Pedagogy in (*e*)motion: Bridges across cognition¹

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RESUMEN

En este artículo invito a discutir la importancia de las emociones en la agenda pedagógica y psicológica para superar el dualismo de razón y emoción. En el quehacer pedagógico, como en la vida, somos como actores que ponemos nuestra alma y corazón en nuestro trabajo. Las emociones son esenciales en nuestros procesos de toma de decisiones ya que son el motor del sistema límbico —nuestro cerebro emocional— el cual está conectado al aprendizaje y la motivación. De aquí que nuestro aprendizaje y enseñanza son auténticos y holísticos cuando están entrelazados en nuestras emociones. Por ello presento la propuesta para una pedagogía de la e(moción) que es capaz de *movernos* hacia la problematización como proceso político y social. Para la formulación de este concepto elaboro varios discursos que deconstruyen las fronteras entre el enseñar, pensar y el sentir, tomando de base elaboraciones que resaltan nuestra herencia filogenética, cultural e histórica.

Descriptores: emoción, movimiento, pedagogía crítica, cognición, cultura, política

ABSTRACT

This paper is an invitation to discuss the importance of emotions in a pedagogical and psychological agenda in order to overcome the dualism between reason and emotion. In education, as in life, we are like actors who bring our hearts and souls to our work. Emotions are essential to the decision-making process since they are the engine of the limbic system —our emotional brain— which is connected to learning and motivation. Therefore, learning and teaching are authentic and holistic when they are embedded in emotions. Thus, this paper is a proposal to consider pedagogy in (e)motion as pedagogical practice that *moves us* toward constant problematization, to construct more powerful bridges across cognition as a political and social process. To formulate this concept I elaborate some discourses that deconstruct boundaries between teaching, thinking and feeling, in order to elaborate, explain and uncover our phylogenetic, cultural and historical heritage.

Keywords: emotion, movement, critical pedagogy, cognition, culture, politics

"...you can't separate intellect and feelings in the work of the mind. They're both there all the time. Real learning —attentive real learning, deep learning— is playful and frustrating and joyful and discouraging and exciting and sociable and private all at the same time, which is what makes it great." Eleanor Duckworth (2005:21)

Authentic learning is a crossover of emotions

Eleanor Duckworth's words have invited hundreds of educators including myself to enjoy the risk of having wonderful ideas. What makes learning a journey of risky fun? I can remember, with particular clarity, some of my journeys of risky fun and learning in some of those experiences; the butterfly feelings in the stomach, the tension, and the anticipation that would end in a great feeling of accomplishment. Yet these experiences also felt like roller coaster rides. It could be that these experiences became a kind of metaphor for the intersection between emotions and the actual physical and cognitive movements that these emotions provoke in us. The great Brazilian educator, Paulo Freire (2005; 1998; 1993) always maintained that we are educators when we recognize that we must teach with both our hearts and minds. In education, as in life, we are actors who bring our hearts and souls to our work. Within a plot, we share the space with other characters in the scenario, which may or may not change, depending on the intention of the writer. As with the roller coaster ride, we are there experiencing emotions that we sometimes cannot name. Located within the plot, we are never a mere audience; we are performers giving life-interpreting meaning to the context as a whole. For educators, the script and context combine both challenges and aspirations to continually make sense and interpret our work. Educators, acting like performers in their classrooms must collect and evaluate their works in terms of a commitment with a constant reinvention of pedagogical practices, of critical questioning, of differences that arise, of different ways of understanding the learning process, of what might be considered small conquests in an effort to teach and learn, and of the negotiation that takes place throughout. From the point of view of a learner, a gain could be understood as that connection, explained or pending, between concepts, a moment of assertion, a minute of debate, a moment of doubt or enlightenment, everything counts! All experiences make possible an expansion of what is to what might be (to more), or untapped ideas that can connect our critical being to content in order to problematize it. Here, the emotions find their common scenario with thought. Fear, joy, acceptance, disgust, surprise, anger, and anticipation, sorrow: all basic emotions are embedded in our biological and cultural nature. Emotions color our ideas, move the reason and stretch cognition.

Drawing upon the tenuous yet suggestive relationship between the act of teaching and the openly and asserted projections of a performer, the uncommitted performer seems to sense an accomplishment of their work once the curtain is dropped; but the committed performers, insist on the artful-political-social development of their project, reinventing themselves within the context of what is felt in and across different fields and places. I feel comfortable with the metaphor of performer for the simple reason that we may not be as close to our students if we do not prepare effectively, affectively, and cognitively to *perform* in a moving pedagogy that can provoke the audience to share in an emotional sense. I can recall some of the remarks made by renowned educator Yetta Goodman.² In an interview for the book titled Teaching by Heart (Hatton, 2005) she said that in her early experiences, as an educator, she referred to herself as a performer in a negative sense feeling she was engaging in and with the classroom for the sake of entertainment. Of course, such an important discovery was indeed an indication of her own role as a critic or spectator cognizant of her own emotional status. Her emotions had triggered a cognitive dissonance and valid doubts about her role. She said that even when some students responded well, others would gain little if anything from the experience. She decided to move from her center, from her own comfort zones as a performer and opted to navigate into the spaces that would showcase the students. Here I need to highlight the importance of the concept "context", since I propose to make clear the relationship of movement to emotions. Etymologically, the word has a *text* that is not expressed in a concrete sense, but is nevertheless present. In other words, it is conveyed to someone somewhere at some point in time. The text is thus embedded in a time space continuum called context, wherein our human processes are imagined, realized,

and actualized; where and when we invent and reinvent ourselves and our world from within and without.

By the same token, bell hooks affirms, in her book, *Teaching to Transgress* (1994), that teaching is a performative act. And I have to agree with her given that it has been my own experience in the classroom and other pedagogical settings. Performance is that aspect of our work that offers the space for change, invention, improvisation, and even good and thoughtful planning. To embrace the formative aspect of teaching it means that we are compelled to engage many and diverse audiences to consider ideas, issues, and proposals of reciprocity. We need each other; we need to resist the enchantment of the lights and the special effects. In other words, our job is not to amaze other senses, but to shake their senses and to move not to entertain in a banking-like (see Paulo Freire on the "banking" notion of educating) fashion. A delicate balance must be struck between a performance that engages and one that shadows. What is education, if not the art of making movement so others can engage at our invitation to participate and to be?

