PROPRIOCEPTION OF THE MIND

BALANCING SCIENCE AND SPIRIT THROUGH EMOTIONAL INTELLIGENCE

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ABSTRACT

This paper purports to demonstrate that teaching is an art form that not only relies on knowledge of theory and practice, but, even more importantly, also depends on a sensitivity to the needs of the individual student and the needs of the group. It is important for us, as teachers, to understand that in order to teach our students we need to reach them on an emotional level by implementing emotionally intelligent judgments throughout our interactions with them. It is not sufficient to be totally versed in the subject we are teaching, we must be continually aware of the emotional state of our students by assessing myriad clues simultaneously. These clues are received accurately by an emotionally intelligent teacher, affording students the opportunity to actualize their potential. The Nebulous Bull's-Eye and Proprioception of the Mind are graphic representations of two key concepts; understanding how a student progresses through emotional stages and circumstances yielding the optimal conditions to actualize their learning potential, and how a masterful awareness of students' cognitive and emotional bearings guide a teacher towards effective instruction.

ERIC Descriptors:

Communication

Behavior

Teaching Skills

Student Teacher Relationships

Teacher Responsibility

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INTRODUCTION

"The more and more each is impelled by that which is intuitive,
or the relying upon the soul force within, the greater, the farther, the deeper, the broader,
the more constructive may be the result…"
- Edgar Cayce

This paper will explore the premise that we have the capacity to affect the learning potential of our students by being more attuned to what emotional intelligence entails, and by validating and reacting to our intuitive "knowing" of the emotional energy from our students. The majority of our emotional selves lies in the unconscious or subconscious of our psyche, stirring inside of us, but rarely coming into awareness. Despite this fact, these unconscious emotions make profound adjustments to how we perceive and react. The possibility exists to control our consciousness in order to bring our intuitive understanding of our students beyond merely the periphery of our awareness, and into a process of active decision-making in the classroom. I have extrapolated my understanding of the negotiation process within Vygotsky's Zone of Proximal Development (Vygotsky, 1962), which is the interaction between teacher and student) by way of my first ontological term *The Nebulous Bull's-Eye.* The four layers (see Appendix A) of the Nebulous Bull's-Eye unveil how a student moves through her initial visceral response to a classroom environment and progresses towards reaching cognitive potential.

In addition, I propose that an optimum classroom learning environment is guided by a teacher who engages themselves with students through emotionally intelligent perceptions and reactions. I believe that an emotionally intelligent teacher suspends their own need for self-validation and focuses full attention on their students' well-being. The capacity to engage with students in this way is the ontological term *Proprioception of the Mind* (Fowler, 2003). The physiological definition of proprioception (which is a Latin term, meaning one's own) is the perception of body awareness; a sense that we rely on enormously, yet are usually unaware of. Proprioception of the Mind, however, is a blending of our biological and emotional selves that offers a harmonious balance between science and spirit. This ideal will be addressed as the culmination of this paper; assimilating my research into learning theories and natural circumstances and biological implications of ourselves as human beings.

Following the conclusion of this paper is the index of Terms, Definitions, and Ontologisms (page 55). Ontologisms are representational vocabulary of a concept; unique to this paper the ontologisms will be *The Nebulous Bull's-Eye* and *Proprioception of the Mind*. This index is a veritable roadmap of how, through research and reflection, my ideas for this paper evolved. It is representative of not only the specific readings I focused on for this paper, but the history of my educational experience. My previous interests in biology, anatomy, physiology, anthropology, philosophy, and psychology are embedded in the choices I have made and how I perceive the relationship between our biological selves and the emotional landscape of teaching and learning. Traditionally in the world of academia, science and the arts have been segregated; separate fields of study that

rarely mesh. My understanding of others, myself, and the art of teaching is grounded upon my belief that science and the art of teaching are deeply connected.

CHAPTER ONE

Emotion and Communication

Emotion

Emotions are rooted as the fundamental distinction of being human. They tap into who we are, biologically, and are a result of an evolutionary process; becoming as much a part of our genetic code as our physical features, personality and other hereditary predispositions. The biological purpose of emotions is to distinguish subtleties and nuances of our surroundings, beyond merely a "good" or "bad" distinction. (Ekman, 1992) Our emotions are reflexive - responding to events, circumstances and perceptions of "otherness". Six basic emotions exist: Happy, sad, angry, surprised, afraid and disgusted. These emotions are paralleled with our inherent reflexive messages throughout the nervous system that millenia ago communicated to us as to whether we should bite (nutritious), spit (toxic), approach (sexually available), flee (enemy), or chase (meal). Those impulses evoked a response - they caused us to react to a stimulus. (Levenson, Ekman, Friesen, 1990) In fact, the etymology of the word emotion is from Greek, meaning "to move". Our emotions are a result of our most intrinsic need - to ensure the survival of our species. Throughout our evolutionary process we also adapted physiologically to the need to produce language; the bone structure of our skulls, as well as our facial muscles and other physiological features adapted in order to produce sound

with more efficiency and with less obstruction to our breathing. Our survival depended upon conveying our intuitive evaluation of the environment and our intuitive understanding of each other. In other words, language became necessary in order to communicate intuition. Since language evolved as a necessary tool to communicate instinctive assessments of our environment and others, it seems logical to me that the foundation of language teaching must accept and respond to our intuitive "knowing" of students' well-being and needs -- listening, evaluating and participating beyond the scope of linguistic interpretation and expression. The subtleties and nuances of communication can lead us to amazing possibilities - a ripe place, rich with emotional investment. We will never know how far our students' influence will take us -- unless we are aware of the clues.

Communication

The intrinsic need to communicate exists in all organic life forms. From cells communicating at a molecular level, to olfactory nerve stimulation (or smell) that numerous animal species interpret, to words that are uniquely human - life depends on communication to and from otherness. Our expressions of communication exist in many cognitive and emotional parallels; written and spoken words for the literate, universal paralinguistic expressions, sign language for the deaf, and in vibrations of mental and emotional energy that participate in all of the previous forms.

In an effort to understand the balance of emotional and cognitive "otherness" in a communicative classroom and how a student's potential can be actualized within this balance towards an educative experience, I have come to believe the following:

- Vygotsky's theory on the Zone of Proximal Development (a collaborative learning environment where students and teachers learn with and from each other) inherently exists in any communicative setting. Interaction with otherness is requisite for an individual to move from actual learning development to potential learning development. (Vygotsky, 1978)

- In a classroom setting, the Negotiation Process (which is the collaborative process between teacher and student when, through a teacher's skillful guidance, a student moves from actual learning development to greater potential learning development within Vygotsky's Zone of Proximal Development) is a ubiquitous circumstance irrespective of age or maturity.

- Within this Zone of Proximal Development, an effective negotiation process is contingent upon two variables: (1) An optimal, minimal anxiety level as it relates to the elements of a student's Affective Filter (attitudes, motivations and student self-concept), and (2) an emotionally intelligent teacher.

- I propose that the following traits are indicative of an emotionally intelligent teacher: Intrinsically motivated to meet the needs of his or her students, cognizant of subordinating teaching to learning, controlling his or her consciousness and attention while screening out irrelevant stimuli,

emanating a genuine, positive mood, and a sincere belief and hope that the student can learn.

- A teacher's emotional intelligence can be enhanced, improving students' learning experiences and growth. Awareness of what emotional intelligence entails is a precursor to controlling one's consciousness, leading to emotional intellectual growth.

- Intuitive assessments of students' paralinguistic cues are tantamount to other traditional forms of assessment. Interpreting mental and emotional energy from otherness is a valid indicator of how to reflect in and on decision making. These assessments transcend the barriers of objective, tangible assessments and tap into a student's emotional investment. The interpretation of these energetic assessments affect the content and presentation of content, while simultaneously affecting the emotional well-being of students.

- Understanding language communication (linguistic and paralinguistic) in the classroom is paralleled with an understanding of the following:
    1. Mechanisms (psychological and physical) of language expression.
    2. How the classroom environment and a student's sensory interpretation molds the ability to perceive.

3. Our functional need to communicate as it relates to our survival and validation of who we are as individual entities.
4. How and why our capacity to express language and emotion synchronously grew through the evolutionary process.

- My interpretation of the seven previous concepts is collated in the term Proprioception of the Mind. (Fowler, 2003). The term Proprioception of the Mind is intended to capture the physiological and spiritual essence of a teacher's affinity with students. I first discussed this idea in my final synthesis paper for Approaches, entitled *A Kaleidoscope of Private Universes*. The following excerpt captures the ideal of Proprioception of the Mind as I first perceived it.

> This is where philosophy, psychology, biology and methodology intersect to form a kaleidoscope of private universes. What happens in this kaleidoscope is a continually evolving "thing". It is cause and effect, joy and fear, self and otherness, second nature and sixth sense, autonomy and dependence, nurturing and challenging, safety and risks, cognitive and emotional, individual and community, stimulus and response, the power of silence and the power of language. This kaleidoscope is then unpredictable and unique - replete with myriad possibilities. I have come to recognize the fact that good teaching really is an art form, and requires an awareness of all the previously mentioned paradoxes. I

> would like to call this artistry of awareness Proprioception of the Mind. (*A Kaleidoscope of Private Universes*, p 2, Fowler, 2003)

The biological dimension is expressed through the word ‘proprioception‘, and the term ‘mind’ represents intuitive energy or spirit. William James purported, “Muscular vigor will always be needed to furnish the background of sanctity, serenity, and the cheerfulness of life” (1873); so too does the ideal of Proprioception of the Mind tap into the auspicious synchronicity between the mind and the body.

CHAPTER TWO

THE NEBULOUS BULL'S-EYE

"Intuition, the supra-logic that cuts out all routine processes of thought and leaps straight from problem to answer."

