Giornale Italiano di Educazione alla Salute, Sport e Didattica Inclusiva / Italian Journal of Health Education, Sports and Inclusive Didactics - ISSN 2532-3296 - Anno 4 n. 4 - ottobre - dicembre 2020 Suppl. - ISBN 9788860223920 - CC BY-NC-ND 3.0 IT - doi: https://doi.org/10.32043/gsd.v4i4%20sup.265

MOOD METER APP TECHNOLOGY TO "REDISCOVER" EMOTIONS: A TECHNO-EMOTIONAL SCENARIO

LA TECNOLOGIA MOOD METER APP PER "RISCOPRIRE" LE EMOZIONI: UNO SCENARIO TECNO-EMOZIONALE

Maria Annarumma
University of Salerno
mannarumma@unisa.it

Giuseppe De Simone
University of Salerno
gdesimone@unisa.it

Michele Todino
University of Sannio
michele.todino@gmail.com

Abstract[1]

Knowledge is a possible source of emotions and it allows each mind to be free, to go beyond borders, to overcome formalisms, labeling and stereotypes. The final result should be a rediscovered balance between feeling and thinking, between body and mind. These fusions will allow emotion to pass through knowledge and, at the same time, these fusions will allow knowledge to penetrate emotions to become something new and original and, often, unpredictable. Technology has often stimulated conflicting emotions, but how emotions change with new technologies is a question that it is waiting for an exhaustive answer.
Meanwhile, a new proposal for emotional education is offered by technological world. Technologies are changing our way to express feelings and emotions thus they are shifting our perception of reality. Moreover, technologies could help us to understand and manage the emotional universe. In this work, for instance, Mood Meter App is an application that records and monitors user's emotions through a digital device: a new techno-emotional scenario is emerging on the educational horizon.

La conoscenza come fonte di emozioni permette ad ogni mente di essere libera, di andare oltre i confini, di superare formalismi, etichettature e stereotipi. Il risultato finale dovrebbe protendere verso un ritrovato equilibrio tra sentimento e pensiero, tra corpo e mente. Queste connessioni permetteranno alle emozioni di attraversare la conoscenza e, allo stesso tempo permetteranno alla conoscenza di penetrare le emozioni per diventare qualcosa di nuovo e originale e, spesso, imprevedibile. La tecnologia ha spesso stimolato emozioni contrastanti, ma come cambiano le emozioni con le nuove tecnologie è una domanda che attende ancora una risposta esauriente.
Nel frattempo, una nuova proposta di educazione emotiva è offerta dal mondo tecnologico. Le tecnologie stanno cambiando il nostro modo di esprimere sentimenti ed emozioni, quindi stanno cambiando la nostra percezione della realtà. Inoltre, potrebbero aiutarci a comprendere e gestire l'universo emotivo. A tal proposito viene presentata in questo lavoro, la Mood Meter App un'applicazione che registra e monitora le emozioni dell'utente attraverso un dispositivo digitale: un nuovo scenario tecno-emotivo sta emergendo all'orizzonte educativo.

Keywords

emotion, learning, technologies, apps, inclusive education.

emozioni, apprendimento, tecnologie, applicazioni,inclusion,educazione

1 The present study was conducted in full collaboration by the authors. However, M. Annarumma wrote §2, §3 and §5; G. De Simone wrote §4; M.D. Todino wrote §1.

Introduction

Damasio (2000) points out that mind and body, as well that reason and emotions together generate a human organism, but at the same time, the Cartesian tradition, in which the mind is quite distinct from body cannot be overstated because it could be introduced and error of evaluation of human behaviors (Ivi, p. 82). There is a biological requisite indispensable to make mind as an object of scientific study: a return to consciousness (Ibidem). Besides, the formal thinking often is not an appropriate "tool" to solve problems, nor the most influential one for people; it is not used for conceptualization of a progressive construction or to produce an itinerary that people could follow over time to solve problems or more easily to leave daily life.

More in details, the formal thinking couldn't be the best way, for a mind, to make possible a comprehension and a transformation of sensitive attributes of environment context, around people or inside their mind, into symbolic attributes. An interaction between perceptions and symbols, manifest by experience, embraces four levels: 1) body; 2) interactions with physical environment; 3) interaction with others (social-interaction); 4) symbolic capacity. These four interactions between mind and outside-mind world generates a complexity that reflects on teaching-learning process due to relationship between body and mind (Corona, 2012). Learning is a process that require many steps, for instance, to introduce a new knowledge object; for learners are important to be able to recognize and manage this new knowledge object, not only approach it.