As educators, we can promote enthusiasm for knowledge and learning. We can design a pedagogical practice of ludic and reflective activities. While participating in a 10-day workshop held in Tucson Arizona in 1992, on the topic of language and socio-cultural approaches, I was moved yet again by Yetta Goodman. Again she infused her conferences with the literature and authentic narratives of children. And yet, as great as the memories of those conferences are, they also represent transformations in the political and social influences of the educational position that I decided to pursue. We cannot be ingenuous about our place in front of others' ideas and their effect on us. As teachers we have power and, as such, a clear challenge to a work alongside, to work with. One of these challenges is clearly the institutional and personal hierarchy that comes with our own functions as educators. This may actually represent one of the biggest challenges to any of us in higher education. From a more positive perspective, I can assume a more experienced and nurturing position in the process of generating knowledge, but this is in no way my own nor exclusive role. Day in and day out the committed educator demonstrates and works with her audiences in the socio-emotional conditions that promote a respectful climate for discussions and debates such that unexpected 'truths' can be revealed. Actually, when I engage in daily discussions with my stu-dents about their struggles, the anecdotes and their stories, I can identify those silent spaces in the deep emotions, pauses were other 'lineal'

educators might resist and succumb to only that which lies at the surface; the simplistic and oversimplified cognition and recognition of the obvious, shrugging-off any deeper understanding and learning. Again, thought and reason meet with emotions and feelings.

This is precisely the difference between a pedagogy in (e)motion and a rational lineal pedagogy; the recognition of the intersection of reason and emotion, where such a dualism reveals the fundamental necessity to reconsider this distinction. Actually, throughout this paper I will defend the position that the dualism: reason and emotion is a mistaken one. I will, on the other hand, assert that in the dissolution of such a dualism, we will discover a new way of knowing and understanding that takes into account both the contexts and emotional aspects of human cognition. Indeed, how can it be possible that we not include our emotions in the cognitive realm if, in fact, processing of emotional information is mediated by pathways and neural structures that are involved in intellectual processes such as decision-making and problem-solving (Alvarez, 2006; LeDoux, 2000; 1996) and in creative solutions (Csikszentmihalyi, 1996)? Maybe the reason is because we have underestimated the value of emotions in deep learning.

Why to engage in pedagogy with emotions in mind and body

Emotions are related to body as well as mind. There is no cognition without emotions, or emotions outside the limits of a cognitive experience, and progressive explanations of human learning and development must take into consideration the fusion of both. To engage in a pedagogy in (e)motion, I propose to transact with the consequences of attempting risky maneuvers; to trust our intuition, to consider the analysis of our behavior in connection with our emotions, and to problematize facts. It is important to know that our behavior has historical and cultural roots as it also implies the highest of mental functions, composed of complicated internal processes. Those internal processes include the complex and yet primary mechanisms of emotions. Antonio Damasio, a prolific neurobiologist and author of many books on this particular subject, has discovered that the emotions are essential to the decision-making process since they are the engine of the limbic system -our emotional brain which is connected to learning and motivation. Emotions are needed to make simple decisions such as how to dress or what to wear and how to execute complex activities such as the making of critical judgments. These wide ranges of behaviors and actions are

possible due to the cultural nature of our life as social beings. In this line of thought, Damasio (1994), in *Descartes's Error: Emotion, Reason, and the Human Brain*, points out that, our emotions are triggered only after an evaluative, voluntary, not automatic mental process. In the following quote, he expresses the relation of emotions and the evaluation processes:

Because of the nature of our experience, a broad range of stimuli and situations has become associated with those stimuli which are innately set to cause emotions. The reaction to that broad range of stimuli and situations can be filtered by an interposed mindful evaluation. And because of the thoughtful, evaluative, filtering process, there is room for variation in the extent and intensity of preset emotional patterns. (p.130)

In other words, in spite of our personal interpretations of the experience and the more complex social organization in our lives and communities, the basic map of the machinery of the emotions has been transformed. The more we interpret the more we interpose our cultural and political selves to multiply and expand the emotional mapping. Emotions have been the topic of many psychologists, scientists and philosophers. From the first published articles of William James in 1884³, to Robert Plutchick (2001), emotions have been related heavily to body reactions as well as mind states. From James's primer map of fear, love, rage and grief there is an expanded version that includes sadness, joy, fear, acceptance, anger, disgust, surprise and anticipation. There is a remarkable body of knowledge in the field of emotions and the disciplines that crossover them, extensive enough to fill some books. Moreover, from the interpretative standpoint, as much language and cultural tools are embedded in our constructions of meaning the more words we will have to name those meanings related to feeling and affective moods, situations and stimuli. What it is important to the concept of pedagogy in (e)motion is to establish the importance of avoiding boundaries between teaching, thinking and feeling.

Our emotions have very important functions in our lives, more than just help us to adapt to new situations and protect ourselves by provoking nexus between events and body states. The emotional response can accomplish some useful goals when we are feeling our emotions because we become entirely conscious of it. The moment we become conscious of emotions we have the flexibility of response based on the particular history of our interactions with the world; means as environments, human landscaping and contexts. Damasio (1994) states: "although you need innate (natural mechanisms) devices to start the ball of knowledge (interpretation) rolling; feelings offer you something extra." (p. 133). That something extra is what I call *stamina*, given by a feeling-thinking cultural brain.

Lev Vygotsky, the designer of the today acclaimed culture and sociohistorical approach in psychology, and in my point of view, the architect of a radical and critical psychology, was aware of the theoretical transgressions of his investigations as well as the limitations of the explanation of the superior thinking processes (a very researched topic in psychology) without the emotion component. In all senses, the psychological exploration leads to the problem of motivation, as Alex Kozulin —a Russian specialist in Vygotsky's sociocultural theory and the theory of mediated learning experience- says on the prologue of *Language and Thought*, 1996 (edition he edited). As he reviewed, one of the latest masterpieces of Vygotsky that remained unfinished for some years was the one which approached the problem with emotions. Kozulin indicates:

The first part of that masterpiece was titled The Study of Emotions: A historic-psychological research (started in 1926, finished in 1933, and published in the English language in 1984). In this book, Vygotsky returned to the problem he discussed in The historical meaning of the psychology crisis (1926, about the "gravitational" phenomenon between the naturalistic and the idealist explanation. This makes us reflect upon how the fields of emotions, feelings and motivation to produce higher level thought were divided epistemologically. In The Study of Emotions, Vygotsky demonstrates that there are not such similarities among James-Lange theory and Spinoza's concept of passion. He supports that, contrary to Descartes (the authentic precursor of James-Lange theory), Spinoza was looking for a synthetic concept of emotion in order to eliminate Cartesian dualism. In this point, Vygostky demonstrated how the dualistic approach from the XVII to the XX centuries, was dividing or polarizing psychology, in mechanicist naturalism and metaphysical idealism. (pp. 29-30, free translation by the author)

The systemic complexity of the human organism, and its meaning for the study of the affective processes were fundamental for Vygotsky's dialectical position of his explanation of mental or psychic functions. Vygotsky, in the 30's, was staring from the future in an attempt to track and explain the wholeness of the spiritual (body and mind) nature of human beings. The old epistemological challenge brings back the wide topic of emotions as to be discussed in the education and psychology fields in order to reconstruct and deconstruct the explanations of the thinking processes, their influence in learning scenarios and the understanding of human development.