- Robert Grave

When I first read about Vygotsky's theory on the Zone of Proximal Development (ZPD), where he defines the ZPD as "the distance between the *actual development level* as determined by independent problem solving and the *level of potential development* as determined through problem solving under adult guidance of and in a collaboration with more capable peers", I was struck with two ideas that continued to percolate in my mind. The first and most prominent being the connection to Constructivism (which strives to foster autonomy within collaborative learning communities) and secondly, that in order for his premise of the negotiation process to work, it must happen while a student's Affective Filter (motivation, anxiety level, attitudes, attitudes towards learning, and self-confidence) is positive, empowered, and free of anxiety. According to Vygotsky's Zone of Proximal Development, where the design is to move students from their actual learning development to potential learning development, there exists an optimal learning setting that places emphasis on the co-construction of knowledge by more mature and less mature participants engaging in an activity together. The collaborative interaction between the student and teacher is termed the Negotiation Process. I propose an extrapolation of this negotiation process, posing that this interaction is a ubiquitous

circumstance in all communicative learning environments, irrespective of maturity or age. In addition, I believe that a student's potential problem solving level can only be actualized when a teacher's emotionally intelligent judgments appropriately guide and challenge the student, while simultaneously the emotionally intelligent teacher accepts their interdependent role as a co-learner.

Grounded by Vygotsky

As I continued reading various authors, I continually found myself using the Zone of Proximal Development as my point of reference. For example, Paulo Freire's theory of Transformational (Libratory) Education (1987) consists of students and teacher in a *partnership* where meaning is inherent in the communication between the two - certainly congruous with Vygotsky's negotiation process. In Ingham and Luft's explanation of the Johari Window, which is a graphic illustration of relationship in terms of awareness (1970, page 55), they discuss how an individual's ideas and suggestions are left undeveloped unless they are engaged with a group at a minimal anxiety level. This implies that a student's maximal learning potential will not be met unless participating in a communicative setting - again, synonymous with Vygotsky's Zone of Proximal Development. Even the theory of Universal Grammar, which purports that human beings have an innate general capacity for constructing language (Chomsky, 2002), is related and relevant, since unmarked grammatical principles - the inherent, basic principles of all languages (words, word groups and word order) are *negotiated* to marked principles. Marked principles are the appropriate grammatical structure that a child has seen and heard from his or her indigenous community. How a child mentally constructs language is contingent upon a communicative interaction prompting inherent language

capacity to specialized language capacity. Moving from actual language aptitude to specialized language aptitude is congruous with Vygotsky's premise of students moving from actual learning development to potential learning development in a communicative setting.

Layers of the Nebulous Bull's-Eye

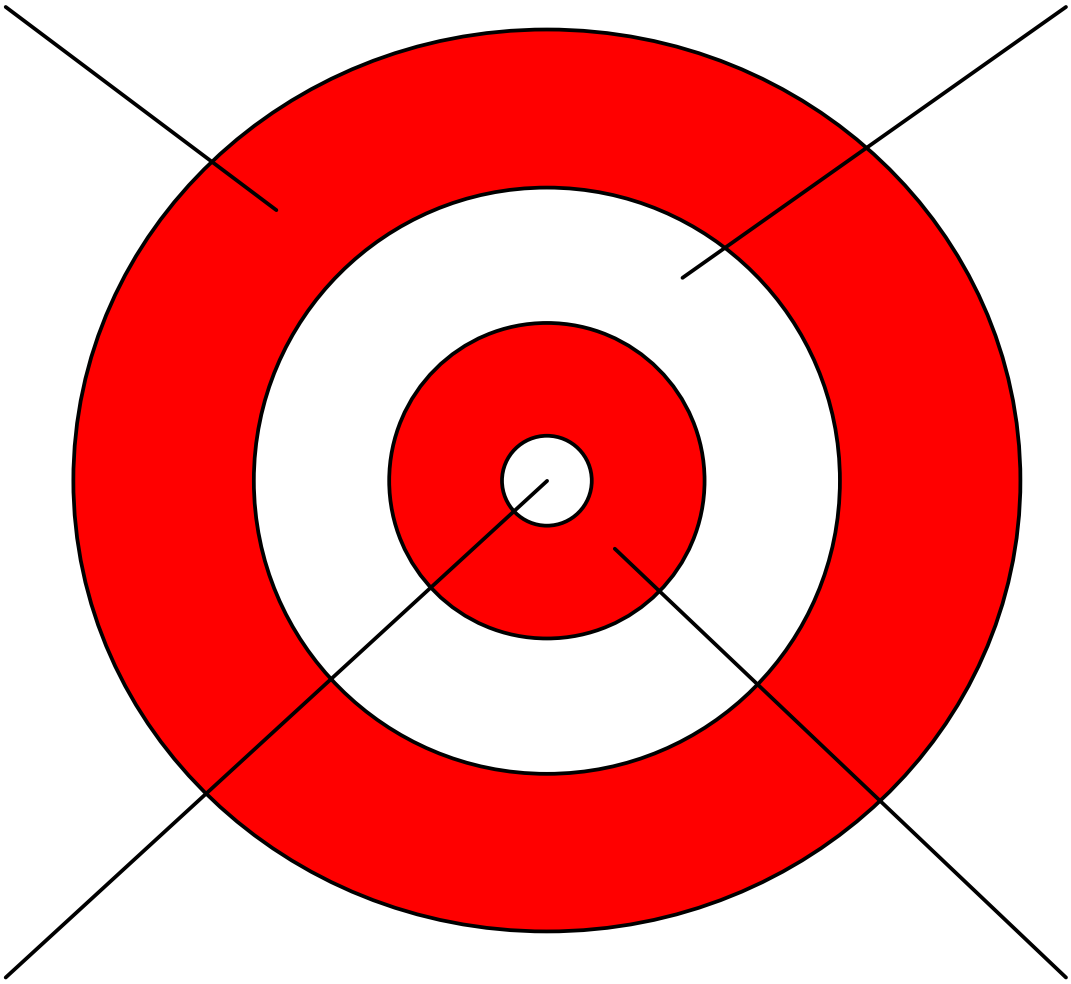
The following diagram, The Nebulous Bull's-Eye, depicts my perception of how a student and teacher work through emotional and cognitive layers of a student's psyche in order to co-construct the optimal learning condition. The Nebulous Bull's-Eye diagrams four layers that are analogous to the preparation process that students and teacher progress through in order to reach and maximize students' potential.

Each of the layers will be addressed in detail; however, the following offers a brief overview. Layer "A" relates to a student's emotional and thinking energy reacting with the environment and energy from "otherness". Layer "B" depicts a student's actual problem-solving level that inherently exists without a communicative learning environment. Layer "C", although smaller in its geometric representation, captures the spirit of what this diagram entails; pulling together the gist of the other constituent elements into discernable action. My understanding of what this action considers has been coined by Vygotsky as the *negotiation process* between student and teacher. I contend that whether this interaction successfully propels students towards their potential is predicated by a teacher's emotionally intelligent judgments. Layer "D" is the result of an effective negotiation process; a student's potential problem-solving level is actualized, thereby creating a new actual problem-solving level.

THE NEBULOUS BULL'S-EYE

A. Student's emotional and thinking energy reacting with environment and energy from "otherness"

B. Student actual (individual) problem-solving level



D. Student potential problem-solving level

C. **Negotiation process** - (transformational interaction) predicated by emotionally intelligent judgments that encourage student potential level

(Fowler, 2005)

CHAPTER THREE

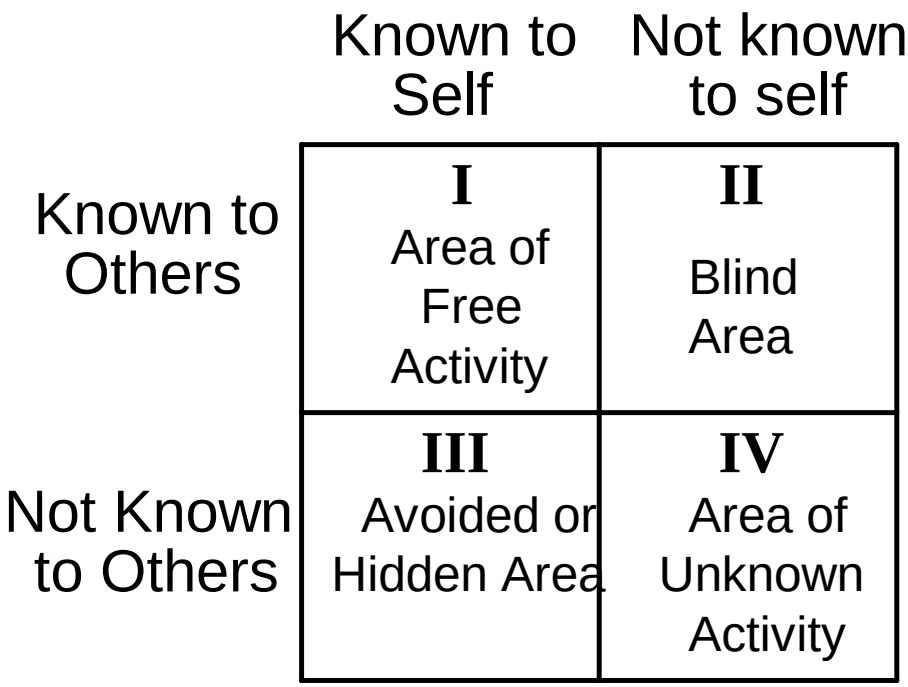
LAYER “A”

Students' emotional and thinking energy reacting with the environment and energy from "otherness"

When a student enters a learning environment, there are myriad variables being simultaneously registered; the most prominent being the student’s visceral reaction to sensory stimuli. However, apart from physical comforts, students are also emanating, processing and responding to the energy of thoughts and emotions from others. A student will either perceive the environment as safe, questionably safe or potentially hostile. How can we, as teachers, construct this perceptibly safe, optimal learning environment that prompts students to actualize their potential? Through study and experience, I have discovered that music is the most potent precursor to this desired learning environment. The following sections will discuss how a student’s emotional and thinking energies (as referenced through the Johari Window) are affected by the controlled classroom conditions of music, visual stimulation, and a student’s physical relationship and proximity to the environment, teacher, and other students.

