leadership



competencies (trust, empathy, awareness, integrity...) referring to emotional capital facilitate teamwork, enhance efficiency and quality as well in their staff. At the opposite, pessimistic or not confident in him or her-self students or collaborators, via an emotional contagion effect, can damage the collective collaborators' efficiency. To summarize, without a balance or appropriate emotional capital, the constitution and use of BHK and SCK will not be optimal.

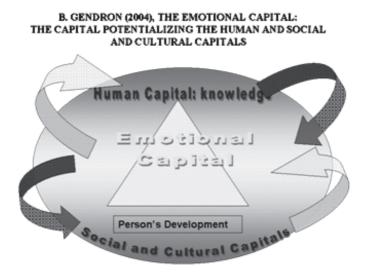


Figure 5 Interplay between Emotional capital and the other capitals. (Gendron, 2004)

5. The Emotional Capital Characteristics and Educational Challenges

Emotional capital as a set of emotional competencies is developed and provided since the early age until adulthood in informal manners and contexts, in "social environments" as family, neighbourhood, peers, communities, sports clubs, religions, societies and school contexts. Because social environments include the groups to which people belong, the neighborhoods in which they live, the organization of their workplaces, and the policies created to order their lives, the EK differs from one person to another. It has specific characteristics, which are challenging curriculum and educational policies issues. And because of context changes, emotional capital is changing (or missing, or lacking), which makes EK a main and crucial issue nowadays in education.





5.1 Emotional Capital as a set of competencies can be improved and mobilized for a problem solving and as a capital can be damaged or altered if not well maintained

Competencies are the resource that people mobilize to answer a problematic situation in a proper and ad hoc way according to the context. As emotional capital is a set of emotional competencies, it can be developed, but as a capital, it can be damaged or altered and needs to be well maintained. Like Coleman wrote for social capital, emotional capital, like physical capital and human capital, emotional capital is "not completely fungible but may be specific to certain activities". A given form of emotional capital can be valuable in facilitating certain actions and may be useless or even harmful for others. It might be limited in its scope of application and is not completely fungible, but fungible with respect to specific activities.

For instance, in emotional work like in the health sector, caregivers with a balance of empathy and an appropriate emotional self-regulation, coping with painful situations can be useful to survive in such a sector, when at the opposite end, a lack of empathy can be counterproductive and lead to mistreatments toward patients and worsen the patients' health; the same in the education sector; teachers or educators ignoring the emotional atmosphere of the classroom or ignoring student's personal difficulties may lead to putting aside or excluding some vulnerable students. Regarding school performance and failure, students with too high self-esteem can be counterproductive in certain situations where modesty should be appropriate to question him-or-herself regarding his-her own failure. At the opposite end, a too low self-esteem or a lack of self-confidence can impede people to progress or lead to self-censure.

Also, emotional capital can be damaged in certain situations. For instance, repeated failure at schools can discourage and develop inappropriate reactions, leading to dropping out or being kicked out. Research on management sciences and on psychology stress the vicious cycle of depression people who have been laid off experience: after several negative answers to jobs announcements, jobless or laid off people can see some part of their personal EK altered or damaged like losing their self-confidence and lowering their self-esteem and isolate themselves



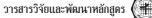
(Bennett, et al., 1995), and in consequence, may not use optimally their SCK as their social network for finding a job. To summarize, like physical capital, EK is not to be taken for granted: to be kept in a good shape, it needs to be "maintained". Like a physical capital, the "right" EK is required to answer in an adequate way the problem situations (like to cross a river, a boat will be useful where a bicycle will not).

5.2 Social Environments and EK

The EK differs from one child to another according to his or her good or poor-quality social environments; for instance, it can differ from boys/males and girls/females if they are raised with a gendered educational bias. Indeed, family social support, as a form of social capital, contributes to children's emotional capital endowment disparities at different ages of life. The role of family functioning during childhood is a potential mediating factor in explaining the association between family breakup in and emotional competencies developed. Since a few decades, western families have been facing new challenges. Indeed, family structure and functioning are changing: single-mother families, divorce or recombined families, under-parenting or increased work force

involvement of both parents. In such contexts, the traditional balanced (personal and social) emotional competencies essential for balanced social interactions learned at home are not always taught or provided to children and/or have changed toward more individualism and a focus toward "self" referring to 'personal' emotional competencies more than a balance between personal and social emotional competencies.