Furthermore, Gardner (1999) said that every brain learns better, and fixes more things, when an organism is actively engaged in an exploration of physical places and uses materials, in these cases, brain formulates problems in a better way because it really wants to solve these issues (Ivi, p. 83); in other words, this happened due to de fact that these problems are in the same physical place and they engage the body. Usually, to achieve a goal, it is necessary to learn a habit to ensure a pattern to solve a specific problem and to understand when it is possible to use this pattern to solve similar problems. In this regard, Karl Popper (1968) would define this approach as congruence between general laws and particular conditions.

Using this way of thinking, people produce "mental categories" that are organized to face issues and these categories are defined metacognitive categories and they will be placed beyond and above knowledge and notions as Pierre Lévy (1996) evidenced in deep. Few years later, Jean-François Lyotard (1979) described in detail another useful concept; to better understand metacognition, the French philosopher highlights that the world placed everybody "elsewhere" but, nevertheless, envelops people in an everyday life; for this reason, this world binds each mind and it generate a conditioning that produce the real organization of knowledge in everyone and influence brain's cognitive construction of reality as well as each mind influence the understanding of the world around it in a retroactive process. For these reasons, this work starts from the consideration that each mind plays an active role in the "construction" of world model self-representation.

More specifically, to understand what is around us, it is not enough a "repetition" of old experience or a reproduction *tout court* in our mind of our external world, but it is necessary a continuous process of creative perceptual and self-reconstruction using a feedback that derived from our emotions. Moreover, it is important to point out that while language has a precise and direct correspondence between it and a conscious state of mind and, at the same time, language has a character to convert it on paper or other supports; a non-verbal system has sensory and somatic representations that are difficult to evoke and to decode because they do not follow a linear path, i.e. they are difficult to interpret both for who see them from outside and from who live emotion from inside, in other words because sometimes it is difficult to auto-detect emotions.

If we believe that emotional dynamics can be deliberately and directly brought to an immediately investigable level then it assertion could be very questionable because, from time to time, indirect analyzes are used to go more in deep to understand emotions for example using dream interpretation and analyzing pathological behaviors. An emotion is often difficult to un-

derstand and also what is going on inside us when we live it but this does not mean that people do not perceive issues that rise from emotions, in our daily action. Indeed, in real life is quite the opposite, in fact, often people use their emotional substrate to carry out automatic actions, that take into account emotions, for instance when an aroma arouses sweet or bitter sensations perform habitually, almost mechanically and they have an impact on emotions and our state of mind. As well, it could be possible to state that emotions are "used" much more then "linear" awareness and "linear" thinking.

Moreover, to define a useful emotions pattern (Ekman, 1984), it should act in a different dynamic from a cognitive pattern; in other words, emotions are not conscious and mainly concern a dimension of desire, pleasure or pain. This emotional pattern is defined from our births and it starts from the moment that we start to understand a language. These two considerations find confirmations both among theorists of emotions (Scherer, Ekman, 1984) and neurophysiologists of emotions (LeDoux, 1997). Besides, a presence of a multiple code (Bucci, Miller, 1993) is proved by experimental cognitive psychology research (Anderson, 2005), from neuropsychology and from experimental and clinical psychotherapy research (Paivio, 1986). These studies show us how reductive to present brain functioning through a dominance representation of our right or left hemisphere; in reality we find a theory that represents the functionality of brain as a multilevel cerebral modularity (Gazzaniga, 1995).

From a functional point of view, emotions simultaneously activate: central nervous system; vegetative system and endocrine system; therefore, this simultaneously activation represent one of the most complex and interesting psychophysiological processes. Consequently, the main function that emotions play in a teaching-learning process is the construction of mental schemes that will act automatically to select between multiple possible responses and to produce a systematization of these answers to fit then in different level of rank and to generate automatisms. In conclusion, knowledge shapes our emotions, and our emotions shape our knowledge, in a mechanism of mutual influence. If knowledge and emotions are well trained they allow us to be free, to avoid auto-restrictions, to look over a schematic way to see life. To do this, school should really take into accounts what it was exposed before, because emotions and knowledge are fundamental to ensure an acquisition of skills that allow to all a full membership in our society. For the European Parliament, and exactly in Council Recommendation of 22 May 2018 on key competences for lifelong learning, it is important to outline a key competence that realize these combinations on knowledge and emotions, that must be teach in school, and consequently studied in teacher education and training. Council Recommendation defined it as cultural awareness and expression competence, two skills that point out the personal ability to express and interpret ideas, experiences emotions, engage in individual or collaborative processes, have an open attitude for use respect for all (EU, 2018) to forge a community pro human rights, an support this idea stipulated as a fundamental pillar of European Community (Le Goff, 1995, p.131), that take into account all, from children to senior citizens and it must be in any educational system teach from primary school to higher education.