Johari Window

The Johari Window (Ingham and Luft, page 55) is a simple, four quadrant 'window' that proportionally represents perceptions of interpersonal awareness; the areas known and unknown to self, and areas known and unknown to others. These include: Area of Free Activity (known to self and others), Blind Area (known to others, but not to self), Avoided or Hidden Area (known to self, but not to others), and the Area of Unknown Activity (not known to self or to others). As a student anticipates that the classroom is a safe environment to engage with others and the content, they relax. Thus, more energy will be expended in the "Area of Free Activity", and less energy devoted to the "Avoided or Hidden Area".



Music

I am continually amazed at the power of music, since it not only provides ambiance and brings students together towards a harmonious emotion, but it can rouse students towards a "super-learning" state. As Dr. Seuss (the maestro of rhythm, rhyme and artful alliterations) has been quoted as saying, "What do we learn first, but a song?". I often reflect on one fact that I learned from an Anthropology course; historically, human beings have always strived to create music (Jourdain, 1997). Music is universal in defining social situations: Celebrations, mourning, patriotism, romance, fear and nostalgia (Reagon, 1998). In fact, one anthropological theory is that music evolved "to strengthen community bonds and to resolve conflict through creating emotional connections among people" (Kaemmer, J.E. 1993). This holds obvious implications for building a safe and comfortable classroom community. In addition, music taps into our brain in a very specific way - evoking emotion, energy and affecting cognition. Humans (as well as other animals) are constantly monitoring and locating themselves within a web of sound and vibration - primarily unconsciously. The primary evolutionary function of the ear is to locate sound; therefore, in addition to establishing a sense of oneself through our auditory perception, we also interpret a sense of belonging within a group through this physiological response to music. This sensation of hearing music also produces a psychological feeling of being centered and safe. It seems pertinent, then, to afford students exposure to music in order to create unity within diversity, and to expose their common values and goals through the shared experience of hearing music. More than merely hearing my students say, "Boy, this is relaxing", or "I feel really comfortable here", I also witness their physical and mental energy change. I notice their posture

become more casual and relaxed as they begin talking with others. I hear them taking deep breaths. Their facial expressions are less tense, and they move more freely. If a student hears soothing music, he or she will respond physiologically. Most importantly, I see my students looking around the classroom and making eye contact with each other. This indicates to me that the student is engaging with others with less inhibition; taking risks and making efforts to understand others and be understood by others which, when understood within reference to the Johari Window, means that the student is expending less energy trying to protect their self-image and devoting more energy towards understanding and interpreting their surroundings and otherness -- learning.

Visuals

In addition to perceiving and interpreting auditory stimulation, students are also processing visual cues. Visuals, from pictures to a written schedule on the white board, can direct attention and give students an opportunity to immediately concentrate attention on the content. Offering students a variety of sensory stimuli also encumbers self-consciousness as it allows various options for focused attention. Since uncertainty in group situations often breeds the most anxiety, this provides a comfort level in knowing what to expect. A visible schedule of the day's lesson, along with pictures and/or shapes, can provide levity and allow the students to have a sense of my personality. I hope to convey a spirit of humor and a message of genuine respect and faith in their ability to succeed. I invariably have some inspirational quote written on the board, and something for them to read on their desks (short poems, song lyrics, comics, newspaper articles,

etc.) My intention is to provide them with enough stimuli as to prompt curiosity, while not overwhelming the students.

Music and visual stimuli inspire the creative aspect of human nature. Noam Chomsky (2002) discusses in his book *On Nature and Language* that humans are unique in the respect that we are capable of thought; incited and inclined to act in certain ways, not designed or compelled at random. He asserts that "…humans can express their thoughts in novel and limitless ways that are constrained by bodily state but not determined by it, appropriate to situations but not caused by them, and that evoke in others thoughts that they could have expressed in similar ways". From Chomsky's interpretations of these congruous Galilean and Cartesian principles, coupled with my understanding of the Johari Window, I believe a student's ability to communicate by use of language will evolve and adapt in a sensory stimulating and perceptibly safe company of otherness.

Arranging Ambiguity

A classroom's seating arrangement is also very critical, since it demonstrates attitudes towards the role of the students and the role of a teacher. Having the chairs arranged in a circle communicates equality; an ambiguous environment - no front, no back - no dominance, no subservience. I almost always arrange my classroom in this way and, what is clearly evident, is the space in the middle of the circle. A student's attention is drawn to that space which is usually covered with vocabulary written in different colors on index cards, handouts for the day's lesson and/or regalia (any tangible item; maps, books, stuffed animals, food, pictures, and the like). These items provide

students an opportunity to start thinking about the content, while challenging them to discover its meaning. After experimenting with different seating arrangements, I have discovered that this method instills a sense of motivation towards discovery (students ask questions and discuss amongst themselves their speculations), and subsequent empowerment (students‘ speculations are correct or congruent with my intentions for the lesson). The circuitous seating arrangement not only communicates equality, but provides students with the opportunity to engage with each other through eye contact, close physical proximity, and through interpretation and reaction to each others' paralinguistic cues. A heightened sense of belonging and camaraderie results as a natural circumstance of these conditions.

In summary, the use of music, visuals and seating arrangements have the propensity to foster the students' sense of security and thereby reducing anxiety. If their initial visceral response to the learning environment is favorable, students will then have the physiological and psychological energy to collaboratively engage with the content.

CHAPTER FOUR

LAYER "B"

Students' actual (individual) problem-solving level

Within the layer of a student's actual problem-solving level I will focus on two aspects of an individual's psyche that will either encumber or inspire their ability to focus and think: The Affective Filter Spectrum and the Anxiety Spectrum. In addition, this chapter presents ways to minimize students' anxiety and how particular classroom paradoxes can foster a positive Affective Filter. Anecdotes are included at the end of this chapter in order to elucidate the power of communication as it relates to intuition, empathy, control, active listening, and a student's self-discovery.

A student will oscillate the boundary between sensory awareness and engagement with a proposed problem or task. The safer a student feels, the more focused their attention becomes on the problem or task at hand, and the less he or she will be self-consciously aware of their immediate surroundings. As a student initially interprets and understands the content, he or she is engaged at their individual (actual) problem-solving level. Requisite to an optimal learning environment that will impel students' interest is that of an emotional investment in the content itself. From the hippocampus' formation of memories through motivation and emotion to the amygdala's coordination of our

emotional and cognitive responses of the brain, the biological implications between emotion and learning are tantamount to all other factors.

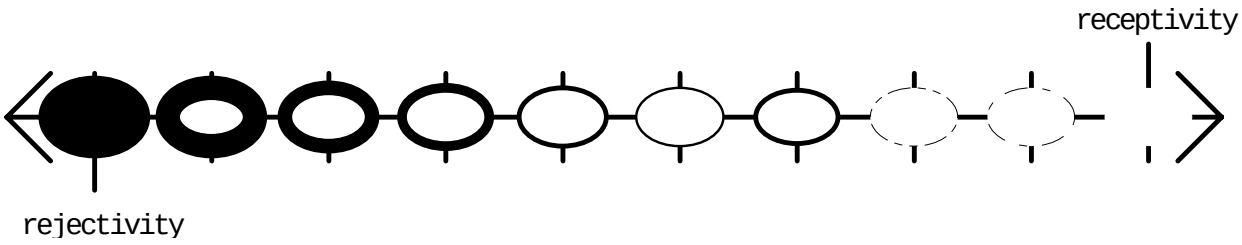
John Dewey's *Experience and Education* (1938) discusses the importance of continuity pertaining to what an experience is tending towards; whether it be educative or mis-educative. Dewey states, "…the principle of continuity of experience means that every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after." I agree with this premise, since it seems perpetually true that in the classroom, where people are gathered for the purpose of advancing one's knowledge, an educative experience is within cognitive reach. A caveat, however, is that there also exists an opportunity for a mis-educative experience. For example, if a student discovers a way to cheat on a test, or contributes to or witnesses disrespectful words or behavior, it could lead to a negative effecting/affecting experience. I also believe that any student engaged with the content is on the threshold of delving into an educative experience. Although Dewey postulated this in 1938, it is synonymous with current research by Joseph LeDoux (1986) regarding how our emotional responses are hard-wired into our brain's circuitry. LeDoux states that what makes us emotional is learned through experience; therefore, this could be the key to understanding and even changing our emotional make up. This holds significant implications for the classroom, since teachers are in the precarious position of guiding students' experiences - both emotional and intellectual, and the symmetry between the two. Paulo Freire (1992), in his theory of Transformational Education, posits that in order to truly relate to students, one must sit with them, talk with them, and listen to their stories. Since he believed emphatically in providing emotional connections for students,

he would go so far as to eavesdrop on their conversations in the hallways, follow them down their Brazilian streets observing how and with whom they interacted, and took every opportunity that he could to learn about them. Although I think his tactics are perilously close to stalking, I adamantly agree. How else can we truly understand (and appropriately react to) the emotional responses our students are having, unless we understand the experiences that formed those emotions?

Affective Filter

A student's emotional reaction to a learning environment is critical, since it will either inhibit or encourage focused attention and learning. Krashen (1983) describes proverbial spectrum (from rejection to receptivity) as the student's Affective Filter. The Affective Filter is reduced contingent upon a balance of several factors: Minimized anxiety, strengthened self-confidence, encouragement of positive feelings, attitude towards learning, and stimulated motivation.