Also, neighbourhoods, school environments can participate to unbalanced EK children, young people and teenagers' endowment. With the banalization of violence reinforced by violent video games, movies, or on the Internet or on TV news, violence as bullying is becoming a pervasive problem in many schools. Research on education showed that higher levels of school bullying were related to more males in the schools, lower levels of empathy, more authoritarian and violent families, higher levels of community violence, lower socio-economic conditions, hostile attributional biases and more beliefs supporting aggression. If brain and behavioural science research shows that deficits in emotional competencies can sabotage the intellect of children and adolescents, according to researchers, the



greatest toll is on children and adolescents, for whom risks include bullying and social cruelty, aggressive acts, violent crime, depression, and alcohol and drug use. Such students in such poor social environments who exhibit behaviours of social cruelty show aggression in unprovoked situations; act deliberatively, not out of anger; get pleasure from their acts; use power imbalance to intimidate or hurt other students; lack empathy, compassion, and perspective taking; high on self-esteem; and lack remorse, act impulsively, and fail to anticipate the consequences of their behaviour.

The increase and place in daily life and the power of media (TV, internet, commercials, movies...), beyond violence phenomenon, promote and keeps reinforcing for instance some society stereotypes of people's roles like gender roles and expectations, in parents' education bias, which can explain emotional capital differences between boys and girls and performance at school or vocational or professional career choice differences (Gendron, 2004). If biological sex differences in the area of cognitive functioning have been found to be minimal, emotional capital differs from boys to girls in gendered education⁴. Braconnier (1996) shows that parents' behaviours vary according to the sex of their children. A mother for instance, facing her child's anger, will say to her daughter: 'be nice' and to her son 'defend yourself'. Instead, 'the father will question and threaten more, especially facing his son'. Some of those differences are in terms of role training and social expectations. Indeed, in most western societies as in France, where social gender stereotypes are strong, boys and girls are often raised from their early age in a way that they develop different interests, attitudes and emotional competencies. Indeed parents, schools and the societal expectations can influence and strengthen the sex-role expectations for boys and girls in western style society. In every culture of the world, children are taught to be appropriate adults through the games they play. For instance, in western societies, when boys are growing up, they play baseball, basketball, football, cops and robbers, cowboys and Indians and war, all of which are hierarchical team sports. They learn how to compete, be aggressive, play to win, strategize, take risks and mask emotions. Playing their assigned role in the hierarchy-the hierarchical culture of men-

⁴ The term gender role denotes a set of behavioural norms society imposes upon people according to their biological sex.



boys learn to obey their coach unquestioningly, become leaders and play with people they do not like. In essence, boys learn how to garner power, manage conflict and win or lose without becoming emotionally involved with their "competitors". At the opposite, more than likely, girls grow up without playing often team sports. Girls play with people they like (usually oneon-one) and learn their cultural lessons from "doll games", in which there are no winners or losers. Girl play reinforces "getting along and being nice", protecting friendships by negotiating differences, seeking win-win situations and focusing on what is fair for all instead of winners and losers. As a result, girls (unlike boys) have "flat" instead of hierarchical relationships. A very important rule in women's culture is that the power in interpersonal relationships is always kept "dead even." There is never a "boss doll player." Girls who try to be the boss quickly learn that this damages friendships. Therefore, they often attempt to equalize power, negotiate relationships and share power equally. Consequently, the different emotional competencies developed through those experiences will have a major impact on individual personality and different returns in different spheres (regarding their

student attitude, their scholar and vocational guidance, at school, work, home...(for further development on gender issues and emotional capital, see Gendron, 2010c). In fact, feminine and masculine styles are less biological imperatives and more related to tacit understandings and learned behaviours driven by various social and national constructs. From a systemic view, cultural gender expectations result in organisational cultural characteristics also being gendered, participating in females and males emotional capital differences via what it is called "the hidden curriculum and implicit education" (Pourtois & Desmet, 2004).