The construct when deconstructed: more space for interpretation and political action

The word emotion derives from the Latin emotio⁴ and means movement, a motor expression through verbal or bodily acts and behaviors. Plutchick conceptualized emotions as an essential part of what we are and why we perpetuate ourselves as humans. I also believe that our emotions are responsible for our pertinence in history and culture. Damasio (1994) claims emotions as part of what we have called human cognition, human production, and the construction of thinking. Interestingly, Plutchick pointed out that the last century generated as many as 90 definitions of emotions given the theoretical approach used to categorize them, but even before, Spinoza, on XVII century, had a progressive idea of the importance of emotions in thought. From Darwinian evolution, Freudian psychodynamics, the psycho-physiological approach of William James, and the neurological approach proposed by Walter Cannon, they have together raised many ideas based on a variety of questions about controlled experiments, systematic naturalistic observations, images from high brain technology, and clinical interpretations of human manifestations.

Surprisingly, as much as we have to interpret human physical and subjective experience, the agreement among some of these and other specialists is significant in terms of giving to emotions a great role in human development. Every thought we have is related to our emotions and our emotions use cognitive systems for any analysis as well as the resulting action of the analysis. Thus, a feedback mechanism between emotions, thought, and action is forged. Emotions are a basic component of cognitive processes and this tenet is at the core of the proposal for a pedagogy in (e)motion: to be impassioned for a reason, and to assert that critical teachers are not politically neutral. Plutchik's (1980) psycho-evolutionary theory of basic emotions allows me to deconstruct the notion of emotions and demonstrate their important role in pedagogy. Emotions have an evolutionary history and have evolved from different forms of expression in different species. Emotions have

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served as adaptive mechanisms in helping organisms deal with key survival issues posed by the environment. When teaching, emotions can become a means for bringing forth information and the communication that follows in a colorful and constructive fashion. We can see ourselves moving into emotional states that can help us articulate our inner thoughts. This is particularly necessary in a world where the violent and uncertain dynamics of multiple scenarios in a society with its multiple challenges: biological, health related, demographic, economic, and political, all insist upon a constant negotiation in the process of human and social development. Each of these factors influences us in toxic or hopeful ways even though they are organized and synchronized by the ideologies of power. Hence, the adaptations we are constantly making are cultural in nature; conditioned by history, by memories, and by dispositions, revealing before us the critical need for a critical pedagogy in (e)motion and not the tradition of psychological accommodation. In other words, to accommodate may feel good, but it is no longer safe. As I mentioned, we always identify our ideas with a critical system of meaning with all of its allegiances and implications.

We are all at risk of being moved by emotions of rage and this too can be an honorable risk to take. Without emotions we are disconnected artificially from our inner-self as well as from our bodies, and from our historical memory. Being emotionally connected is being more conscious of the little and inconspicuous details that bring meaning to a story. Allow me to share an anecdote with you. My family and I were at the Luis Munoz Marin International Airport in San Juan, Puerto Rico, a colonial territory of United States, passing through a checkpoint. Before us there stood a large, very threatening and rare Star-Wars-like machine. Being seven months pregnant, I immediately stopped. We had heard about this machine in the news, but never thought we would meet it head-on. It is a cold and ominous version of the usual security detection machines; this one sprays the body with a mist. Its purpose is to discover any hidden liquids the person may be carrying. Again, being pregnant my body was quite full of amniotic fluid. Aware of the security concerns but also of my health and that of the baby inside of me, I twice questioned the female officer standing next to the machine if it was completely necessary that I pass through. "It's harmless", she said. "I am full of water as you can see. And that thing will sound off", I responded. Of course, it did. Yet the most threatening thing happened afterwards. The security officer's faced lit up as she reacted to the machine sounding-off as I passed through. "I am clueless

and astonished" she said. As I turned to her, she turned to a six foot six inch airport security officer who looked at the results of the machine. Another female officer subjected me to a full-body hand check. I was still waiting for someone to talk with me but no one did. When the female security officer completed the search her only discovery was the presence of my big belly. As to my questions she simply referred me to the other officer. In a calm, polite, but firm voice, I asked the security officer in Spanish - the native language in Puerto Rico- if he could explain to me why the machine sounded-off. He responded, in English, and with no visual contact: "that is confidential information." Airport security officials are federal employees. And federal employees work for the United States government in Puerto Rico, a colony of the United States. The wearing of a military or security uniform and the speaking of English and in such a context clearly establishes a boundary between the colonized and the colonizer regardless of the fact that as persons we are both Puerto Ricans. Pondering the female officer's response that I question the male officer in charge, I thought to myself: "This is a way of saying I don't know the rules and he does and has the power to withhold or reveal any information." This is one way people are utilized by the establishment to project control and power through bodily movement and verbal languages.

This is one way in which a pseudo-power, delegated to a particular sector or population of a colonized people, is exercised over other colonized subjects; no answers, no interaction, no eye contact, no personal touch, no consideration, not even an explanation of how it worked! This is the colonial illusion of being powerful, even if only for a few seconds. It was, in my estimation, a classic example of how we become detached as humans, detached from the "other", and poisoned by the illusion of power, distanced, severing any possibility of a communication with the objective of interpersonal human understanding. The persistence of my questions were my shields, an act of resistance and simultaneously a demand that we come to terms as equals, as cocollaborators in the process of forging human understanding. In this way, my questions were also political acts against the colonial tradition of passive acceptance and indifference when confronted by the colonizer's (U.S.) impositions. From a critical pedagogical and critical psychological standpoint, to sustain a dialogue or a short personal interaction with the other is a sign of openness, interest, and connection. On the other hand, the detachment I felt and was subjected to could also be transferred to another context; that which occurs in

classrooms, schools, universities, communities in public and private agencies; which, given the present state of affairs, need to turn inside and examine how to overcome an environment that is anti-dialogical and thus contrary to the best interests of human development.