1 Physiology of emotions: the "intelligent body"

We have seen how emotions play a decisive role to guide and determine cognitive processes, how incisive they are in establishing rules and concepts, how important they are to contribute in a decisive way in a construction of mental representations, however, just with Daniel Goleman studies there was a better comprehension about emotions (1996) and because the scholar developed a definition of emotional intelligence and he describes it as a particularly effective way of reasoning around oneself and others. To understand the scope of this definition, it is sufficient to reflect on how crucial our approach to others is depending on whether we are overwhelmed by anger or if instead, although we are, even rightly taken by it, we manage to control this anger. It seems quite obvious that for people an ability to dominate emotions is not of secondary

importance, more in detail, emotions governance is configured as an intelligence specific form characterized by two main aspects: the first aspect is emotional self-control i.e. it concerns a "personal competence" expressed as a personal capacity; the second aspect concerns "social competence" which is expressed as something related with others. There is a close correlation between the ability to analyze and control emotions and the ability to focus and pay attention.

On the basis of recent neurophysiological studies, emotionality has a central role and this is highlighted not only in relation to learning processes but also in relation to ordinary and trivial behaviors. Any decision, even just to stand up, would require an amount of processing that would take much longer than it normally does. Antonio Damasio (2000) presents them as a mental function that interacts between non-rational processes and reason that moves from cortical and subcortical brain structures. Besides, for Damasio (Ibidem), there is also a division between two kind of emotions: primary emotional dynamics are deposited and managed by the circuits of the limbic system; secondary emotions, on the other hand, are made up of dispositional representations that find their allocation in prefrontal mental structures and are gradually acquired in subsequent moments, through lived experiences, during people adult phase. Both possibilities find of expression in some observable somatic signs, these signs are usually defined as somatic markers, which evidently refer to a experientiality phase and they influence mental processes in sensations terms, in this way they become an automatic pre-alarm that warn us against possible errors, well known because they are already been produced through previous experiences, i.e. they work as a "warehouse of images" gradually built up in mind, generated by situations that we face day by day.

This alarm bell is triggered automatically because there is a relative "somatic marker", then "high reason" intervenes, such as a logical-rational processes that will allow to choose between a very limited number of options preselected by somatic marker; at this point mind will have the opportunity to select for the "best solution" resulting from a cost and benefit analysis (Annarumma, 2018). Obviously, mind does not act as an algorithm because it is strictly and inextricably dependent on the body and the experiences to which it belongs. Mind include a interrelated stratifications produced by innatistic dynamics and daily experience, it contains an unconscious memory and automatisms wisely constructed by a psychogenetic evolution; it has a thickness in which contents joints and branches stratifications, besides it presents a strong stabilization component and, at the same time, flexibility and adaptation. If someone wanted to look for a single command center located in the brain that center would not be found; certainly there are areas of expertise responsible for carrying out specific activities, these areas are not rigid but change in relation to the connections that they have with other parts of the brain and in relation to the stimuli that they have with new and old experiences.

Mental activities are determined by a large set of systems first in primitive sensory cortices and in motor cortices which will form the basis of knowledge in terms of "senses" and "actions", besides mental activities are also determined by another set of systems defined high-level cortices that will "orchestrate" fixed-term activities to promote and to establish a temporal correspondence between separate areas (Damasio, Damasio 1994, p. 70). This hypothesis, proposed by Damasio, highlights that mental processes, which appear almost dominated by reason, have in reality a strong contribution produced by emotional component; precisely, an emotional element has formed in mind over time, it has been produced by experiences and it acts automatically and this element constitutes a unitary emotion/reason process, and it establishes the presuppositions capable of giving immediate answers to the many questions that crowd the mind and that require behavioral and multiple and fast linguistic answers. Damasio says that the emotional experience, which Wilma Bucci (1999) defines as "symbolic / non-verbal", over time determines a "somatic/emotional intelligence" that automates certain choices and these choices operate without the need for mental processing. Damasio defined this operation as a somatic marker automatic mental action. Indeed, these operations are defined somatic because they are consequent to bodily experiences, both viscerally and non-viscerally; somatic markers mark neuronal cells called to precede and preside over decision-making process.

