Chapter #15

ELECTIVITY AND EDUCATION: AN EMOTIONAL WAY TO LEARN SIGNIFICANTLY

Elena Visconti
University of Salerno, Italy

ABSTRACT
Many contemporary scholars talk about emotion, learning and education. This chapter tries to understand if it is possible to learn through emotional observation and if learning can become significant and effective. In our daily lives, there are many experiences that challenge us emotionally. Being aware of our own emotions and our own ability to solve difficulties, helps both adults and children in a growth phase and in school-age. Authors ranging from Montessori to Piaget, Maturana, Varela to Putnam, from Hillman to Dennett and Damasio, to Karmiloff-Smith, reflect on this topic. This chapter aims to study the phenomenology of the development and of educational experiences. We tried to find the emotional dynamics of adolescents. The analysis of neuro-cognitive and learning processes, which will be called elective, allows a recognition of those dynamics, related to the various self areas, which need strengthening and enhancement and which may become an educational and transformational choice for future generations.

Keywords: electivity, immersion, degrees-gradients, phenomenology, learning, relationships.

1. INTRODUCTION

Learning, especially of an induced type, is usually forgotten and is often reason domain when we talk about cognition. How to make learning not only knowledge but also a deliberate choice is the goal of this study. This notion is connected to empathy (Boella, 2006), through which you can improve what Vygotsky would call “zone of proximal development (Vygotskij, 1966). Learning is elective (Visconti, 2011) because it is not linked to knowledge but to what is internalized, emotional-somatic markers – (Damasio, 1995, 2000) in an ontological perspective and of humanizing/education. The concept of education goes over the prescriptive aspect of development, growth to become a category of meaning, as hermeneutics of life (Demetrio, 1997) and as resulting in neurological and transformative human factors. This position follows the theory expressed by Karmiloff-Smith on “representational redescriptions” (Karmiloff-Smith, 1995), which will be discussed later and that will validate the hypothesis presented.

1.1. Elective learning and motivation
In his work “De Actractionibus Electivis” Torbern Bergman, the Swedish chemist, states that in the relationship between individual subjects something occurs that is quite similar to the particular phenomenon existing in nature, whereby two united elements split to form two more couples driven by other two, due to mutual attraction, starting a not precisely identified synthesis and rejection process.

Wolfgang Goethe was particularly fascinated by this research, as he was interested in different disciplines, and above all in natural sciences, he went into detail of Bergman’s theory, whose law “actraction electiva duplex” in Latin, hints just at that unknown
phenomenon whereby two naturally coupled elements split in order to re-build more couples because of “special affinity”. It is still unknown and almost impossible to explain why some elements attract each other and others reject each other in an absolutely natural and physiological way. Actually, the attraction and rejection phenomena that occur in nature likewise can be seen in other conditions regarding man and these are as articulated and interconnected in its internal and external dynamics.

So, why should we rule out that such reaction could also happen in the manifold and multi-sided learning process and relevant acquisition (when one wants to express an ampler view in line with the object of this research) with its latent, hidden dynamics, that is somehow unknown to pure scientific rationality?

“Elective affinities”, that is how Wolfgang Goethe called them when he wrote one of the greatest masterpieces of the XIX century international literature taken by great love for the study of natural sciences; that is a masterpiece mediated, though, by the genial mind of a matchless writer and teller of stories that belong to man’s fleeting existence (Goethe, 1999).

His existence is composed by specific chemical components, by endocrine and endogenous factors, by pulsions and instincts, but also by the soul’s codes (Hillman, 1997, 2004) that are the real inner uncontrollable, non-manageable drives that reason cannot explain, but they are actually the real stimulus that leads us to those involving passions that motivate our existence and take part in our lives with the right determination to improve, which gives meaning to the “living the world” and gives the right force to that impulse that leads from man’s world to the world beyond (Cambi, 2006).