Cognition and (e)motion: Always together?

At the beginning of the 21st century, there is much more agreement in the fact that emotions are linked to cognition in a very positive way. Cognition is not an isolated aspect of our experiences, as we interpret them embedded in our subjectivity. This proposal reminds us that a known thing is lived and interpreted experience. It is part of the living tree of human existence. It is an abstract idea that embraces the effects with their biological and biographical nature. There is no thought without emotion. There is no thought without memory, and the role of consciousness in these is of the utmost importance. When neuroscientists have asserted that consciousness and emotion are inseparable is because the emotions -- in their adaptive function-- lead our ideas with movement. Indeed, it is usually the case that when consciousness is impaired so too is emotion. In fact, the connection between emotion and consciousness and between both of these and the body is quite powerful. Taking Damasio's proposal (2003), complex consciousness is not a simple phenomenon: it is a well organized system that evolves through the lifecycle and changes depending on conventional memory and short span memory, and is enhanced by language. This conscious state is more a characteristic of people since we, in comparison to other animals, make culture and are conscious of it. An individual knows him/herself as being —the self— the entity that transcends, permutes and reinvents ideas, thoughts, and is capable of feeling sensations from others. Our biological nature is a re-collection of unique facts, events that characterize and identify us as a person with history and place in the world. The autobiographical self depends on systematized memories' situations in which our consciousness was involved: birthplace, interests, hobbies, problems, issues, behavior, our names, and our past. Our biographical memory is our pillar in life and lives in the physical world. We are lived memory, memory that takes into account the experiences; not static or finite, but dynamic and unfinished. Those memories and experiences related to motivation, interest, positive or negative intense emotions are crucial in many human activities.

Positive emotions are usually considered as ludic; according to some researchers such as Gadanho and Hallam (2001), who points out

that the positive emotions have a crucial effect on diverse cognitive processes such as information processing, communication processing, negotiation processing, decision-making processing, and even creative problem solving process. Isen and Baron (1991) summarized, that people who are feeling happy are more flexible in their thinking, make associations more easily, are more able to see potential relations among events than other persons in a non-happy mood. Other findings, using a Broaden-and-Build Model of Positive Emotions (Fredrickson 1998; Isen, Daubman & Nowicki, 1987) identified four positive emotions such as joy, interest, contentment, and love, and further suggested that positive emotions broaden the scope of attention, the scope of cognition, and the scope of action. This theory holds that, over time, the broadening triggered by positive emotions builds a range of personal resources, including physical resources (e.g., physical skills, health, longevity), social resources (e.g., friendships, social support networks), longevity), social resources (e.g., friendships, social support networks), intellectual resources (e.g., expert knowledge, intellectual complex-ity), and psychological resources (e.g., resilience, optimism, creativ-ity). Fredrickson (1998) and Forgas (1998) also found that persons in a positive mood formulated action plans that were more cooperative and integrative, and achieved agreements of higher quality than did neutral or negative mood participants. Meyer and Turner (2002), on their part, focusing on emotions as a motivation source in classrooms, concluded that involvement was socially constructed motivationally and emotionally by providing intrinsic supports, such as bolstering students in feel-ings of confidence, persevering, developing interest and curiosity, and appreciating mathematics as a tool and language. These findings validate the importance of emotions as a motor for motivation as well as a kind of scaffolding or natural support for thought skills, curiosity, communication, physical and sensorial awareness, and wellbeing.

Emotions must be understood in the context of the biological, biographical, and anecdotic dimensions of human beings. What we call consciousness is a complex biological organization of our brain which includes working memory, reasoning, conventional memory, and the language which enhances it. According to Damasio's interpretation, the super-sense of extended consciousness brings forth a fully constructed being into the light. The concept of the 'conscious' takes its meaning then from our proposal of the learner's own sense about his/her biographical heritage. Autobiographical memory denotes the organized record, and life documentary of relative aspects of our lives. These memories do not exist in a vacuum but in a given context with unique characteristics, social historicity, and culture which individuals use and need. This memoirist and biographical material is crucial for our existence and sense of reality. Therefore, emotions assume their important role in how we connect complex or simple ideas, values, principles and judgments among other activities that cultural beings produce. Human emotion is not just about sexual pleasures or fear of insects. It is also about the horror of witnessing suffering and inequities and about the satisfaction of seeing justice served; about our delight when we hear our national anthem or that special composition by Mozart, in my case I would say Gilberto Santa Rosa - for salsa dance music and Juan Morell Campos- for classic danza puertorriqueña. It is also very important to acknowledge that, from the huge research in the emotional intelligence construct —although this paper is not about this concept in its psychometric dimension— the idea of emotional development includes the understanding of our own and other's feelings and affective evaluations, the potential to connect to others, learning to manage and understand those feelings, and wanting to do so (Goleman, 1995) and the potential to regulate and move actions (Salovey & Mayer, 1990).

The predominant attitude in the modernity paradigm accuses the field of psychology and emotions of being too subjective -as if treatments of topics like interpretation, subjectivity, or any of many references to our inconclusiveness were synonymous with being vague and elusive. Indeed, that which may at one time be vague and elusive may deliver us into the realm of possibilities. Emotions have historically been situated at the opposite end of reason, connoting a perverse twist on the romantic perspective and an incomplete view of our humanity. Such a position could not recognize the legitimacy of emotions as both a vector and an engine for reason itself. More recently, controlledvariable studies (see Meyer & Turner, 2002; Park, 2004) have recognized the importance of emotions in the decision-making process, in common concept developments, and our movement within our ideological formation. Many recent studies thus support my proposal for the development of a pedagogy that takes very seriously the intentional movement and the intentional affect in the learning and teaching process.