AFFECTIVE FILTER SPECTRUM



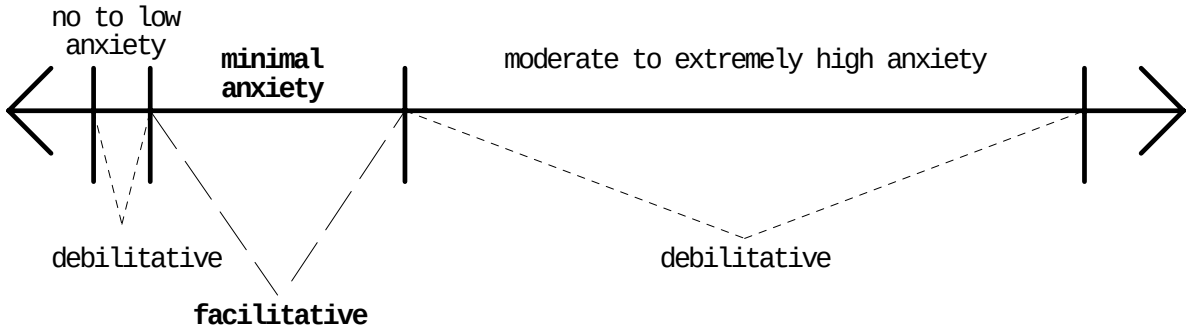
(Fowler, D 2005)

The Affective Filter Spectrum illustrates my perception of the completely impenetrable mind of a student who feels threatened, anxious and self conscious (rejectivity) to the alternatively open, confident and empowered student (receptivity).

When a student's Affective Filter is full, there is no opportunity to absorb; all energy is turned inward. At the other end of the spectrum, a student is openly receiving and emanating emotional and cognitive energy; the optimal condition for exciting a student's potential learning capacity.

According to H. Douglas Brown (1994), anxiety can be either facilitative or debilitative. Within this particular spectrum, a small amount of anxiety may bring a student to optimal awareness or in the case of greater anxiety or no anxiety may debilitate learning altogether.

ANXIETY SPECTRUM



(Fowler, 2005)

Two types of anxiety have been purported: trait anxiety, which is a predisposition towards feeling anxious, and state anxiety, which is a situational response or anxiety produced via a student's reaction to his or her environment. There is little that we, as teachers, can do about trait anxiety, but state anxiety is certainly within our control. A student's level of anxiety is a precursor to how the other elements of the Affective Filter

are felt. Since affect is emotional expression and emotions are rooted in all of these factors, it is crucial to understand how and why emotions are processed.

Our brain receives and interprets sensory impulses, and then transmits messages to our muscles and organs, communicating whether to relax or to protect. The amygdala coordinates much of the emotional (and cognitive) responses of the brain, as well as secreting the body's fight-or-flight hormones. If an environment is perceived as potentially hostile, norepinephrine (one of the body's fight-or-flight hormones) is released. Norepinephrine makes the senses more alert. If a student perceives their learning environment as potentially hostile, he or she will experience heightened qualifying awareness of the senses - significantly reducing or even blocking the student's attention to learning challenges. As the body prepares to protect, cognitive or intellectual capacities diminish and the Affective Filter intensifies self-consciousness and anxiety (Pathophysiology: Concepts of Altered States, 2005). It is important to distinguish self consciousness from self awareness. The latter is an individual's awareness of one's actions and feelings, as well as how one is relating to the environment and other beings. Awareness, in this case, is a continual process of
evaluating the significance of internal and external stimulus in relation to one's self. Self consciousness, however, is a myopic view of one's surroundings while experiencing an overwhelming sense of how one is being perceived or interpreted. This is a state of crippling introspection, restricting peripheral awareness and suppressing attunement to others. It is imperative, then, that a student is welcomed into a safe learning environment. The absence of threat will allow students to become attuned to the challenges presented in the content and in the interactions with others in the classroom

community. I want my students to be as comfortable as possible; however, one caveat that frequently influences my decision making process is the idea that promoting a particular comfort level may enable apathy or disengagement.

In Parker Palmer's book "The Courage To Teach" (1998), he discusses six paradoxes of "space" that he attempts to create in his classroom. These paradoxes address the aforementioned paradox of providing a comfortable environment, yet not *too comfortable* so that the student becomes disengaged. Parker Palmer's paradoxes (which I fell in love with and adopted the instant I read them) are as follows:

1. The space should be bounded and open.
2. The space should be hospitable and "charged".
3. The space should invite the voice of the individual and the group.
4. The space should honor the "little stories" of the students and the "big" stories of the disciplines and tradition.
5. The space should support solitude and surround it with the resources of the community.
6. The space should welcome both silence and speech.

If a space is "open", then a student feels free to embark on the path of discovery, yet "bounded" in respect to the fact that there is a point, purpose, reason, or goal for our time together in the classroom. Within this open space, as I hope to foster, is a sense of belonging and familiar comforts (music, consistent patterns of what is expected, and a plethora of vocabulary on the walls) so that a student is able to relax and have an immediate sense of belonging to the group. This sense of belonging has the tendency to become *too successful* and lead to excessive student-to-student off topic conversations. This circumstance has presented itself often, and I am continually trying to find new and creative ways to guide them gently back to the purpose of our class. Whether or not I am

successful at this varies daily. I expect that any classroom paradox inherently possesses the propensity for an unbalanced situation; yet, because of this, the realm of teaching becomes a skillful art.

Minimizing Anxiety

Our classrooms rarely pose physical threats, but threats to our emotional well-being are processed in precisely the same way as a threat to our body. A situation or circumstance that has the potential to diminish or jeopardize a student's self confidence is processed as a threat. Conversely, on the other end of the Affective Filter spectrum, if a student perceives his or her learning environment as safe, then there inherently exists an opportunity to bolster self confidence, foster receptivity and increase the learning curve respectively. The following are paraphrased strategies Oxford (1999) recommends to lower anxiety in the classroom:

- Provide multiple opportunities for success
  - Affording students multiple ways to express their knowledge, skills or awareness, by creating activities that tap into the Multiple Intelligences (Howard Gardner's theory that there exists seven Major dimensions of intelligence: Musical, linguistic, bodily-Kinesthetic, spatial, interpersonal, interpersonal, and logical-Mathematical (Gardner, 1983).
- Encourage students to take moderate risks
- Reduce competition
  - Instill a system that validates participation, not merely correctness
- Use music, laughter, and games to help students relax

- Address various learning styles
  - Afford students various avenues to express their learning
- Make students aware that language anxiety is common, expected, and manageable
  - Establish a sense of trust and camaraderie by sharing personal anecdotes about feeling anxious as a student, and encourage others to share their stories.
- Help students recognize symptoms of anxiety
- Help students learn to tolerate ambiguity in a non threatening environment
  - Seizing learning opportunities in respect to emotional lessons by encouraging discussion of students' emotional reactions

The following sections represent anecdotal experiences that illustrate how different circumstances arise in the classroom that effect a student's ability to learn and how my responses were either appropriate or inappropriate in guiding students back toward our goal and/or attempting to meet their immediate needs. These anecdotes relate to the issues of privacy, active listening, and affording students enough time to participate.

"Uh-Huh"

Recently, during a mid-morning Pronunciation class of 13 students, I noticed a young Uzbekistani woman shifting her posture in her seat, looking at the classmates to her left and right and rolling her eyes. I immediately assumed that it was I who was

causing this discomfort. In the span of a second, the prospects of whether or not the content was daunting, presented poorly, or simply that I had offended her in some way, raced through my mind. I continued, but walked closer to her and asked her if she was alright. Her slouched position, flat intonation and slowly spoken “Uh-Huh”, told me it was an insincere reply. I sensed a very heavy energy coming from this young woman, and was concerned that she was feeling distress. After watching her and the other students around her look a bit uncomfortable and continue to shift in their seats, I decided to back up the lesson and do another assessment exercise. This required putting them in small groups so that I could assess and direct attention to their individual pronunciation issues while providing the safety of a small, familiar group. After several minutes had passed, I sat beside Firuzya, and asked her if she had any questions about what we were discussing or if she was comfortable with what we were practicing. She then leaned towards me and whispered in my ear, “I’m pregnant. I don’t feel good.” “Oh! Thank you for telling me.”, I replied. My response and intonation conveyed a bit more force and emphasis than I had intended, but I noticed the other students around her nodding knowingly and giving me a silent message. Through direct eye contact, raised eyebrows and a faint smile, they communicated that they were aware of her situation as well. It was instantly clear to me that my own insecurities and introspection caused me to assume that her paralinguistic expressions were a reflection of my teaching. The shifting in her seat was due to her physical discomfort; the rolling of her eyes communicated to her peers that she didn‘t feel well - perhaps fostering a stronger sense of personal connection with them. The rolling of the other students’ eyes communicated empathically that they understood. After listening to the students practice, I was aware that my adjustments to

the content and lesson were unnecessary. The students had been dutifully working, but with obvious boredom. I had sensed and witnessed less vibrant participation, and I had felt a strong energy coming from them that told me they had reached their saturation point practicing aural and oral discrimination between /I/ versus /iy/, and /ey/ versus /ay/. I learned an invaluable lesson beyond the scope of merely resisting assumptions: Sit with them, talk with them, listen to their stories.