5.3 Context and Values Changes and Emotional Capital: Toward Educational Challenges

Nowadays, the ever present and faster pace of the changes in societies and values—in comparison to the past—challenge the emotional capital. It explains how socio-economic and cultural forces interplay within a particular historical and political context in bringing about such notable changes as individualism, materialism and moral crisis and young generation EK endowment.

In the actual economic context of crisis and globalization, industrial western





societies more and more promote competition, individualism, liberalism and personal performance which tend to enhance individuality. Those changes have an affect on personal development and individuals' behaviours, impacting individuals' Emotional Capital endowment with more focus on the personal emotional competencies like assertiveness with "over"-assertive behaviour, lower selfcontrol with more frequent aggressive reactions or over-reactions and lower empathy as underlined by research on management style (see articles on mistreating managers toward collaborators and suicide phenomena).

Also, the decrease of other institutional and humanistic engagements like the decline in some forms of civic engagement, in joining community of volunteers' organizations (NGO, unions and service groups as notified in 2000 Putman article about "Bowling alone"), decrease of influences of religion... illustrate some of societies' changes. For instance, religion was still important for individuals a few decades ago. To belong to a church (attending religious offices) used to be a place where morals, citizenship, humanistic values, supporting balanced social emotional competencies were taught and shared. Nowadays, religions transmitting those values and competencies have less impact on individuals as people's religious beliefs or engagements are declining or some turn to be more radical⁵.

Cultures mixed through globalization influenced by western societies participate to young generations' convergent-divergent socio-economics ideologies and values shifts and youth attitudes which support different emotional competencies development more oriented to individualism. According to research (Thompson and Thompson, 1990), individuals form most of their value system by adolescence; in consequence, it may be the next generation, whose work values are truly affected. Indeed, beyond the competition, individualism, liberalism and individual performance, promoted values by western societies which tend to enhance individualistic competencies as personal emotional competencies, research underlines contradicting influences and generational shifts in work values; individualism-collectivism has become the terminology generally

⁵ Some religions turning toward radicalism can participate strongly at spreading non-egalitarian values for instance in a gender perspective and by doing so, participate to implicit unequal education, between boys and girls.



used for comparing self-versus group orientation. It affected different cultures (Eastern and Asian cultures). Several research studies on the Chinese new generation show that the group-focused nature of Confucian values is in direct conflict with much of Western Individualism, which suggests a decline of Confucian values in the New Generation of managers of Chinese young generation. (Ralston, et al. 1999). The forces influencing individual work values, national culture and economic ideology, lead to generational attitude shifts toward work: working for living versus living for work.

Those shifts in work values already start at school. Education values have also changed via the strength of multi-media, the internet, virtual social networks, and movies. As underlined by Veugelers and Vedder (2003) during the 1950s, the main emphasis with regard to values, also in the educational system, was placed on conformity, on adaptation to society. The 1960s offered an impulse for self-fulfilment, social commitment and democracy in society as a whole and in education. In the 1980s, technical and instrumental thinking, with little attentions for values, dominated education. The 1990s were characterised by, on the one hand, further decline of formerly coherent value systems in society and, on the other, the desire, as part of an on-going process of emancipation, for further developing one's own value orientations.

All those changes have an impact on personal EK development and individuals' behaviours. And children's education doesn't escape from that. Balanced personal and social emotional competencies essential to behave as a citizen are not learnt everywhere and some children come into the classroom without the appropriate emotional capital. These emotional competencies refer to the savoir-être (know-to-be and behave) and to the rules of democratic socialisation (to know how to behave in social situations, how to communicate, to handle conflict, to respect other's opinion, and to share...). Emotional competencies which encompass citizen competencies are an essential capital to allow people's human capital constitution. But because of those societies and changes in the environments, balanced EK endowment can be lacking or missing nowadays and thus, we realise that those social and personal competencies are crucial to behave properly in society as they participate in the citizenship competencies.