Emotions are bridges for meaning and deep learning

Emotions are the mirror of our thoughts, and our feelings are the names we give to what we feel and what moves us. They are a physical response. One is moved, manifests oneself in movement that is at once a verb for the other. Puerto Rican writer, Ana Lydia Vega (2008), with her fine and astute sense of humor, as a writer and journalist writes:

If there is something that this workshop has taught me it is that in order to touch the delicate fiber of one that reads, the chosen theme must, before all else, make the one who writes tremble. In this, life becomes text. Here resides the truth of the author. (p.15)

Cognition and thought are yet other fascinating dimensions of my inspiration. Pedagogy in (e)motion reminds us of the fact that a known thing is a thing thought out, something lived and felt, in one way or another, and it is a branch of the tree of human livelihood that includes the emotions. We cannot separate them. Both are the product and process of lived experience itself and cognition is not simply a department of walls, it is a space of affectivity that needs both the biographic and biologic emotive of the being in order to manifest itself. Without emotion there is no thought; and if there is thought that it bears an ideological and sense-thought quality. Being neutral is being dead emotionally, and is a political posture of non-movement. Education as an object of reality, is, by nature contradictory, implies conservation (of data and knowledge acquired) and creation, critique, negation, and the substitution of the existent knowledge. We should look at how our attitudes, the ways that we organize our work, and the knowledge that we select, contribute to the proliferation of ignorance, submission, and defeat; or how these help to forge astute individuals, informative, critical and with a healthy rebelliousness, capable of nourishing the will to change things. This is the meaning of struggling for that which we do not yet know, but aspire to. It is to live in solidarity with other generations and with history itself.

> Broken bridges led to alienated teachers, frustrated and tired human beings. This is the terrain for cynicism. —n zambrana

Pedagogy in (e)motion is a bridge; it communicates and reaches the emotions of living with the movements that make possible justice and equity across all institutions. In his song *El escaramujo*, Cuban song-writer and singer, Silvio Rodríguez says, that he lives by questioning, and that knowing cannot be a luxury so, if knowing is not a right then surely it is a left, a metaphor that he uses to allude to a false dichotomy

that we make within divergent moments that can be interpreted as the coordinates of a necessary encounter for an understanding of human nature. In his cynical mood, the singer moves the audience to feel and think outside the logical and lineal structure of the expression. Here the emotions of anger and frustration in his obvious critique, serves as a powerful reservoir of affect that forces us to a re-reading of the world through questioning. This is an invitation to work with our emotions in mind and hands to create new understanding and to live in deep learning. Pedagogy in (e)motion proposes that emotions lead and enrich our pedagogy because it implies movement within ourselves. Therefore educators who are more connected with their emotional brain are more capable of stretching affective and social dimensions to be more *sentipensantes* (meaning the fusion between feeling and thinking) in the learning and teaching and living processes.

Deep learning is also related to powerful emotions. Maturana (2002) speaks about the biology of love; and asserts:

We, human beings are biologically caring, as a trait of our evolutionary history. This means two things: first is that love has been the preserved central emotion of our evolutionary history that gave us origin about five or six million years ago. Second, we become sick as we lack of love as a fundamental emotion, which is central to our existence with others. (p. 46, trans).

Kincheloe (2004) speaking about Freire's notion of love also elevates it to a condition for critical learning. He said:

If critical pedagogy is not injected with a healthy dose of what Freire called *radical love* then it will operate only as shadow of what is could be. Such a love is compassionate, erotic, creative, sensual, and informed. Critical pedagogy uses it to increase our capacity to love, to bring the power of love to our everyday lives and social institutions, and to rethink reason in a humane and interconnected manner. Knowledge in this context takes on a form quite different from its more accepted mainstream versions. A critical knowledge seeks to connect with the corporeal and emotional in a way that understands a multiple levels and seeks to assuage human suffering. (p. 3)

Deep learning: time and (e)motion in learning contexts

Learning that takes place in the form of an authentic context within a community of reflexive practice presents an ideal model for the prepa-

ration of teachers in the integration of new technologies —not only the digital- with pedagogical practice. This situation supposes profound and meaningful lifelong learning process. We discover a symbiosis of sorts between the contextualized learning theories of philosopher John Dewey and the theories of socially constructed learning advanced by psychologist Lev Vygotsky, both within the paradigm of social and dialectic constructivism, respectively. John Dewey's conception of consensual alignment in education posits that learning should provoke and celebrate reflection; but that the community of learners is born of social action; that educators, in their practice and discourse, need to provoke the conditions that stimulate thought, more than the repetitive mechanical skills, privileging communication with purpose and intent. John Dewey was aggressive in his vision of education given his emphasis on linking learning to experience, while at the same time maintaining a critical posture against the rigidity with which psychology treated the social construct called intelligence, emphasizing more so the construct of social intelligence which he called the power to live democratically in a society. And so, the school, and all formal educational contexts should have an eye toward a participatory democracy for authentic learning to flourish.

Theories of human development such as Vygotsky's (1995a; 1995b; 1978) socio historical theory suggest that just as cognitions are constructed as part of social interactions, so too can motivations and emotions. This theory views the environment and the person in terms of entwined reciprocal relations for understanding and explaining human development and learning, which is mediated in many diverse ways by others. The historic-cultural, more recently called theory of Vygotsky posits that the development of the intellect is the product of social contexts, the use of tools and signs, and the culture within which it occurs. Therefore interpersonal, intrapersonal, personal, and community activities are the motor of thought. After recognizing that emotions have a crucial role in thinking and dispositions, it is crucial in interpersonal, personal and community activities. People develop executive functions or processes of thought. The research of Vygotsky (in L. Moll, 1992; Lucci, 2006; Rodríguez Arocho, 2000; 2007) tried to establish how persons, with the help of tools and signs, direct their attention, organize the files in their memory, and regulate their conduct. First, the human being works at the social level (interpersonal) and finally at the individual level (intrapersonal) where s/he appropriates what was socially constructed. Thus, the essence of human

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thought and conduct reside in mediation through signs, people and instruments. The instruments are directed toward the exterior, toward the transformations of physical and social reality. The signs and are directed toward the interior, toward a self-regulation of behavior itself. For example, the mark that we make in a book or on an object, as a means of remembering something important was, for Vygotsky, the prototype for the mediation of complex behavior. As human beings we live in a universe of signs. Our conduct is not determined by objects but by the signs linked to objects. With respect to mental functions, Vygotsky defined the natural functions as inferior; as would be the case in the presence of elementary perception, memory, attention and will. While cultural mental functions he defined as superior since these appear gradually through a radical transformation of the inferior functions that are constructed and organized through psychological means and interpersonal tools. These tools and means are possible through the mediation of others in the making of culture. As humans who produce culture, we need our emotional reserves to operate with others and to manage the effects that tools have on us.