Privacy

One of the Principles of Change within the Johari Window addresses the importance of sensitivity; that "sensitivity means appreciating the covert aspects of behavior, and respecting the desire of others". Although Firuzya was forthcoming of her situation, others may appreciate and desire privacy. Two years ago, when my teaching context was at a private English Academy in Ulsan, South Korea, I was overly attentive towards a particular student when I should have been more "sensitive" by not focusing too much concentration towards his condition. Andy, one of thirteen twelve-year-olds in this class, was writhing in his chair. It appeared to me that he was in pain, so I inquired as to why he was squirming. He waved his hands in a dismissing nature, saying "No, no. Go. Go." We continued, but Andy then began making noises similar to that of a wounded animal. After several more inquiries to his physical state, and several more responses of "No, no. Go. Go." (coupled with abrupt gesticulations) he began pointing to his thighs saying, "Teacher. Mo-Gi (mosquito). Dat, dat, dat…*UH*!" His sister, who was seated to his left, said, "Teacher. Many Mo-Gi. Hurt". I decided to take him to the office in order to retrieve "Mo-Gi" medicine, and instructed him to go into the bathroom

and apply the cream to his mosquito bites. I returned to class. Andy arrived several minutes later, sat down, and then proceeded to writhe and groan. His discomfort turned to visible agony and he began to cry. After countless more inquiries, his sister divulged that earlier in the day Andy had undergone the "peeling of the whale" (as it was stated to me) operation. "Peeling the whale" is a colorful Korean euphemism for circumcision. Andy was absent the following day. I chose to share this anecdote since it reveals how *my* intention to reach this student and meet his immediate physical need obscured my ability to notice that *Andy* would have been far more comfortable if I hadn't exposed his weakness and desire for privacy. He was communicating to me his desire for privacy, but my focus was on meeting my own needs of being validated as a "good teacher" who takes care of her students. The reality of this scenario is that my priority was not with Andy's well-being -- it was, and I suppose it stemmed from my own insecurities about my teaching skills at that particular moment, a reflection of my insecurities and need to be affirmed of my worth as a teacher. This is a dangerous place to be as a teacher, since my introspection caused me to lose control of my awareness of others. Undoubtedly (although unwittingly) I caused harm to one of my students.

Listening

I have paralleled Dewey's assertion that we biologically process the formation of emotional and intellectual attitudes (through this continuity of educative experiences) with LeDoux's research to formulate my own premise that an emotionally intelligent teacher provides a better quality of educative experience for students through the skill of listening. As I try to assess whether the content presented is of an appropriate challenge,

either by trying to elucidate what they already know, taking notes on what the students say, write, do or ask, or by any other means, assessment requires that I listen actively. Listening, in the truest sense of the word, means focusing full attention on otherness and understanding the pertinence of an individual's emotional investment. My understanding of what "language" entails (expression of personal and/or collective thoughts, ideas, feelings and intuitions) grounds my assertion that the language classroom requires emotional investment; that if a student doesn't feel listened to or understood they will lose motivation and develop a sense of apathy. In a language learning classroom, a student's use of language is always subjective and a reflection of a student's personality and character - a vulnerable and risky position. Conversely, other disciplines (such as Biology, Computer Graphics or Psychology) require that a student's language expression encompass a previously agreed upon representation of ideas and facts. Although anxiety presents itself in every classroom situation regardless of the subject matter, other disciplines afford students a far less threatening environment. Juxtaposing these two distinctions reveals that in a language learning classroom a student is required to express how he or she understands a subject while also trying to communicate to others *who* they are. This communication predicates a sense of belonging within the group. By being intelligible and understood, students are able to not only validate their efforts towards learning the content, but simultaneously validate themselves as contributing members of the group. I have found that I must occasionally allow prolonged silence in order to afford students the time needed to formulate their thoughts and ideas into written or spoken language. Students do not truly and fully understand the topic at hand until they can express it. They cannot express it unless they are emotionally engaged in a safe

environment. I have witnessed students participate far more enthusiastically when we use their names in examples and on quizzes or tests, and by using their personal experiences as part of the lessons. The information gleaned from listening to students tells me where we need to start -irrespective of my lesson plan.

Time

Whether or not a student is able to concentrate and communicate what they know depends on their emotional well-being. During a discussion in an advanced reading and writing course that I taught in the Fall of 2004, one student, Arlin, dominated the discussion. We were discussing an aspect of James McBride's *The Color of Water*, and although Arlin's contributions were clear, thoughtful, and enlightening, the other students displayed visible frustration due to his verbose nature and the fact that his accent was difficult to understand. Their frustration was evident from how they were looking at each other; rolling their eyes or exchanging knowing glances with raised eyebrows and heads tilting sideways, whispers, and loud, deep sighs. I sensed a strong disapproving energy. Despite several gentle pleas to respect each other by listening to other classmates without interrupting, (an unfortunate, common occurrence) it was to no avail. This dynamic was not an isolated incident. Arlin, who has a nearly unintelligible accent, loves to talk. Previous feedback cards from these students had stated that they didn't feel they had enough opportunity to speak, and one feedback card in particular stated, "I don't like having different cultures in the class because I can't understand the accent." On this particular day, after several unsuccessful attempts to afford other students the opportunity to speak, it was clear that the other students had given up. They either put their heads

down on their desks, looked at the clock, or engaged in some other means of resisting Arlin's words. (This situation still remains one of the most complicated and perplexing circumstances I have had to contend with in the classroom.) The negative energy was thick, and I panicked. I interrupted Arlin stating that I appreciated all of his contributions, but felt his classmates would likely want to speak as well. I implemented the talking piece (a tangible item), explaining that the person holding the talking piece (a small, stuffed dragonfly) would be the only one speaking. I explained that the person holding the dragonfly could speak for up to two minutes, then pass it on to the next person. The energy in the room changed, although I wasn't sure exactly how it had changed. The students were attentive to the clock, but eagerly participated. We continued with our discussion of the metaphor, "The question of race was like the power of the moon in our house", when the talking piece arrived in the hands of the most reticent student, Long. I anticipated that he would quickly pass the dragonfly on to Isabela, but instead he held it for what seemed like a very long, heavy minute. I felt a keen sense of discomfort, knowing that I and the other students were aware of how much he avoids participating verbally. But when Long started speaking, we all breathed a collective sigh of relief and leaned forward - anxious to hear his words. He spoke of his life in Vietnam where his farming community relied on the stages of the moon to determine when, where and what to plant; that although the presence of the moon and the stages of the moon weren't discussed in conversation, "it was inside of us, telling us what to do and how to act, but nobody talked about it because it was so obvious". I had to hold back tears of joy, since not only did Long understand the pertinence of the metaphor, but his willingness to share a personal anecdote was unprecedented. An instant prior to

Long's insightful narrative on "the power of the moon", I was deeply compelled to rescue him from the uncomfortable silence. One invaluable lesson that I learned from this experience is that my own reticence during what I perceive to be uncomfortable silence could perhaps be communicating faith in my students; giving them space to formulate their ideas by giving them *time*. Those extra moments may feel uncomfortable and heavy only to me, since my own insecurities regarding my ability to teach are affected when a student struggles. My perception of the energy in the room as being uncomfortable was due to my own distracting introspection, but I believe that for Long it was a peaceful time to formulate his thoughts.

CHAPTER FIVE

LAYER "C"

"Teaching is an instinctual act, mindful of potential,
craving of realizations, a pausing, seamless process."
- A Bartlett Giamat

The negotiation process -- emotionally intelligent judgments that encourage students' potential

Ideally, as a student is challenged, the teacher is continually attuned to the student's paralinguistic cues and energy while simultaneously gauging whether the posed problem or task is of the appropriate intellectual and emotional challenge. The teacher makes adjustments of the objective (emotional and tangible) conditions in order to lead the student towards the maximum challenge congruous with the student's emotional and cognitive skills.

Energy

Apart from monitoring emotional and physical comforts, students and teacher are also emanating, processing and responding to the energy of thoughts and emotions from others. Due to the fact that the word energy denotes a variety of interpretations and understandings, for the purpose of this particular discourse the term energy will apply to

the abstract. Energy, then, is the intangible, but perceptible variations in emotion and motivation. It is felt in the nonphysical factors of our lives, characterized by perceived vibrations and the impulse to move or react. A student who feels safe, self aware and attuned to his or her environment will navigate through these vibrations of thought and emotion from others, contributing and compelling a positive and harmonious mental energy. I believe that this perception of emotional energy from others (and responsiveness to this energy) occurs when several conditions are met: Reduced Affective Filter, motivation to connect with others and the subject, and a capacity to discern and respond appropriately to moods and temperaments of others. Howard Gardner's theory of multiple intelligences (1996) considers the latter as one of his seven postulated basic intelligences - interpersonal intelligence. Within this capacity, an individual is perceptive of others, their relationship to each other, and their relationship to their surroundings.

The following topics of the physiology of our sixth sense, empathy, self-discovery, and control fundamentally relate to the energy of communication to and from the students and the teacher. The physiology of our sixth sense (or intuitive knowing) is now considered a characteristic of empathy and indicative of emotional intelligence. A teacher's capacity for empathy leads him towards the most conducive arrangement of objective conditions that prompts students' self-discovery.

The Physiology of our Sixth Sense

Prior to Gardner's pronouncement that interpersonal skill is a form of intelligence, the term "sixth sense" was used to capture the meaning of this intuitive understanding of

otherness. Although the conviction of knowing something with our "heart" (our emotional mind) is often felt with a more profound certainty than knowing with our "head" (our rational mind), this emotional or intuitive knowing is often dismissed as invalid or irrelevant. I believe that this emotional/rational dichotomy does not polarize the two; instead, they both operate as a guiding force for the other. Our intuitive knowing is registered on the conscious, unconscious and subconscious levels, prompting this interconnected balance between our emotional and rational minds. This balance operates through the neocortex (the evolutionary core of our emotions), primarily through the hippocampus. The hippocampus is a complex neural structure that is intimately involved in motivation and emotion as part of the limbic system. It is responsible for providing information, refining information, and sometimes dismissing information based on our capacity for memory. Millenia ago we relied on our rhinencephalon (literally "nose brain") to make distinctions between past and present smells in order to protect ourselves from danger, to recognize sexual partners and to determine which foods were edible. We began to develop memory through a series of these referential smells, expounding upon our survival needs to nuances of emotional and rational reference as the rhinencephalon progressed through evolution to form our neocortex. With the evolutionary increase in mass of the neocortex came "a geometric rise in the interconnections in the brain circuitry. The larger the number of such connections, the greater the range of possible responses. The neocortex allows for the subtlety and complexity of emotional life, such as the ability to have feelings about our feelings." ("Emotion, Memory and the Brain", *Scientific American*, June, 1994; Joseph LeDoux) The brain has elaborated upon the ancient parts of our biological selves. Our long-spoken adages, "I smell danger", "This

reeks of trouble“, “Something’s in the air” and “The smell of fear” can be understood as a communicative expression of our innate nose brain or intuitive sense. I believe that this intuitive knowing is at the core of who we are as human beings. It is my contention that we have the inherent capacity to actualize these perceptions into empathic, emotionally intelligent responses towards otherness; that this empathy can be extrapolated to reach students at an emotional and cognitive level that can incite their inherent potential for learning.