1.1.1. Representation of the self and education: mental processes, corporeality and emotions

The electivity, therefore, through the higher mental processes, becomes a preferential channel to reach the inner part and to learn elements that become education and ethical style. Human mind considered supernatural entity, a superior mind as it was "God's mind" in Spinoza, creates higher functions of our brain at different levels: from reason, to memory, to intuition, to will, to feeling and emotion. It is no longer conceived as an endogenous uniprocessor (Piaget, 1983), although it preserves the ability of adaptive-instrumental and constructive re-appropriation of the environment through the experience as an organized action in the process of knowledge through the thoughtful (Dewey, 1961), of that body and mind that Merleau-Ponty would call psychic body (Merleau-Ponty, 1965). Already Fodor (1983), in his volume "Modular mind" argues that the mind is characterized by modules with specific functions and each module processes the data differently, however, the areas are poorly connected. Only a few more years later A. Karmiloff-Smith (1995), states that the mind is strongly specialized and modules are less rigid and isolated as considered by Fodor (Fodor, 1983). Mental processes, therefore, are characterized by modularization that Karmiloff-Smith considers inherent in linguistic processes (Basile, 2001) and hermeneutic interpretation. According to the latest research there is a theory that arises between cognitive psychology (mind as manipulation of symbols occurring in a system similar to the computers) of a modular innatist type; and, connectionism (the mind as a result of the many physical and chemical interactions that occur on a network of neurons) of an anti-innatist and anti-modularist type. It is defined as evolutionary connectionism (mind as a result of the many physical and chemical interactions that occur on a network of neurons in the intersection between evolution and learning), very close to the positions of Karmiloff-Smith who believes that only modules exist at birth and grow throughout life and are in small part encoded in the genome as a
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result of complex interactions between genetic information, development and significative experience. The theory of connectivism has a conception which is less easily adapted to evolution and it is more interested in the complex interaction between genetically inherited information and information gained through experience. “This form of pan-adaptivism is not shared by all cognitivists. Noam Chomsky, for example, considers the mind as a manipulation of symbols and considers that there is a specific mental module for the language or for syntax, but does not believe that language emerged in humans due to specific evolutionary pressures (Fodor, 1983). Even evolutionary biologists like Stephen J. Gould (1941-2002) have repeatedly argued that what is inherited genetically is not necessarily the result of selective pressures and not necessarily adaptive. It can be the result of random factors, or it may be neutral from the point of view of adaptive and is connected to another adaptive element, or may be evolved carrying out a function and later reused for a new function (Calabretta, 2002, pp.52-53).

Education is to be considered as the overall interpretation of linguistic and social representations with emotions, relationships, cognition and conveying of meaning and significance (Bateson, 1977). The electivity is compared to these two different categories: development category and soul category.

The idea of electivity is closely linked to the whole phenomenology of human development that is strongly connected to an "emotional brain" (LeDoux, 2003) and "emotional intelligence" (Goleman, 2001).

This study wants to observe and improve all those dynamics that represent the man conceived between body and mind (Erikson, 1950; 1984), in his various vital spheres with degree-gradients of the self.

Learning processes (elective) are originated from a choice (Dennett, 1993), sometimes unconscious (Bateson, 1977), and internalized according to the general state of satisfaction and health (Damasio, 1995, 2000). Pedagogically this appears very meaningful because it acts on the enhancement of each of them. The action of valorisation and strengthening of different areas is established on the basis of observation made through the recognition of the degree of satisfaction and the gradient of improvement. The tables relating to the degree-self gradients, as will be shown later, aim to highlight the overall status of a person in a given context and to implement improvement measures promoting, facilitating and empowering processes that emerge in times of fragility (in the table below about the degrees-gradients of the self).

2. BACKGROUND

From the research carried out among two hundred teachers of early childhood, primary and secondary schools who used the tables of degree-gradients of the self what emerged was that the state (emotional, relational, cognitive, affective) experienced by each student heavily influenced the motivation, commitment and general involvement in the processes in which it is required to participate. The grid gradually realized through opinions and emotional states of students, concerned the different spheres of the phenomenology of the self. This grid is divided in degree-gradients and refers to moods, mood, gratification and the idea of security/insecurity/dissatisfaction of everyone. Wants, needs and expectations represented by teachers have also been considered. The feedback in rewarding behaviors and attitudes of confidence, attribution of meaning aimed at strengthening, aroused, in most cases, greater orientation to the task to be performed, emotional and effective management and operational balance.
It is from this basis that the structure of degrees-gradients can be used as a tool of
dynamic observation that does not immediately reach the submerged part.

Starting from the concept of gradient as vector magnitude, we want to use the concept
of degree-gradient to create a possible tool for the depth observation of some dynamics that
underlie the phenomenology of the self.

In psychology, the term gradient is used in reference to the change of motivation to
approach or to move away from a purpose, which is related to the distance of the subject
from this, and we speak respectively of gradient approach and removal.