One of his principal disciples, Alexander Luria, criticized of modern psychology, its apparent evasion of the mental processes as social and historical in their origin and that the important manifestations of human consciousness have been molded by human activity and its superior product-process: culture. For both theorists (Luria and Vygotsky) the fundamental error resides in the historical search for explanations of the nervous system disconnected from cultural activity; that is, a notion of psychology as no more than an empirical science, void of interpretation, by virtue of the developments that have taken and take place for the ideas of behavior, assigned law-like attributes that privilege these as units of human analysis and hence confer upon empirical explanation of thought as exclusively and fundamentally a processes of mental activity, as if nothing more than a cold and undisputable matrix of mathematized stimulus and reaction. Notwithstanding, there is a strong tendency to leave out emotions from the mechanism of the formation of reasoned ideas. In great part, this is due to a lack of clarity with respect to the role of emotions in that interrelated experience of thoughtful functions. This omission of emotions can be detected in the majority of the papers of Vygotsky's followers in the United States. However, in Spanish psychologists Del Río and Alvarez (2007) paper titled, From the psychology of drama to the drama of psychology: The relationship between the life and work of Lev S. Vygotsky, we can find the voice for emotions and feelings. Actually, in my point of view, the challenge for current Vygotskian researchers will be to bring up to the analysis of the construct of emotions to explain higher levels of thinking in order to understand human development and learning.

The emotional brain, as referred to by Antonio Damasio (2003) and Ledoux (2000), imposes a certain level of control and coordination with respect to bodily responses; vital to the most advanced processes. It plays the role of mediator between the reasoning brain and the body, informing and motivating the feeling-thoughtful brain. It includes the thought of feelings, in such a manner that these become inseparable. It has also been posited that the limbic system plays a role in the conservation of "the continued sense of the personal self and the convictions that we apply to our beliefs", according to Damasio. The limbic structures —which have been related to emotions, motivation and learning— can also be fundamental in the recognition of one animal to another member of its species for social affiliation. Long before the neocortex completes its evolution; the emotional brain is already in its place. While the links between the oldest and newer cortical centers evolves, the neo-cortex is already, modulating, interpreting, and regulating emotional life. As evidenced in its Latin root, "emotion" connotes movement. When we are moved, bodily changes are produced. The eyes dilate in surprising happiness. The legs fly, the body dances. From Sigmund Freud and his metaphors of the mind or psyche (soul) that must take into account the emotions and impulses [of the "id"] of the inhibited nature of the human being to counterbalance societal tensions, to the functionalist William James, who on the contrary, offered an inventory of the self as the sum of what is considered "own": the body, mind, and circumstance capable of interpreting and evaluating, we are, in the end, affective beings who create intentions, are the architects of plans, the translators of experiences and language, the communicators, constantly interpreting and sharing personal and cultural knowledge.

Making a meaningful relationship with students takes emotions

To evaluate critically the emotions that move us is part of the dialectic constructivist mission forcing us to transgress the order of a banking and linear knowledge that also commits us to rethink our positions from the personal and collective aspects of knowledge construction toward a re-creation, a reconstruction, if you will, of the interpreta-

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tions of reality, that may be parallel, but not totally contradictory. Additionally, such action brings us closer to our students because it allows the students and their professors to make strides in the direction of deep dialogical discussions. In this way, agreements and disagreements in the creation and re-creation of discursive activity will promote the necessary evidence of a future culture of students engaged in reflection and critical pedagogy capable of critically understanding and transforming the space and content, that is, the form and context of education. Naturally, in the process, both students and professors need to arrive at their understandings about the relationship and the embedded meanings of power. Most power analyses of interpersonal and group level dynamics establish, as their point of departure, that in order to adapt and master their environment, people continually need to be able to produce their own intended effects on these environments (Nafted, Blakar, Carlquist, Phelps & Rand-Hendrinksen, 2007). Power is related to intra-psychological concepts such as autonomy and competence.

Along these lines, it is necessary to recognize the power of personal relations and its affective expressions transmitted and received between students and professors in and outside the classroom; and subsequently, its possibilities at the level of cultural and political activity. Actions born of this kind of reciprocal exchange, mediated by the emotions and a deep conviction of being, can well signal a direction aimed at an emancipating process of human educational experience. I am constantly exploring the instances in which I call my students to collaborate with me in my projects and I in theirs in different contexts: communities, schools or churches. After experiencing dialogues with some of my graduate students in a more than traditional mentor/mentoree relationship, or what I call collaborative supervision, these students truly engage their communities in the learning context drawing rich and gratifying results from their practicum experiences. In this super-vision, both, students and I take particular care of our professional and personal contradictions and dispositions in terms of their relations with the school personnel and the sensible practices in school psychology. The emotional involvement of these graduate students arrives at its own system of values and interpretations of reality, and contributes to a more critically profound understanding of their own preconceived ideas contributing to a different interpretation of family practices, dynamics, and values in order to unveil richer meanings that would otherwise remain occluded by traditional school psychology and mental health practices. Thus giving importance to the

historic and cultural forces, change the living codes values and force us all to the problematized analysis.

And so, I have discovered that students and professors within diverse school and college settings must learn to reconstruct the meaning of sharing power in order to participate and transform the decision-making process in the many activities relevant to their disciplines and institutional committees. All must be engaged in order to forge organic committees and interest groups among students and professors, to have the space to rethink our collective relations with students, to critically engage the text, and to more justly evaluate the policy-setting environment of our university. The diversity of students and professors engaging in open discussions and open spaces makes possible the consensus and healthy conflicts certain to result in gains for any institution. When democratizing the barriers that traditional power relations like those of professors and students, our contexts become less certain, more flexible, less definitive, and as such, more fluid, lending themselves to a broader, richer, and more participatory possibility of interpretation. For almost eight years at the University of Puerto Rico, a group of professors created and conducted the Cátedra Freire (Committee of Freirean Scholars), our colleagues and a group of graduate students shared a space for the discussion and coordination of academic, cultural, and political activities that drew from the educational principles of Paulo Freire. I recall that one of our most revealing activities included a series of dialogues and discussion sessions related to the tensions between the Student Council of the College of Education, the Office of the Dean of the College of Education, and other student groups. I think we all grew as these encounters challenged our own personal agendas and interpretations of what dialogue is, as our capacity to transgress the official discourse of the faculty was tested. While most uncomfortable too many, such an experience affords us the opportunity to capitalize on the possibilities of critically understanding and utilizing our emotional reserves in our actions, reflections, and negotiations. Here I refer to the process of negotiation as an opportunity for each of us to redefine and collectively encourage new meanings of consensus.