Empathy

Empathy is the capacity or ability to know how another feels by interpreting produced language simultaneously with perception of paralinguistic (nonverbal) cues. These cues may include one, several or all of the following: Myofacial expressions, tone of voice, kinesthetic (bodily) cues, gestures, posture, emotional and or thought energy, silence, physical proximity and eye contact. As empathy is interpreted via these paralinguistic cues, it is also expressed similarly - rarely through words. Empathy requires calm and receptivity so that the subtle signals of feeling from another person can be received and mimicked by one’s own emotional brain. Empathic responses from a teacher predicate a sense of belonging and of understanding. Daniel Goleman (author of *Emotional Intelligence, Why it can matter more than IQ,* 1995) categorizes empathy as an indicator of emotional intelligence. In a broad sense, emotional intelligence means to know one’s emotions, manage emotions, motivate oneself, recognize emotions in others, and handle relationships. (This premise is congruous with Gardner’s categorization of interpersonal intelligence.) Goleman, along with many other researchers and

professionals in the fields of neuroscience, psychiatry and psychology, agree that "Abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope" (Goleman, 1995, page 34) encompass the realm of emotional intelligence. The ability to "regulate one's mood and keep distress from swamping the ability to think" is also congruent with Mihaly Csikszentmihalyi's autotelic personality, which is the ability to control one's consciousness and attention (*Flow, the Psychology of Optimal Experience*, 1990). Csikszentmihalyi's premise is that this ability to control consciousness reasonably assures one's ability to have an optimal experience, or Flow. One axiom in respect to Flow is that when skills match opportunities for action, self-consciousness dissipates and the individual focuses complete attention on the task or activity at hand. Another axiom that is indicative to the Flow experience addresses our inherent nature that seeks to enhance the complexity of ourselves, translating to feeling more self actualized when we understand and master those complexities. This holds relevant implications for both student and teacher during the negotiation process, since controlling consciousness and experience makes abstract thinking possible -- inciting a student's potential.

Self-Discovery

The learning potential is reached when the teacher recognizes which emotional and tangible variables to adjust in order to give students the opportunity for self-discovery. Self-discovery gives students a sense of ownership of the new information, awareness or skill; they discovered it, therefore it belongs to them and becomes a part of

them. The expression “Tell me and I’ll forget, show me and I’ll remember, involve me and I’ll understand” captures this sentiment. If a student feels a part of the process, scaffolded to self-discovery, he or she taps into that proverbial sense of belonging so deeply rooted as one of our most intrinsic needs.

My first experience witnessing this moment of inception (or self-discovery) remains indelible on my mind. In Northampton, Massachusetts, a multi-cultural group of twelve students were orally practicing giving directions to each other. One student would give imperative commands (“Go straight”, “Turn right”, “Turn left”, “Turn around”, etc.) to the others who were standing in the middle of the room, single file. One particular student, Jose, was visibly distressed that he didn’t understand the commands. He was out of rhythm with the other students, and I heard him release deep sighs while his tense and wrinkled forehead accentuated his erratic movements. He maintained a fixed stare at the floor. After some uncomfortable moments I asked if anyone else would like to give directions. Surprisingly, Jose volunteered. I gave him flashcards with the commands written on them so that he would have that tangible reference (or comfort zone). He began issuing directions to the others and the expression on his face dramatically changed. After a few commands, he stood in front of his chair and began modeling his own commands. He was beaming with pride. He was evoking a response from others using English, prompting a visible and audible change in his confidence. When the next volunteer gave directions to Jose and the others, Jose was joyful - making eye contact while smiling and laughing. Despite the fact that he made occasional mistakes, he demonstrated control over the content and a connection with the other students. Jose had

evidently had an epiphany of self-discovery through his ability to communicate effectively to the rest of the class.

Control

As stated previously, emotional variables (or empathic responses) are expressed via one or more of the following: Myofacial expression, eye contact, speed of body movement, physical proximity, silence, posture or other body language. All of these are potentially calculable and managed. An emotionally intelligent teacher will be able to remain aware of these communicative clues - balancing their own responsiveness to the student's contributions without becoming overly introspective. (An example of being overly introspective is when I had perceived Firuzya's physical discomfort as disapproval of my teaching.) Despite the fact that we, as teachers, need validations of our efforts (and of ourselves as decent people), it is imperative that a teacher uspend those needs when focusing on this process. Referring again to interpersonal intelligence (Gardner) and emotional intelligence (Goleman), the attribute of being able to control impulses and delay gratification relate to this capacity on the teacher's part to suspend the immediate need to validate efforts of their teaching skills. As Howard Gardner says, "The core of interpersonal intelligence includes the capacities to discern and respond appropriately to the moods, temperaments, motivations and desires of other people."

Arranging tangible conditions relate to the content itself: Visual and audio/lingual material, and *how* this content is presented. Attunement to how the student is receiving and processing the information, as well as balancing the material with proportionate challenge, is in a continual state of flux. This negotiation process oscillates

in a give-and-take relationship between teacher and students - pushing the students to maximize potential and quite often exchanging roles. The teacher becomes the student, and the student becomes the teacher. This is indicative of Paulo Freire's ideal of Transformational Education, where all benefit and learn from the interaction and move towards action (using the language as a means to achieve a purpose). While in the decision making process of just *how* to arrange these conditions, the teacher is continually making adaptations resulting from reflection on decision making processes and analyses - present and past. This negotiation process is not only pushing the students to maximize potential, but also creating learning opportunities for the teacher.

CHAPTER SIX

LAYER "D"

"The only freedom that is of enduring importance is freedom of intelligence, that is to say, freedom of observation and of judgment exercised in behalf of purposes that are intrinsically worthwhile. Without freedom's existence it is practically impossible for a teacher to gain knowledge of the individuals with whom he is concerned."

- John Dewey

Students' potential problem-solving level.

The potential problem solving level of the student is metaphorically represented in size and location as the core of the Nebulous Bull's-Eye. At this point the student has peeled away the three previous layers: Students' visceral reaction to sensory stimuli, including emanating, processing and responding to the energy of thoughts and emotions from others (layer A); oscillating between sensory awareness and engagement with a proposed problem or task (layer B); and progressing towards the maximum challenge congruous with the student's emotional and cognitive skills (layer C). Once this potential level has been met (layer D), it then becomes the new actual or individual level (layer B),

morphing exponentially; therefore, I have used the term nebulous -- never distinct, and always unique.

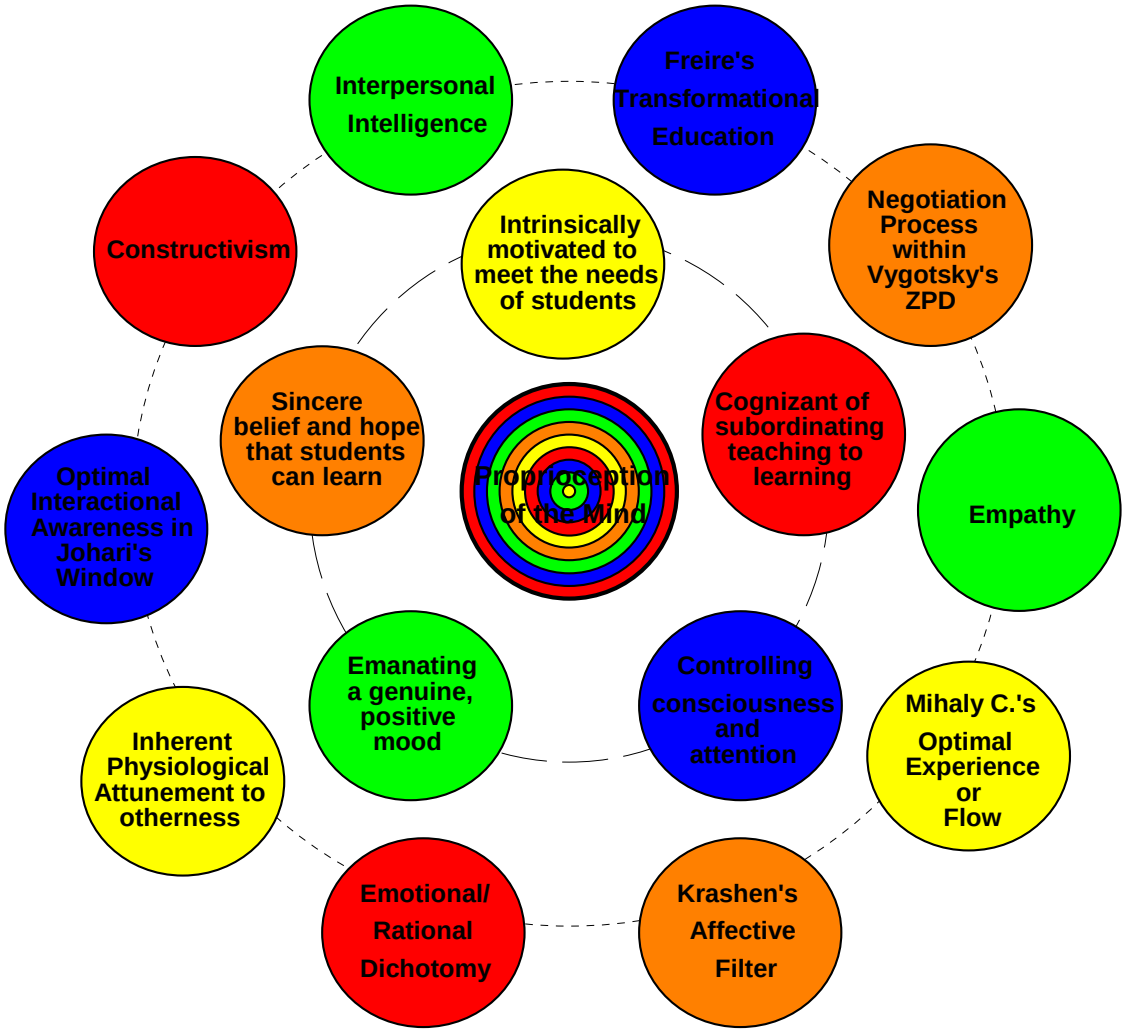
The negotiation process is a delicate prospect. A characteristic that is impossible to quantify, yet imperative to this process, is a teacher's genuine spirit of interest in the student's emotional and cognitive well-being. I believe that how a student interprets, communicates and works through the negotiation process is greatly (not solely) influenced by the teacher, irrespective of the student's initial state of well-being when entering into this interaction. Once a student has reached a moment of inception, his or her potential level now becomes the actual level of learning development without the need of guidance or direction by the teacher. The student now has control of the new information, skill or awareness and has the capacity to manipulate it.