3. SELF PHENOMENOLOGY AND DEGREES-GRADIENTS. A METHOD
TO IMPROVE RESOURCES

Grades-gradients are trying to find (in the situation and in its potential) the degree of
emotional satisfaction/dissatisfaction (emotional gradient); one related to motivation
(motivation gradient), the relational one, related to perception/self-perception, acceptance
and self-acceptance, to the representation and self-representation, to self-esteem; and that
expressed by the character and personality (gradient of potentials and resources), in an
attempt to observe the growing subject:

- degree of emotion and affection (Defense/inhibition, closing/aggressiveness,
euphoria/dysphoria): feels loved/you don’t feel loved; has demonstrations of
care/didn’t care demonstrations; you feel cared for/don’t feel cared for; feels listened
to/don’t feel listened to and needs in its requirements; feels accepted/not accepted
feels in his hardships and difficulties; feels defended/does not feel defended; view
independence-autonomy/independence-autonomy doesn’t show; view security/safety
doesn’t show.

For the emotional-affective gradient it is necessary to improve the sense of safety in
an attempt to promote an adequate reply to the capacity of processing the fear of separation,
abandonment and loss (Bowlby, 1980, Ainsworth, 2006). It is crucial to convey a healthy
sense of belonging that is reassuring throughout the individuals’ development and
accompany them during learning experiences (Attili, 2001), training and socialization:

- degree of relation (Rogers, 2007; Lèvinas, 2006) reached with respect to the
self-esteem, the self-perception and self-concept: you like you don’t like; others
likes/dislikes towards others; feel self-confident/not feel self-confident (Bandura, 1977);
to feel accepted/not accepted; to feel welcome/not welcome; to play in group/don’t play in
group; to believe to be able to share experiences/to feel unable to share experiences.

As what concerns the relational gradient and self-confidence, it is necessary to
improve the level of self-esteem, acceptance, approval, and involvement of sociability,
trying to promote an adequate concept of himself and of the concept that other people have
of that himself and to eliminate the feeling of rejection, isolation, exclusion;

- degree of motivation (Maslow, 1982) which highlights: he has got expectations upon
himself/has not got expectations on himself; he believes he can do tasks well/badly; he feels
able/does not feel capable; he feels valued/he does not feel valued.

For the motivational gradient, it is necessary to get levels for the improvement of
success, sense of self-perception of competence, self-recognition and performance
recognition, to allow a proper motivational condition and a good disposition to do so that he
can eliminate the feeling of failure and frustration;

- degree of potential compared to temperament and to the character and personality:
he appears introverted or extroverted, i.e., he shows passivity or sociability, over-cautious
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or expansion, or control, calm or impulsiveness, anxiety or sobriety, stress or restlessness or aggression.

For potential and resources gradient, it is necessary to the overall improvement of the sense of inhibition-closure, prohibition, regulation, self-regulation, self-control and self-management and emotional body (Lanciano, Zammuner, & Trivisani, 2010; Lazarus, 1991), in an attempt to foster a general and adequate expression condition of individual resources although specifically considering temperament and character in order to build a balanced personality and a solid identity. Some of the prevalent emotions (fear, surprise, sadness, disgust, anger, happiness), can be contemporary and transversal recurrent, but according to the degree of processing of each area you can consider how to plan an educational project.

Obviously the observation, so structured, is not intended, nor as a sort of diagnosis, nor such a classification, but it is instead aimed at strengthening itself through the educational awareness and a style, a humus, or climate, or an encouraging educational atmosphere.

4. FUTURE RESEARCH DIRECTIONS

According to the investigation shortly described above you can imagine new research horizons and set goals for improving methodologically the phenomenon study in children, designing interventions on psychological, pedagogical, as well as educational life learning. Some of the prevailing emotions (fear, surprise, sadness, disgust, anger, happiness), can be recurrent, contemporary and transversal, but according to the degree of processing of each area you can consider the level of educational project. Obviously the observation, so structured, is not a sort of diagnosis, or a classification, but it is aimed at strengthening of phenomenal self through the educational action and awareness and employment of a style, a humus, a climate or educational atmosphere encouraging (Franta & Colasanti, 1998), ahead of a schedule-educational-didactic design.