Thinking in (e)motion needs courage and action

In a conversation I had with a colleague about the world order, our pedagogy, and our students' responses to related themes, we came up with some reflections about that which shapes our dialogue. My col-

league recalled a conference she attended at the 2007 meeting of the American Education and Research Association on the subject of mindful teaching, based on the work of Parker Palmer. The presenters at this conference explored the importance of the teacher's professional identity, vision and perception of her students, and the discipline needed to promote profound changes. This line of thought adopts an approach of mindful or contemplative teaching. As interesting as this approach seems, there remains a dimension I consider fundamental to any analysis. This dimension is defined by our ethical values and political stance. We may not always be in agreement, but we can at least admit to our political position in the interpretations of the world and as such engage with respect to in the presence of other positions. Author of, The courage to Teach: Exploring the Inner Landscape of a Teachers Life Parker Palmer presents us poignantly with the notion of the "power of love and forgiveness" promoting a connectedness between "personhood" and its possibilities to transcend. This is exactly what interested us in our dialogues regarding mindful teaching. For me, a sense of personhood must include and never neglect our political and cultural dimensions. It is essential that we recognize our connectedness if we are to overcome and transform human injustice and, in the broadest sense, our ecological destruction.

The moment we turn our back on our connectedness or distance ourselves from the subject we are teaching, we sink into an acceptance of an inauthentic rupture from what and how we teach. Orphaned from our feelings and connectedness to culture our knowledge becomes a mimeograph, a copy or reproduction of something not ours as teachers or as students, sacrificing the possibilities of a deeper, more profound, and transformative educational practice. This makes the subject that we are studying or the content of our educational practice distant and artificial 1-and as such, the distancing our students from the world, our interpretations of the world, and the possibilities that they engage in with their own world in the context of the content studied. As teachers, honesty and identity in our approaches are the only insurance we have. This honesty and identity requires the integration of a critical lens from which we can see and interpret the world amidst differences of positions and contradictions, and still project hope for improvement. In his book, Critical Pedagogy and Predatory Culture: Oppositional Politics in a Postmodern Era, Peter McLaren (1995) discusses the concept of identity from the perspective of a metaphor, of a narrative that touches the borders of uncertainty: "A text, identities

cannot be fixed within closed systems of meanings; consequently, there are no true identities —only identities that are open to inscription, articulation, and interpretation" (1995: 99). Again the inconclusive nature of identity is reinforced by McLaren's position. As such, as educators we must recognize the cultural and political forces and influences in our pedagogy that can sway from conformity on the one hand to resistance on the other. This dynamic, the very real presence of human contradictions, then makes mindful teaching and learning more manageable and enjoyable.

As critical pedagogues, we are committed to action and not passivity. We place love and forgiveness and a critical perspective couched in the necessity of connectedness with the emotions, passions, and aspirations in the context of a struggle for justice. We cannot be oppressive with our students and at the same time claim that we love them. But we can accept our relative positions of power problematize them, look for alternative transactions, while being honest and politically centered. Because our emotions and feelings shape our consciousness, we must, as teachers, be critical beyond any notion that would lead us to patronize or concede. The delicate connections between emotions and actions must be empowering, not to concede but to assert. Critical postmodern teachers are not politically neutral, as they identify with a critical system of meaning and all of its allegiances. The difference between critical postmodern teachers and teachers who see themselves as neutral is that critical postmodern practitioners admit to their political preferences and invite others to claim theirs. Claims of neutrality are dangerous when one examines the work of teaching. On a daily basis, teachers choose to include some forms of knowledge while excluding others from the curriculum, and legitimate particular beliefs while delegitimizing others. Being neutral is being dead emotionally, and it is a political posture of non-movement. We always have a project underway in our classroom. Everything has a purpose, a goal.

If there is a broken bridge, we can reinvent a healing one

I would love that my students remember me as a door that help them to enter into the world. —Undergraduate- student -teacher

The above student's reflection moves me to think about the imponderable difficulties that they will find when trying to enter "into" the world of teaching. But those obstacles are not as important as the

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affective and cognitive tools that pedagogy of the emotions can offer. Understanding the metaphor of the door, cited above, is tantamount to embarking on a journey into the student teacher's deepest motivations and desires. Much of our work resides in the places of our emotions, memories, and movements. Dancer, educator, and writer Mabel Elsworth Todd (in Kincher, 1990, p. 79) has said: "Emotion constantly finds expression in bodily position", and body position is a decision we make. And so the aspiring student teacher must make a decision to move toward a goal or succumb to the possibility of never accomplishing it. Moreover, she would need to predispose herself with passion in the planning and the process that would lead to the achievement of her goal. In a pedagogy in (e)motion teachers are completely committed to being active motivated for both motion and emotions.

From the metaphors —bridge, dancing, window, doors— which we can use in education to describe, in sensible ways, its dynamic nature, those which link movement and emotion may very well represent the necessary motivation for the realization of our pedagogical goal. Why we would need this pedagogy becomes the crucial question. The critical answer: why not exercise a pedagogy that promotes the possibilities for sustained and thoughtful human living? Can an educator reach cognition and political action without being (e)motioned? By no means can we assume a naive point of view, but being in hope —as Freire expressed (1990), not waiting without action—rather in a combative and suspicious attitude, prepared to connect to meaning and forge new realities. Pedagogy is a human act, and a relational activity by definition. It has to do with the act of teaching and learning in a determined context with its cultural and ideological premises. Having a normative system presupposes that there are controls, limits, and a hierarchy. Yet, it is naive to consider that "the system" is free of con-tradictions of what education must be and why. And it is precisely the contradictions of our thoughts as feelings wedded to our practice that we, as critical educators with a pedagogy and (e)motion, must identify, reflect and act upon; an educator, sensible enough and engaged with her reality such that she can reach into the destructive and pessimistic comforting numbness of what for too long she has superficially accepted and transform it into a creative and hopeful journey.

We must remember that against all odds, there are teachers that resist; teachers who dream; teachers who invent and reinvent themselves no matter how experienced they are. There are teachers who get involved in adventures and calculated risks; teachers who have learned to relearn; teachers who transgress the textbooks in search for meaning; teachers and school principals who share their power and invert their roles; supervisors who think that their teachers are the school's everyday heroes. Pedagogy in (e)motion is this activity in which you and I have an emotional relationship that can embark us upon many interesting projects, one of them being the building of bridges, to heal, to fix, to break, to empower, to transgress, and ultimately to position ourselves as educators and interpreters of our human and physical reality with political clarity and purpose. I recognize that there is much more to dialogue and research about human emotions, learning contexts, and cognition. This proposal is a concrete and strong point to begin with.