6. Conclusion Emotional Capital: a nowadays challenging capital

Emotional competencies are as important as other 'more traditional' competencies. They are crucial and useful to perform socially, economically and personally. They constitute a crucial capital on their own and also as a booster of the other capitals to use and utilize them plainly. Thus, this set of emotional competencies has to be considered as a capital, a real asset in which people, institutions and societies should invest in it, as it has major returns for individuals (to allow well-being and sustainable person's development), for society (social cohesion) and for (individual and social) life.

Regarding educational issues, a balanced emotional capital can help students to reach their best potential in the classroom and as future workers at the workplace.

Emotional capital becomes crucial for the youth's well-being and achievement in life. Balanced emotional capital is the basis for self-improvement, growth, and life-long learning, as well as being able to successfully and adequately interact with others. It helps at becoming resilient, allowing people to respond to stress and disappointment in appropriate and productive ways.

If goodness-of-fit is critical for the full emotional, cognitive, physical, psychological, and moral development of all children, emotional capital shapes and conditions a person's entire life and participates in his or her citizenship profile. But not all individuals are equally equipped with such a crucial emotional capital. Also, EK capital is threatened by social changes and values shifts, which can compromise the balance of EK children's endowment. Especially, according the quality of the socio-economic environments, not all children are equally equipped. Changes occurring in the family structure, in social values, on the labour market, in education... Those factors can lead to an unbalanced EK: toward more individualism and a stronger focus on personal emotional competencies, which have an impact on personal development and on individuals' behaviours regarding citizenships and social interactions. Therefore, regarding educational and social policies, families, or social partners concerns, all educational partners should be aware to which extent this emotional capital is crucial and needs to be taken into account in education.



To nurture children and students' developing character and promote their balanced EK development, emotional literacy must be a key ingredient of their education. Beyond discussions and actions with parents, or through parent associations, early childhood programs and training for youth at risk focused on emotional capital should provide a goodness-of-fit to participate in EK formation for each person, allowing an effective equitable and sustainable education and citizen's development. So, developing at school those emotional and social competencies are as important as the EK affect academic achievement positively (Gendron, Mazard & Teyssier, 2009). Those skills have a long-term effect and 'can lead to achievement from the formal education years of the child and adolescent to the adult's competency in being effective in the workplace and in society' (Finnegan, 1998).

Because of its impact on the successful academic learning process but also at promoting citizenship skills, it questions the pedagogical and teaching style, teacher training and some early curriculum. Indeed, the teaching style will have to be changed toward a quality of teaching and teachers to be trained toward an ethics' leadership style reflecting citizenship behaviours which include the EK matter. When considering the diversity of learners in classrooms today and the quest to leave no child behind, it is essential to tailor learning in response to students' abilities, interests and learning styles so that all may reach standards. To revisit the equation of the learning process, the successful learning equation should include the affect and conation dimensions. Nevertheless, the aim of teaching emotional competencies is not 'shaping' people in subtle ways but its schooling should aim towards letting students think, reflect and elaborate on their own and have a balanced emotional capital.

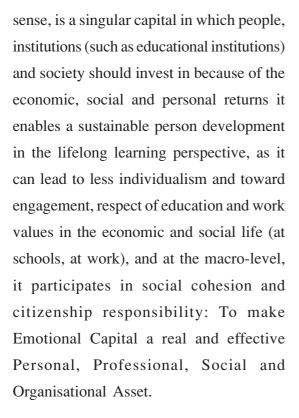
Thus, from an equity perspective, care should be taken to develop balanced emotional competencies in all children (and especially those at risk coming from poor-quality social environments), whatever their origin, gender (boy & girls), culture or religion. This implies revisiting curriculum to allow them a real and effective choice free from 'gender, racism, ethnic, socio-economic bias or stigmas' regarding their life oriented by educational trajectories, occupational and job and career choices.

To end, emotional capital, which belongs to the Human capital in a broad



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"These social and emotional skills affect performance in school and in the workplace. We too often have a bias toward believing that only cognitive skills are of fundamental importance to success in life."

J.J. Heckman, 2004, PhD, Nobel Laureate in Economic Sciences



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