The reading of various styles: motivational, emotional, relational, personality, corresponding to the analysis just presented, is linked to ecosystem complex phenomena that occur in a non-rigid and non-static way and can be derived from a series of indicators in scanning of degrees and get through the use of some tables, which can highlight an affirmative or negative gradient for each item-stimulus compared to general condition and specificity to area of interest. The degree-gradient (affirmative or negative) can be adjusted at different times and in different ways: by accepting the empathetic listening, at gaming experiences, dramatization, storytelling, in working groups and, more specifically, in the dynamics within the class, in order to enhance individual learning resources, and related capacity/ability that lead to it, is realized with the activation of endogenous structures, prefabricated and experiential practices acquisitional crossing pattern of experiences and representations of each. Such interaction determines forms of representational redescription and operating systems and rebalancing of values. The contemporary educational system experiencing an excessive instructive-transmissive and notional load, neglects key aspects of the students: their creative ability, their intense emotional baggage and their self-esteem. The idea presented in this chapter focuses on the recovery of pedagogical style that approaches closer to the experiences of children, adolescents and youth that always show the need to be heard and cared for empathically.
5. CONCLUSION

The intersection between issues relating to the individual development in educational and training processes, determines the nature of an approach aimed at the enhancement of the representations Attitudes, behaviors, lifestyles and expressions of personality take shape through processing mode of educational and training processes in elective acquisition terms, breaking down the psycho-social dynamics and joining them analytically and normatively. Translate meaningful educational experiences in internalization of value elements gives education the substantial potential of transmission. The resulting combinations between levels of gratification/commodities and grades gradient compensation of each area can be considered the ‘cornerstone’ of an educational process, and also means necessary to listen child and adolescent in cognitive and learning processes. To observe, supervise, be responsibly and self-critically is the pedagogical way to hone those skills that the Moscato defines “key competencies”, in a pedagogical perspective that goes beyond” mechanistic and deterministic conceptions, didactic-training visions, behaviorist, and pedagogical conceptions” (Moscato, 2007, 2008).

Skills, even if considered both sociological, behaviorist and cognitive-analytical, do not respond adequately to the total baggage of those that can be universally defined the human skills.

Bellingreri (2005) also talks about empathic skills. It is in this perspective that empathy becomes an important pedagogical category. If there is not such pedagogical 'humus', it is impossible any form of educational purpose.

The whole pedagogical and choreographic scenario is intended as exposition, proposal and project that catches the educational moods.

In the phenomenology of the self can be identified:

- an emotional self corresponding to the sphere of affectivity and the balance between attachment and separation;
- a relational-representative self related to the self-confidence and self-perceived image;
- a motivational self based on the intensity of interest and inclination to participate;
- a potential self due to temperament and character in progressive perspective of personality development.

The affective degrees-gradients are emotional and attachment conditions linked to the adults; the motivational degree-gradient matches the interest and motivation to cultivate passion, asking with curiosity, planning initiatives and projects; the relational and representative degree-gradient is a personal perception of self, of judgment and self-acceptance linked to the element of sociability; the character and personality degrees-gradients are the individual resources, the outcome of previous experiences.

The elective invests the whole human territory throughout the life involving every part and all that belongs to it. It occurs in the expression of the immanent life which, in turn, relies on the sense of values offered by pedagogical action (Acone, 2004).

6. RESULTS

Note: for emotional-affective gradient it is necessary to improve the sense of security so that to encourage an appropriate affection and remove the feeling of separation, abandon and loss.
Table 1. Affective-emotional grade-gradient.

<table>
<thead>
<tr>
<th>Analysis of the state of satisfaction/dissatisfaction obtained through affective-emotional grade-gradient</th>
<th>GRADIENTS</th>
<th>ENHANCEMENT LEVELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>You feel or don’t feel loved</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You have or don’t care demonstrations by loved ones</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You feel or don’t feel dedication</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You feel or don’t feel heard in his needs and requirements</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You feel welcomed in his needs and difficulties</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You feel or don’t feel defended</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You show or don’t show independence-autonomy</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You show or don’t show confidence</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
</tbody>
</table>

For the relational and self-confident-gradient it is necessary to improve the sense of self-esteem, acceptance, approval, involvement and sociality to facilitate an appropriate self-concept and the concept that other people have of him and eliminate the feeling of rejection, isolation and marginalization.

Table 2. Relational and self confidence grade-gradient.