REFERENCES

- Álvarez, H, J. (2006). *Los hallazgos de las neurociencias y su aplicabilidad a lo sala de clases: teoría y práctica.* Guaynabo, PR: Ediciones Santillana.
- Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Perennial.
- Damasio, A. R. (2003). Looking for Spinoza: Joy, sorrow, and the feeling brain Orlando, FL: Harcourt Press.
- Damasio, A. R. (1994). Descartes's Error: Emotion, reason, and the human brain.New York: Avon Books.
- Del Río, P. & Álvarez, A. (2007). From the psychology of drama to the drama of psychology: The relationship between the *life* and *work* of Lev S. Vygotsky. *Estudios de Psicología, 28*(3), 303-332.
- Forgas, J. P. (1998). On feeling good and getting your way: Mood effects on negotiator cognition and bargaining strategies. *Journal of Personality and Social Psychology*, 74, 565-577.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology*, *2*(3), 300-319.
- Freire, P. (1998). *Teachers as cultural workers: Letters to those who dare teach.* Colorado, USA: Westview.
- Freire, P. (2005, décima edición). *Pedagogía de la indignación.* Madrid: Ediciones Morata.
- Freire, Paulo. (1993). *Pedagogía de la esperanza. Un reencuentro con la pedagogía del oprimido.* Siglo XXI Editores.
- Freire, P. (1990). La naturaleza política de la educación: cultura, poder y liberación. Barcelona: Paidós.
- Gadanho, S. C., & Hallam, J. (2001). Robot learning driven by emotions. *Adaptive Behavior*, 9(1).
- Goleman, D. (1995). Emotional Intelligence. New York: Bantam.

- Hatton, S. D. (2005). *Teaching by heart: The Foxfire Interviews*. New York: Teachers College.
- hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom*. New York: Routledge.
- Isen, A. M., & Baron, R. A. (1991). Positive affect as a factor in organizational behavior. *Research in Organizational Behavior, 13*, 1-53.
- Isen, A. M., & Daubman, K. A., & Nowicki, G. P. (1987). Positive affect facilitates creative problem solving. *Journal of Personality and Social Psychology*, 52, 1122-1131.
- Kincher, J. (1990). Psychology for kids. MN: Free Spirit Publishing.
- Kincheloe, J. (2004). Critical pedagogy: Primer. New York: Peter Lang.
- Kincheloe, J. (1993). Toward a critical politics of teacher thinking: Mapping the postmodern. Westport, CN: Bergin & Garvey.
- Le Doux, J. (2000). Emotion cicuits in the brain. *Annual Reviews Neuroscience*, 23, 155-1.
- Le Doux, J. (1996). Ther emotional brain: The mysterious underpinnings of emotional life. New York: Touchstone.
- Lucci, M.A. (2006). La propuesta de Vygotski: La psicología socio-histórica. *Revista de Curriculum y Formación del Profesorado*, 10. Retrieved from http://www.ugr.es/local/recfpro/REV102COL2.pdf
- McLaren, P. (1995). Critical pedagogy and predatory culture. New York: Routledge.
- Meyer, D.K. & Turner, J.C. (2002). Discovering emotion in classroom motivation research. *Educational Psychologist*, *37*(2), 107-114.
- Moll, L. (1992). Vygotsky and education: Instructional implications of sociohistorical psychology. New York: Cambridge University Press.
- Maturana, H. (2002). Transformación en la convivencia. (2da ed.). Venezuela: Dolmen Ediciones.
- Nafted, H.; Blakar, R.; Carlquist, E.; Phelps, J. & Rand-Hendrinksen, K. (2007). Ideology and power: The influence of current neo-liberalism in society. *Journal of Community Applied Social Psychology*, 17, 313-327. Published online in Wiley InterScience (www.interscience.wiley.com) DOI: 10.1002/casp.931
- Park, S. (2004, Jan.). Building bridge between learning and positive emotion: How to apply emotional factor in instructional designing process? Vol. 1, Annual Proceedings of the Association for Educational Communications and Technology, 27th, Chicago, IL.
- Plutchick, R. (2001). The nature of emotions. *American Scientist*, 89(4), 344-350.
- Plutchik, R. (1980). A general psychoevolutionary theory of emotion. In R. Plutchik & H. Kellerman (Eds.), *Emotion: Theory, research, and experience: Vol. 1. Theories of emotion* (pp. 3-33). New York: Academic.

- Rodríguez Arocho, W. (2007). La investigación educativa en la América Latina: Cuatro desafíos y algunas ideas para enfrentarlos. *Pedagogía*, 41, 5-19.
- Rodríguez Arocho, W. (2000). El tema de la conciencia en la psicología de Vygotsky y en la pedagogía de Freire: Implicaciones para la educación.
 En A. Villarini Jusino, D. Schipani & F. Noriega (Eds.) *10mo Encuentro Nacional de Educación y Pensamiento: Globalización, pensamiento crítico y pedagogía de la liberación* (pp. 178-192). Universidad de Puerto Rico.
- Salovey, P. & Mayer, J.D. (1990). Emotional intelligence. Imagination, Cognition, and Personality, 9, 185-211.
- Vega, A. L. (2008). *Mirada de doble filo*. San Juan: Editorial Universidad de Puerto Rico.
- Vygotsky, L. S. (1995a). El desarrollo de los procesos psicológicos superiores. Barcelona: Crítica.

Vygotsky, L. S. (1995b). Pensamiento y Lenguaje. Barcelona: Paidós.

Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

NOTES

- 1 This paper is part of the first chapter in the unpublished book titled *Pedagogy in (e)motion: Rethinking spaces and relations.* The book is expected to be published on 2010 by Springer Publications.
- 2 A widely known educator whose work and practices have been devoted to the topic of writing and reading in elementary levels, and cofounder of the whole language approach. I learned with her to read stories in my college classroom.
- 3 May be his first publication about emotions was: What is an Emotion? William James (1884). First published in *Mind*, 9, 188-205, found in *Classics in the History of Psychology: An internet resource* developed by Christopher D. Green, York University, Toronto, Ontario, http://psychclassics.yorku.ca/James/emotion.htm
- 4 In Alvarez, H. (2006), p. 139. Chapter 6 is about motions and its role in learning concepts, reason and social relations.

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