This "experiential/emotional memorization" intervenes automatically whenever there is a need to make also a basic decision; it sends a positive or negative signal anchored to a related previous similar experience. Somatic markers reduce each need to sift through various options because they provide an automatic detection of components that define a new scenario that is similar to a previous one. In this way, the association between so-called cognitive processes and so-called "emotional processes should be evident (Damasio, 2000, p.123). Damasio says that in most of our "decisions" are an automatic intervention of our "somatic markers" which can act together with personal reason and they can allow, as consequence, a very quick exclusion of the most probable negative choices and favoring the possibility of choosing between a few favorable options. These emotions and feelings have been connected, through learning, to the expected future outcomes of certain scenarios (Damasio A., 1994, p. 245). From Damasio's axioms and from their significances follows, we can deduce that our experiential baggage, guarded by memory, bases its operating mechanism on continuous reminders of connected "emotional memories" capable to make us able to understand if our actions may or may not be favorable to us.

Probably, our previous emotional experiences tend to transform them into mnemonic "operative schemes" that intervene and support our decision-making choices; such as, these schemes, becomes a kind of "soft continuous survival instinct". What we have defined as "working patterns" are likely stored through images or internalized actions (Piaget J., Inhelder B., 1948). Somatic markers find their deep raison in their root fixed inside feelings and generated from secondary emotions and, as we have seen, they carry out from a basic selection, in a second moment, then arrives our rationality to aid our decisional processes. From these statements emerges that rationality apparatus is not independent from their biological regulation, and emotions and feelings are often able to generate a strongly influence on our beliefs and our choices, i.e. choices and beliefs could be taken without our knowledge influence (Damasio A., 2000, p. 98). Consequently, an issue emerges that involves personal and social choices that presuppose a strong uncertainty with a decisive influence on our future but also on our daily life and on our psychophysical well-being because this issue endorses our everyday life and it is projected into the predictions of our future.

2 Metacognition and emotional competence

As already said, knowing as source of emotions allows people to free their mind and go beyond borders, to overcome formalisms, labeling and stereotypes. The final result should be a rediscovered balance between feeling and thinking, between body and mind. These fusions will allow emotion to pass through knowledge and, at the same time, these fusions will allow knowledge to penetrate emotions to become something new and original and, often, unpredictable. Knowing is, therefore, a way of feeling of living that can be observed, shaped, reorganized.

There is a close correlation between thought and emotion and both perform an important "job" for decision-making choices; therefore, there is a question of avoiding, as many researches advice (Kanizsa 1983, Ellis 1993, Doux, 1997): it is important not to place emphasis exclusively on one of the two aspects. Consequently, the art of knowing becomes the right balance between emotion and reason.

It is necessary to favor a metacognitive attitude that concerns in a general propensity of each person to reflect on the nature of her/his own cognitive activity and to recognize the possibility of using it and extending it to other contexts. This allows her/him to quickly create new ideas and order them into meaningful structures by creating new cognitive networks.

Then, it is important to encourage reflection and reasoning through cognitive and metacognitive processes that involve aspects such as introspection understood as an observation that is made on one's thoughts, on how it change; so self-awareness is control of cognitive processes, such as anticipating, coordinating, monitoring; self-regulation understood as a choice of

appropriate strategies, recognition of skills necessary for carrying out a task. Fragnito (2007) describes this peculiarity, referred more in detail to children, and he states that metacognition makes possible to privilege cognitive processes quality, because it is not important that children obtain a degree if they do not have the skills to go beyond questions that rose from the latest mobile phone or fashionable cars. What really matters is how many of them are able to appreciate a painting, a poem, and human relationships and, consequently, we must organize a "school" that develops in children, as widely as possible, these feelings which are the true "Spice of life" (Ivi, p. 22).

Despite an extensive literature on this subject (Cornoldi, 1995; Flavell 1971; Borkowski, Muthukrishna, 2011), a possibility of an emotional education in school it is still open and developing, this trains children to get in touch with their emotions to feel them, name them and communicate them. Recent scientific implications (Goleman, 1996) show that a school exclusively oriented to a development of rational skills, and at the same time, that excludes emotional skills, is unthinkable and today we are trying to acquire and improve methods and means to be able to contribute to a more integral growth of people that brings together rational and emotional educations. In this perspective, emotions can be used to improve education and learning processes (Ivi, p. 45). Some researches (Battacchi, 2004; Greenberg, 2009) carried out on the issue of emotions recognition show that children, already at the end of the first year of life, are able to recognize both expressiveness of a reference adult and object towards which they are expressed, in fact they approach and move away from it according to the message expressed by that adult.