The importance of an effective negotiation process, bringing actual learning development to potential learning development, has become a prominent part of how I approach teaching; putting genuine faith in my students, and realizing that they guide my judgments and vision of where I go next. I firmly believe that the negotiation process (within the Zone of Proximal Development) is ubiquitous in every communicative learning community. Whether or not it is effective is contingent upon two variables: Students' reduced Affective Filter and an emotionally intelligent teacher. Just as a masterful chess player can visualize not merely the next move, but the next five, so is a masterful teacher aware of how to lead students in content, while emotionally attuned to our universal language apparent in paralinguistic cues. The co-construction of meaningful content relies upon a give-and-take balance of listening and responding to our universal language -- tantamount to other calculable assessments.

Proprioception of the Mind

The ontological term *Proprioception of the Mind* is intended to capture the physiological and spiritual essence of a teacher's attunement with students. The physiological dimension is reflected in the word 'proprioception', and the term 'mind' represents intuitive energy or spirit (not to be confused with one's 'brain'). The following diagram illustrates how theory and practice converge to form an auspicious ideal of teacher awareness. The outer circle depicts the axioms of pertinent theories that I believe co-exist within the realm of my five postulated characteristics of an emotionally intelligent teacher. Imagine that the outer, dotted circle is spinning clockwise; this is the realm of perceiving otherness. The central, dashed circle is spinning counter-clockwise; this depicts responsiveness to otherness. In the middle, spinning towards you, Proprioception of the Mind is represented. Each theoretical axiom (perceptiveness) affects all of the characteristics of an emotionally intelligent teacher (responsiveness) equally and harmoniously. Proprioception of the Mind, then, is the symmetry of the two realms to form a beacon of masterful awareness. (Diagram of Proprioception of the Mind on following page.)

PROPRIOCEPTION OF THE MIND



(Fowler, D 2005)

It is important to understand the biology of proprioception in order to elucidate my premise of Proprioception of the Mind. The physiological definition of proprioception (which is a Latin term, meaning one's own) is the perception of body awareness; a sense that we rely on enormously, yet are usually unaware of.

Proprioception is an unconscious attunement of where the various regions of the body are located at one time. Special nerve receptors (spindle fibers) detect stimuli within joints and muscles and work to keep our spatial orientation fluid. Relating back to Howard Gardner's Multiple Intelligences, spatial awareness is one of his proposed seven basic intelligences (pilots, painters and professional football players are examples of how spatial intelligence provides opportunities for success). Proprioception also works to correct our balance if we should suddenly experience a disruption to our equilibrium - communicating with our muscles before our conscious mind understands the disruption. I believe that Proprioception of the Mind (a teacher's veritable antenna) is continually righting the emotional and cognitive bearings of students. This special proprioception encompasses science and spirit - acting upon knowledge of the teacher's craft, knowledge of content and of students' experiences, and an intuitive knowing that reaches beyond our present scope of comprehension. It is an assimilation of intuition, neurological responses and emotional intelligence. I believe that our predisposed biology, influence from experience, and empathic energy can create a dimension of proprioception that keeps us, teachers, attuned with our students beyond the realm of linguistic expression. This form of proprioception is an acute and internalized awareness of the non-verbal, non-linguistic emotional messages communicated from one individual to another (or others). My proposed concept of Proprioception of the Mind is a stimulus/response function that enables a person to react empathically to others' emotional communications, but can be sharpened (a design plan for enhancing emotional intelligence, emotional learning, is outlined in chapter seven). It extrapolates past the dimensions of physiological attunements (the capacity or ability to respond reflexively and empathically to

paralinguistic cues) into the essence of human connections to otherness. In fact, this is where language historically began - communicating our intuitive understanding of otherness.

CHAPTER SEVEN

AN EMOTIONALLY INTELLIGENT TEACHER

I propose that the following traits are indicative of an emotionally intelligent teacher: Intrinsically motivated to meet the needs of his or her students, cognizant of subordinating teaching to learning, controlling his or her consciousness and attention while screening out irrelevant stimuli, emanating a genuine, positive mood, and a sincere belief and hope that the student can learn. All of these elements are threaded together through the prominent axioms of the following: Howard Gardner's Interpersonal Intelligence, Krashen's Affective Filter, the Negotiation Process within Vygotsky's Zone of Proximal Development, Paulo Freire's theory of Transformational Education, Csikszentmihalyi's concept of Flow, our inherent physiological attunement to otherness, Constructivism, the Emotional/Rational Dichotomy, empathy, and optimal interactional awareness within the Johari Window. Assimilating the aforementioned concepts begins to explain how empathic responsiveness and validating energy from a teacher predicates a student's sense of belonging and of being understood, which results in an optimal learning environment for our students.

The Language of Energy

Through my academic and experiential learning, I have come to the realization that particular learning theories (addressed in this paper) are congruous with my inherent

beliefs about our unceasing connectedness with all people, and that the learning curve grows exponentially when people gather together to better themselves and their minds. I have also come to believe in a universal language; a communicative capacity relayed and received through facial expressions, eye contact, posture, and physical proximity - a language that transcends quantifiable factors and is experienced through the energy of otherness.

Why is it that the most poignant and meaningful moments of our lives leave us with no language to fully capture it? We may sense an energy, a veritable palpation of feeling, that is so ineffable that any attempt to articulate it somehow seems to diminish the essence of it. Being in the classroom, as a teacher, affords me this richness of feeling on a daily basis; whether it's in real time or in moments of reflection. This is one of the great mysteries of my life, and larger than life. The weighted perceptions of energy from otherness (the abstract and intangible) have grounded my core teaching philosophies; I believe that these perceptions of feeling and emotion are valid indicators of how to assess students well-being -- prompting appropriate adjustments to content and expression in order to maximize learning. The subtleties and nuances of expression and environment are as valid and telling as students' spoken or written words.

Accountability

Collating Dewey's premise of prior experiences affecting interpretation of future experiences with LeDoux's research on emotion, memory, and the brain, it is clear to me that we have the opportunity to more effectually touch our future. Just as students can reach their potential intellectual growth, so too can they be influenced to enhance their emotional growth - actualized by an emotionally intelligent teacher fostering emotional

connectedness and empathy. In addition to my belief that we have an innate capacity to enhance our emotional intelligence, I also deem that awareness of this capacity preempts this empathic growth. As teachers, we are then compelled to seek out ways to recognize and enhance our own emotional intelligence -- answering the inexorable call of professional accountability.

Emotional Learning

Just as we learn social appropriateness (primarily implicitly), we, as human beings, have the capacity to engage in emotional learning. This is a critical piece of professional accountability, equivalent to intellectual professional development. The following list summarizes my perception of how an individual can delve into this type of learning.

- Recognizing and accepting that emotional intelligence exists.
- Researching, reading, observing, and reflecting upon what emotionally intelligent responsiveness entails.
- Affording sufficient *time* for the rational mind to process what the emotional mind is reacting to.
- Remaining cognizant of the importance of emotional intelligent perceptions and responsiveness as it relates to and students' growth.

Emotional Intelligence

In 1995 Daniel Goleman popularized the principles of emotional intelligence, but the notion that emotional intelligence plays an important role in our connection with the world had already been discussed and revealed through myriad researchers, though not

all of the findings on emotional intelligence were initially posited as a possible outcome. From Robert Ader's discovery that biological pathways entwine the immune system, emotions and central nervous system -- with the capacity to *learn* (University of Rochester, 1978), to Carol Kusche and Mark Greenberg's PATHS curriculum (Promoting Alternative Thinking Strategies) developed to curb crime and violence by teaching methods to control emotions and impulses, manage anger, and encourage relationship strategies, to particular schools (e.g. New Haven, Connecticut) requiring that the "Social Competence Program" be taught in their public schools, to all of the aforementioned researchers and contributors discussed in this paper, supporting the ideal that emotional intelligence has quickly become not only a mainstream concept, but also as a scientifically accepted critical component of successful human interactions.

CONCLUSIONS

Balancing Science and Spirit

The art of teaching does not achieve a culmination of a mastered skill. It is a continuing evolving process; expanding the vistas of our professional field and content, expanding our knowledge of students' lives and our ability to communicate with them, and expanding our awareness of our purpose and intention in this world. This spectrum has a starting point, but reaches into the vast possibilities that the union of science and spirit represent. Guiding us are the emotions that propel us towards decision-making and action. These emotions are communicated beyond merely written or spoken words, and exist in the subtleties and nuances of intentional, and unintentional, glimpses into our thoughts and feelings.

The Nebulous Bull's-Eye metaphorically and visually captures the essence of a communicative classroom process. It depicts why and how a student is able to progress through the following stages: Attention to self and the environment, focused attention on a problem or task, being receptive to the problem or task being guided by the teacher, and ultimately reaching his learning potential. The Johari Window is referenced as a tool to understand how a controlled environment (through music, visual stimuli, and physical conditions) clears a student's psyche and Affective Filter to a positive condition (reducing anxiety and fostering motivation and a healthy self-concept) as a precursor to reaching that optimal learning state.