<table>
<thead>
<tr>
<th>Analysis of the state of satisfaction/dissatisfaction obtained through relational and self confidence grade-gradient</th>
<th>GRADIENT</th>
<th>ENHANCEMENT LEVELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>You like/don’t like</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You like/dislike</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You feel/don’t feel involved</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You feel/don’t feel welcomed</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You feel/don’t feel worth</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You feel/don’t feel up to solve problems and difficulties</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You like to play-work/You don’t like to play-work in Group</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You consider/don’t consider to be able to share experiences</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
</tbody>
</table>

For motivational gradient it is necessary to improve the sense of success, self-perception of competence, self-recognition and acknowledgment in performance, to promote adequate motivational condition and a good disposition to eliminate failure and frustration.
Table 3. Motivational grade-gradient.

<table>
<thead>
<tr>
<th>Analysis of the state of satisfaction/dissatisfaction obtained through motivational grade-gradient</th>
<th>GRADIENT</th>
<th>ENHANCEMENT LEVELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>You Have/don’t have expectations</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You believe you can do (do anything) right</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You feel/don’t feel capable</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You feel/don’t feel appraised</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You feel/don’t feel valued</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>It is not hard to show disapproval</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
<tr>
<td>You show /do not show activity</td>
<td>Affirmative</td>
<td>Negative</td>
</tr>
</tbody>
</table>

TO IMPROVE YOUR SENSE OF SUCCESS

TO IMPROVE YOUR SENSE OF COMPETENCE SELF-PERCEPTION

TO IMPROVE YOUR SENSE OF SELF-RECOGNITION AND ACKNOWLEDGMENT IN THE PERFORMANCE

For the potential gradient and resources you need to consider the overall improvement of the sense of inhibition-closure, prohibition subduing and adjustment, self-adjusting, self control and emotional management to foster general and adequate conditions of individual expression and channeling resources although specifically in their temperament and character in order to build a balanced personality and a solid identity.

Table 4. Potential-resources grade-gradient.

<table>
<thead>
<tr>
<th>On the analysis of the state of satisfaction/dissatisfaction obtained through the potential-resources grade-gradient</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANALYSIS OF THE STATE OF SATISFACTION/DISSATISFACTION OF THE POTENTIALS-RESOURCES DEGREE-GRADIENT</td>
</tr>
<tr>
<td>Show extraversion or introversion</td>
</tr>
<tr>
<td>Show sociability or liability</td>
</tr>
<tr>
<td>Show expansion or excessive prudence</td>
</tr>
<tr>
<td>View vividness or excessive control</td>
</tr>
<tr>
<td>Show vividness or excessive control</td>
</tr>
<tr>
<td>Show calmness or impulsiveness</td>
</tr>
<tr>
<td>Show production or excessive anxiety thoughtlessness</td>
</tr>
<tr>
<td>Show sobriety or grumpiness</td>
</tr>
<tr>
<td>Show serenity or restlessness</td>
</tr>
</tbody>
</table>

TO IMPROVE YOUR SENSE OF INHIBITION

TO IMPROVE YOUR SENSE OF SELF-ADJUSTMENT

For the gradient concerning the potential and resources it is necessary to resort to the overall improvement of the sense of inhibition-closing, submission and awe-that of regulation, self-regulation, self-control and body and emotional self-management, in an effort to foster a general and adequate condition of expression and channeling of individual resources although the specifics of his temperament and character in order to build a balanced personality and a strong identity.
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**AUTHOR INFORMATION**

**Full name:** Elena Visconti  
**Institutional affiliation:** Department of Humanities, Philosophy and Education, University of Salerno  
**Institutional address:** Via Giovanni Paolo II, 84084 Fisciano - Salerno – Italy  
**Short biographical sketch:** Researcher of General and Social Pedagogy at the University of Salerno; Ph. D. in Methodology of Educational Research at the University of Salerno; Three years research grant at the Department of Educational Science of the University of Salerno; Annual Postgraduate course and Postgraduate Professional Updating; Three year specialization in Clinical Pedagogy; three Scholarships won at the Italian Institute for Philosophical Studies of Naples; Teaching contract for the integrative course History of Pedagogy - Progetto scuola – at the University of Salerno, Department of Educational Science a.y. 2002/03; Member or Research team 2002-2003-2004-2006; Lecturer of Adult Education, University of Salerno, a.y 2008-2009; Lecturer of General Pedagogy, University of Salerno, a.y 2009-2010; Lecturer of Social Pedagogy, University of Salerno, a.y 2010-2011 / 2011/2012; Lecturer of General Pedagogy, University of Salerno, a.y 2012-2013, 2013-2014, 2014-15 and 2015-16.