To explain this early ability, two hypotheses have been advanced: the sympathetic instinct, that is an emotional resonance, an empathy that allows the child to feel and experience the emotional state of the other; imitation, or rather the child, initially imitates the facial expressions of this adult without however giving it any emotional value. It will then be the act of imitation that will induce the association with the corresponding emotion.

An emotional competence is given by a set of child's abilities to recognize, to understand and to respond appropriately to both emotional situations and emotional states of others. Emotional competence consists of three factors: emotion's expression; emotional understanding and emotions regulation. Emotion's expression is acquired within family intimacy through words and actions addressed directly to each child, but above all through a life models and emotional expression provided indirectly by adults. Children learn to develop emotional competence from all those figures that have an important role in their life: parents, siblings, teachers, educators, peers. Thus, these people are defined as socializers of emotions because they teach what is accepted and what is not within their culture. Then, emotions socialization arise and coincides with three mechanisms of social learning: modeling, parents involuntarily provide their own models of expressiveness; training, parents through dialogue, and therefore voluntarily, modulate child's expressiveness; finally, a contingent reaction, that is, a reaction of others to child's emotional expression. This latter mechanism plays an important role because it influences, enhancing or inhibiting, child's abilities. A devaluation of the child's emotions leads to emotional illiteracy, which will be observed mainly in school. A lack of emotional intelligence is cause of many risks such as: violence, depression, drug use, anger (Gross, 2007; Greenberg, 2009). It is therefore important that emotions will be teach because they allow us to shape our emotional responses and channel them to achieve more productive goals, especially because we learn to manage negative situations, endure frustrations and convert them into new opportunities.

3 An App for emotional education

New technologies are changing our way to express feelings and emotions thus they are shifting our perception of reality. Moreover, technologies could help us to understand and manage the emotional universe. An example is the R.U.L.E.R. method, developed by Marc Brackett

(2013), that it could be used at school to promote a new alliance between rational intelligence and emotional intelligence, to encourage a psycho-physical balance, a positive school atmosphere, to improve the quality of interpersonal relationships and to reduce aggressive behavior. This R.U.L.E.R. method was developed at the *Health Emotion and Behaviour Laboratory* of *Yale University*, do better understand emotional intelligence. This method should demonstrate how emotional skills are an essential part of learning, also to improve the ability to make good assessments, to promote physical and mental well-being and, more in general, to achieve success in school and in society. Basic idea of R.U.L.E.R. method promotes, in each student, a way to expand her/his vocabulary of words related with emotional sphere through a personal reflection, based on creativity, storytelling and conversation. The R.U.L.E.R. method explains five emotional skills below:

1. recognizing emotions: recognize emotions in our body's expressions;
2. understand emotions: understand causes and consequences of emotions;
3. labeling emotions: classify the entire range of emotions using a rich vocabulary;
4. expressing emotions: express emotions appropriately in different contexts;
5. regulating emotions: manage and regulate emotions effectively to have healthy relationships and achieve goals (Nathanson, Rivers, Flynn, Brackett, 2016).

One who is able to manage their emotions can face difficult trials in a better and more serene way. This method is designed to change the quality of social interactions in classroom and in society, so that climate in them becomes more engaging. It can be easily introduced within the normal school program from kindergarten until high school. Several researches (Brackett, Rivers, 2014) have found that a development of R.U.L.E.R. method's skills promotes many useful behaviors and attitudes for an educational success because this development produces: 1) an increase in motivation and ability to study; 2) an improvement of the results in disciplines; 3) a decrease in hyperactivity in classroom; 4) a decrease in anxiety and depression; 5) an increase in empathy, social skills and leadership skills; 6) a decrease in inappropriate student behavior, including greater respect between teachers and students and more positive relationships between students (Ivi, 2014, pp. 1-22).

R.U.L.E.R. method integrates emotional literacy into a standard school curriculum, offering learning opportunities to students but it also has a positive impact on teachers, school staff and children's families. R.U.L.E.R. method's training takes two years, from third year a school that starts to use this method become self-sufficient. To learn this method's skills it is necessary to integrate them into daily activities. It is important to underline that initially a development of socio-emotional skills aimed adults, i.e. teachers and educators, who train students, must create stimulating lessons and a positive learning environment to develop these skills in their students (Brackett, Rivers, Reyes, Salovey, 2012, pp. 218-224). It is important to point out that when adolescents have a high level of emotional skills and they establish positive and numerous relationships, there is empirical evidence (Ibidem) that shows a correlation: these adolescents were children with well-developed emotional skills. R.U.L.E.R. method have four "tools" to produce a series of strategies and a common language in order to integrate the learning of emotional and social skills in school and social context. This four main tools are: 1) The Charter (start to deal whit our emotional intelligence) that is a moment to build a positive atmosphere in the classroom; 2) Mood Meter (a diagram of emotions) that is used to develop awareness of one's own and others' emotions; 3) Meta-Moment that helps to manage difficult emotions such as anger and anxiety; 4) Blueprint (a questionnaire) that aids to promote empathy and the ability to resolve conflicts. More in detail, R.U.L.E.R. method through The Charter establishes both a program and an objective to be achieved, moreover, each participant, in her/his own role, undertakes to carry out an agreed role; this collaboration instills both teachers and pupils with greater responsibility, self-esteem and a sense of worth. Some key questions often suggested by students, teachers, and school staff are asked are: 1) How we want to feel in this school? 2) What can we do concretely to feel what we would like to hear? 3) What can be done to prevent and manage conflicts? Therefore, a set of answers resulting from these questions established a

way to deal with emotions and they be signed by everyone.

Instead, the *Mood Meter* is a diagram which represents the "energy" that one feels to have (divided between low and high), the state of one's mood, sensations (from unpleasant to pleasant). Four colored dials attest to the emotions that students and teachers feel on that day. A *red dial* represents high-energy unpleasant sensations, such as anger, fear, anger, nervousness. A *yellow dial* represents pleasant high-energy sensations such as happiness, joy, enthusiasm, merriment. A *blue dial* represents unpleasant low energy sensations such as sadness, melancholy, unhappiness, monotony, fatigue, low self-esteem. The last one, blue, is the worst state of total apathy and negativity. Finally, a *green dial* represents pleasant low-energy sensations such as relaxation, extension, positive thoughts about the future. Thus, *Mood Meter* is a useful tool for understanding one's own moods and those of others; in fact, pupils and teachers are asked to fill in the square by writing their name and the emotion felt at that moment on colored sheets and sticking them in a corresponding box. This tool aims to teach students about emotions and to offer teachers a tool through which their students can elaborate their moods. Through this tool, emotions are managed correctly, it is possible to prevent quarrels in the classroom and conflict situations to the advantage of teaching, increasing learning skills and well-being of each student; moreover, empathy improves together with critical thinking and emotional intelligence.

Marc Bracket, director and founder of the *Yale Center for Emotional Intelligence*, often collaborates with the famous social network *Facebook* with a main goal: looking for new tools that help children and adults to resolve conflicts online. More in detail, the main goal is to help children, families and schools cope with online bullying. Marc Bracket and Robin Stern also developed an app for smartphones and tablets called *Mood Meter App* that is a digital version of paper and pencil emotions' diagram. Purpose of this App is to record a person's emotions in their smartphone and monitor them day by day (Brackett, Stern, 2014). Here are the six main characteristics of *Mood Meter App*:

1. plot emotions in a *Plot Screen*, which represents the four quadrants, divided into twenty-five parts, for a total of one hundred different emotions. Student must mark the word corresponding to his state of mind;
2. Student writes a motivation for that emotion. In this way student has the opportunity to reflect on why it feels this way. Then various reasons are saved in this application and therefore it can be monitored over time if moods change or remain constant;
3. Scholar selects a strategy to change their emotion. The app suggests ways to change student's mood. For example, if at a certain moment the subject feels angry and wants to change his mood then this app suggests strategies to change it, motivations, phrases and images that are recorded of each subject at the precise moment in which he felt that way;
4. this App generates personal reports based on how many times in a shorter or longer period, certain emotions are tracked;
5. these recorded emotions can be shared with friends on *Facebook* or *Twitter*.

Mood Meter App allows user to monitor how emotions change throughout the day and over time. A *Meta Moment*, on the other hand, is a reflective pause that aims to identify best words to define one's emotions and the among of time to find motivations of a particular mood. When user of this App stop to think it is necessary to identify what is called "The best of yourself" and with the help of educators, three aspects are considered to define it: 1) an hypothetical best representation of how someone would like feel in a given situation; 2) a description of the best feedback that someone would like to receive from others, in term of consideration (i.e. regard and respect), in a given situation; 3) an explanation of the hypothetical best results on given situation. This is the phase, R.U.L.E.R. method, in which strategies are developed to improve reflection and problem solving and emotion management skills; a deep inner knowledge process is carried out, to understanding one's own desires and, in this way, to increase and amplified an emotional *problem solving* skill. It is essential to remember that to introduce *Meta-Moments* before teacher must introduce both *the Charter* and *Mood Meter*.

Finally, *Blueprint* is a questionnaire that is administered after a conflict to understand reasons for the antagonism, in this phase it is the teacher who will ask specific questions to explain details and motivation about this hostility. These answers are then presented and discussed, and this allows those involved in this dispute to understand opponent's point of view. Once all information has been gathered, the next step is to reflect and build an action plan thinking about what could be done to recover this situation. *Blueprint* advantages students and teachers manage conflicts as effectively as possible, as child behavior affects both the school climate and student performance. This tool allows everybody to develop empathy, socialization and group integration. *Blueprint* refers to past, present and future situations. Past situations because they are necessary to learn and to reflect for future situations; present situations because, on the other hand, they are essential to act and to listen people motivation and feelings about that action and what others think about this action; future situations because they will be driven by past and present situations, and they are the most important since it is possible to anticipate and plan them, through this tool, to define how each person will feel in a future circumstance and define how they could act.

4 Conclusions

Emotional education means offering not only cognitive and linguistic resources and tools, but also social skills with which to recognize, label, harmonize and build a world full of emotional experiences, which happen within the person and between people. Emotion is the result of complex experiences, which mediate the relationship between organism and environment; it is associated with numerous aspects of human behavior such as perceptions, memory, intelligence and actions (Goleman, 1996, Ekman 1994). Emotions represent a fundamental component of the daily life of each person. Although emotional intelligence is common to all individuals, there are subjective differences. Emotional intelligence can be trained or re-educated, as it is not static or genetically transmitted, but is based on emotional "attitudes" acquired over the years, that is developed through experience.

Understanding emotional world is essential to learn how to manage it and direct it towards actions that are consistent with "one's image" and one's desires. Recognizing some subtle synergies between rational and emotional intelligence is therefore essential for personal and professional development. Within this dimension we can share that emotions and feelings have been connected through learning to an expected future outcomes of certain scenarios (Damasio, Damasio 1994).

Neuroscientific studies have shown that the emotion that accompanies the learning process plays an important role. Therefore, during a learning process not only the information is internalized but also the emotion that has traced this process. Emotions affect long-term memory, a process that occurs through the activation of stress hormones in our amygdala circuit, a part of the brain that manages emotions and especially fear. Every voluntary psychic act implies a "circuit network" which is influenced by emotions. Fear, guilt, anxiety affect learning abilities and create the emotional short circuit. This condition delays or complicates learning skills and over time it could produce a fail because people could forget what they have learned, because their minds have a tendency to escape from painful experiences and memories (Lucangeli, 2017). To deactivate negative emotions, especially guilt and fear, and overcome this kind of emotional short circuit, it is important to create a positive situation stimulated by positive emotions. The World Health Organization in *European Review of Social Determinants of Health and the Health Divide* (2013) has found worrying data about the future on mood disorders and early depression. The only way to stop this bad trend is to replace *escape waves* with *positive emotions waves* that allow us to feel others as someone who is with us and not as someone who is against us.

References

Anderson J.R (2005). *Cognitive Psychology and its implications*, Worth Publishers, New York.

Annarumma M. (2018). *L'arte del conoscere: emozione e ragione*, Universitas Studiorum, Mantova.

Battacchi M. W. (2004). *Lo sviluppo emotivo*, Laterza, Roma.

Borkowski J.G., Muthukrishna N. (2011). *Didattica metacognitiva. Come insegnare strategie efficaci di apprendimento*, Erickson, Trento.

Brackett M. (2013). *RULER -Yale Center for Emotional Intelligence - Yale University*. In http://ei.yale.edu/ruler/

Brackett M., Stern R. (2014). *RULER's app - Yale Center for Emotional Intelligence - Yale University*. In http://ei.yale.edu/new-mood-meter-mobile-app-teaches-emotional-intelligence/

Brackett M.A., Rivers S.E. (2014). Transforming Students Lives with Social and Emotional Learning. In *International Handbook of Emotions in Education*, vol. 368, pp. 1-22.

Brackett M.A., Rivers S.E., Reyes M.R., Salovey P. (2012). Migliorare le prestazioni accademiche e la competenza sociale ed emotiva con il programma Ruler per sentire le parole. In *Apprendimento e differenze individuali*, vol. 22, pp. 218-224.

Bucci W. (1999). *Psicoanalisi e scienza cognitive*, Fioriti Editore, Roma.

Bucci W., Miller N. (1993). *Primary process: A new formulation and an analogue measure*, Miller N., Luborsky L., Barber J., Docherty J., in «Handbook of Dynamic Psychotherapy Research and Practice», Basic Books, New York.

Cornoldi C. (1995). *Metacognizione e apprendimento*, Il Mulino. Bologna.

Corona F. (2012). *Le mappe mentali: uno strumento per la conoscenza del corpo*, in

Cooperazione Educativa, vol. 61. p. 59-62.

Damasio A. (1994). *L'errore di Cartesio*, Adelphi, Milano 1995, p. 245.

Damasio A. (2000). *Emozione e coscienza*, Adelphi, Milano 2001, p. 82, 123, 98.

Damasio A., Damasio H. (1994). *Cortical systems for retrieval of concrete knowledge: the convergence zone framework*, in Koch C., Davis J., Large-Scale Neuronal Theories of the Brain, Mit Press, Cambridge, p. 70.

Doux J.E. (1997). *Il cervello emotivo. Alle origini delle emozioni*, trad. it., Baldini e Castoldi, Milano.

Ellis A. (1993). *L'autoterapia razionale emotiva*, Erickson, Trento.

European Parliament (2018). *Council recommendation* of 22 May 2018 *on key competences for lifelong learning* in Official Journal of the European Union (2018/C 189/01).

Flavell J.H. (1971). *First discussant's comments. What is memory development the development of?*, «Human Development», vol. 14, 1971, pp. 272-278.

Fragnito R. (2007). *Metacognizione e processi formativi*, Pensa Editore, Lecce, p. 22.

Gardner H. (1999). *Sapere per comprendere*, trad. it., Feltrinelli, Milano 2000, p. 83.

Gazzaniga M.S. (1995). *Consciousness and the cerebral hemispheres*, in The Cognitive Neurosciences, MIT Press, Cambridge.

Goleman D. (1996). *L'intelligenza emotiva*, trad. it., Rizzoli, Milano 1997.

Greenberg M. T. (2009), *Emozioni per l'uso: una proposta per educare i bambini*, La Meridiana, Bari.

Gross J. J. (2007). *Handbook of emotion regulation*, The Guilford Press, New York.

Ianes, D. (2007). *Educare all'affettività: a scuola di emozioni, stati d'animo e sentimenti,* Erickson, Trento.

Kanizsa G. (1983). *La percezione*, in Kanizsa G., Legrenzi P., Sonino M., «Percezione, linguaggio, pensiero», Il Mulino, Bologna.

Le Goff, J. (1995). *L'Europa raccontata ai ragazzi da Jacques Le Goff*, Laterza, Bari.

LeDoux J.E. (1996). *Il cervello emotivo. Alle origini delle emozioni*, trad. it., Baldini e Castoldi, Milano 1997.
Lèvy P. (1996). *Il virtuale*, trad. it. Raffaello Cortina Editore, Milano 1997.
Lucangeli D. (2017). *Emotional short circuits the intelligence behind mistakes*. Milano: TEDx.
Lyotard J.F. (1979). *La condizione postmoderna*, trad. it., Feltrinelli, Milano 1981.
Nathanson L., Rivers S.E., Flynn L.M., Brackett M.A. (2016). Creating Emotionally Intelligent Schools With RULER. In *Emotion Review*, vol. 8, n. 4., pp.1-6.
Paivio A. (1986). *Mental representations: a dual coding approach*, Oxford University Press, Oxford 1986.
Piaget J., Inhelder B. (1948). *La representation de l'espace chez l'enfant*, trad. it., Giunti e Barbera, Firenze 1979.
Popper K. (1969), *Congetture e confutazioni*, trad. it., Il Mulino, Bologna 1972.
Scherer J.F. (1984), *Les émotions*, Delachaux & Niestlè, Paris.
Scherer K.R, Ekman P. (1984). *Approaches to emotion*, Erlbaum, Hillsdale NJ, pp.1-8.
World Health Organization (2013). *European Review of Social Determinants of Health and the Health Divide*, WHO Regional Office for Europe, Denmark.