Proprioception of the Mind is my perception of the ideal condition of a masterful teacher. This collates many teaching and learning theories with the idea that emotionally intelligent judgments and reactions from the teacher afford the most students, the most frequently, the conditions necessary for students to reach their potential. The art form of Proprioception of the Mind is the capacity of continually righting the cognitive and emotional bearings of students. It is a masterful attunement with students, content, teaching skills, and the communicative energy that exists between people -- promoting actualized learning.

Emotional intelligence predicates whether a teacher's mental proprioception will be the most effective. The reality is that we, as human beings, exist not on a static plane, but in a situation whereby capabilities and capacities ebb and flow: Good days and bad days, strong days and weak days, thoughtful days and insensitive days. It would be naïve to posit that Proprioception of the Mind and emotional intelligence are emanating full-throttle one hundred percent of the time. But, with the knowledge that both can be enhanced and improved, I am confident that we, and our future students, will reap the rewards of more sensitive and intuitive communication and learning.

Terms, Definitions and Ontologisms

Affective Filter - Student self-concept and the general roles of personality traits (motivation, attitudes, attitudes towards learning, self-confidence and anxiety) as they relate to learning; spanning the proverbial spectrum from inhibition to receptivity.

Amygdala (from the Greek word for "almond") - An almond-shaped neural structure in the anterior part of the temporal lobe of the cerebrum; intimately connected with the hypo campus and the hippocampus; ***as part of the limbic system it plays an important role in motivation and emotional behavior***. The amygdala triggers the secretion of the body's fight-or-flight hormones, including norepinephrine which, among other functions, makes the senses more alert. The amygdala ***coordinates much of the emotional responses of the brain and cognitive processes of the brain.***

Anterior Cingulate Cortex - A brain area located near the top of the frontal lobes and along the walls that divide the left and right hemispheres. "This brain region can learn to recognize when an individual might make a mistake, even before a difficult decision has to be made. The anterior cingulated cortex (ACC) learns to warn us in advance when our behavior might lead to a negative outcome, so that we can be more careful and avoid making a mistake." (Brown, J. 2004) (Joshua Brown, a research associate in psychology of Arts and Sciences and co-author of an Anterior Cingulate Cortex study, 'Science' magazine, February 18, 2004.)

Autotelic Experience - Engagement in an activity that provides intrinsic rewards and enjoyment; a harmonious mix of using one's skills while being appropriately challenged. This engagement is so enthralling that the individual loses the sense of self and of time.

Awareness - A state of elementary or ***undifferentiated consciousness***; having knowledge of something stimulated by one of the senses.

Brain - The portion of the vertebrate central nervous system that is enclosed within the cranium, continuous with the spinal cord, and composed of gray matter and white matter. It is the primary center for the regulation and control of bodily activities, ***receiving and interpreting sensory impulses***, and transmitting information to the muscles and body organs. It is also ***the seat of consciousness, thought, memory, and emotion.***

Constructivism - (As it pertains to the classroom environment.) A theory that assumes students are able to search for their own answers; that lessons can be built around concepts and ideas; that student thinking can preempt lessons, raise important questions and change content; that students can grapple with open-ended questions and can construct relationships, create metaphors, and build collaborative communities while fostering autonomy.

Emotion - Impulses that evoke a response and cause us to react to stimuli. Emotions make profound adjustments to how we perceive and react.

Emotional Intelligence - to know one‘s emotions, manage emotions, motivate oneself, recognize emotions in others, and handle relationships.

Emotional Development as Relating to Evolution - Emotions emerged from an enhancement of the brainstem called the neocortex, increasing the number of interconnections within brain circuitry. The larger the number of such connections, the greater the range of possible responses. The result of this evolutionary process is that we are able to display and interpret a far greater range of reactions to our emotions, and more nuance.

Emotional/Rational Dichotomy - an interconnected balance between emotional and rational minds in a series of providing information, refining information, and sometimes in a process of dismissing information.

Empathy - The capacity or ability to know how another feels by interpreting produced language and/or nonverbal cues. Nonverbal cues may include one, several or all of the following: Myofacial expressions, tone of voice, kinesthetic cues, gestures, eye contact and posture.

Energy - Four definitions apply: (1) Intangible, but perceptible variations in emotional and physical stamina and motivation; (2) The fundamental substance of everything in the universe. The nonphysical factors of our lives which are energetic in nature -

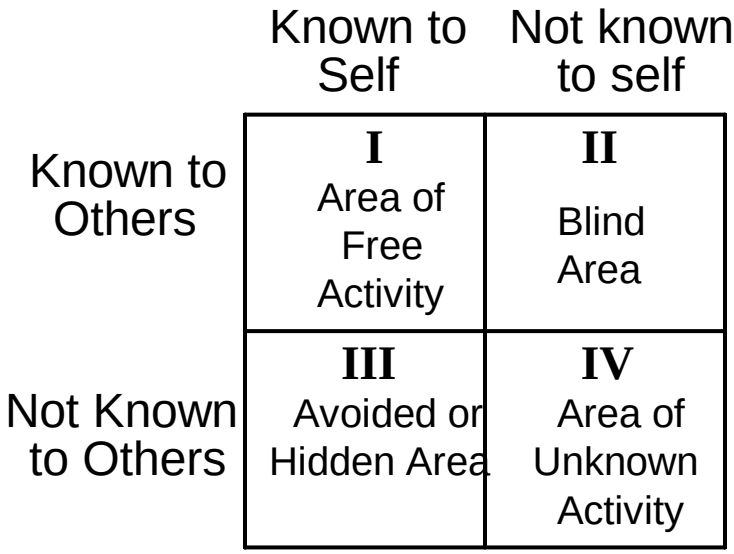
characterized by vibrations and the impulse to move or react; (3) Vitality and intensity of expression; (4) an actuating or compelling force.

Flow - A theory of optimal experience, "a state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it." (Mihaly Csikszentmihalyi). Flow equates to happiness through control over one's inner life, or controlling one's consciousness. When skills match opportunities for action, flow can occur. Self-consciousness dissipates and the individual focuses complete attention on the task or activity at hand.

Hippocampus - A complex neural structure (shaped like a sea horse) consisting of gray matter; ***intimately involved in motivation and emotion*** as part of the limbic system and has a key role in the formation of memories.

Interpersonal Intelligence - (1) The ability to understand other people; what motivates them, how they work and how to work cooperatively with them; (2) Capacities to discern and respond appropriately to the moods, temperaments, motivations, and desires of other people." (Howard Gardner) Interpersonal intelligence is broken down into four abilities: Leadership, ability to nurture relationships, ability to resolve conflict, and social analysis (perceptiveness of others, their relationship to each other, and their relationship to their surroundings).

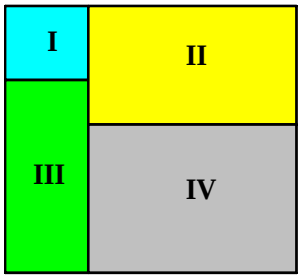
Johari Window - A graphic model representing group relationships in terms of awareness of self, otherness and environment.



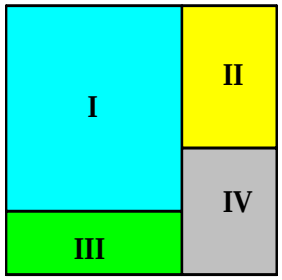
The top left corner of the window (quadrant I) reflects elements of behavior, motivation and activity that is know to one's self and to others. This is labeled the "Area of Free Activity". Students engage with others with less inhibition; taking risks and making efforts to understand others and be understood by others. The top right corner of the window (quadrant II) is the 'Blind Area"; others can see aspects of ourselves that are not in our conscious frame of reference. Our intrinsic nature and behavior that is identifiable by others. The bottom left portion of the window (quadrant III) is where we do not intentionally reveal to others sensitive feelings or subversive intentions. These are elements of our cognition that may be perceived as a potential threat to our confidence if they were to be exposed. The bottom right corner of the window (quadrant IV) represents areas of the unknown. This is indicative of our subconscious emotional reactions to stimulus, which prompt certain behavioral or emotional expression. The

Johari Window exists in a dynamic condition - each quadrant (or degree of awareness) being represented proportionately as relating to the predominant or less dominant degree of interactional awareness.

Example A:



Example B:



Example A depicts a typical meeting of most groups. Superficial interaction (tacit social theories of appropriateness) predicate students' behavior; anxiety or threat is high. This holds poignant implications for the classroom, since students hear and see relatively little of what is happening in their environment - cognitively and/or emotionally. In Example B, the enlarged area of free activity denotes less threat; resources and skills of group members are more fully elucidated, and it suggests more openness to information, opinions, and new ideas about self and otherness. My understanding of the Principles of Change within the Johari Window is as follows:

- The presence of threat decreases awareness
- Energy is expended trying to hide or deny emotions
- Sensitivity means appreciating the covert aspects of behavior, and respecting the desire of others
- Learning about group processes helps to increase awareness

- Quadrant IV is undoubtedly the larger and more influential aspect of an individual's relationships than the graphic illustration conveys

Language - Expression of personal and/or collective thoughts, ideas, feelings, intuitions through a series of arbitrary signals, such as written words, spoken words, pictures, tone, facial expression and other paralinguistic cues.

Language Acquisition Devise or Language Organ - A nebulous "organ" within the brain that contains neural circuits whose structure enables it to perform one particular kind of computation, more or less reflexively (apart from hostile environments); therefore, this language organ is instinctive, mapping experience into language expression and interpretation. (Gallistel, neuroscientist) In addition, given that the language "organ" is instinctive, trying to locate it is comparable to an attempt to palpate a general purpose of a sensory organ. For my intent and purpose, I accept that it exists because it performs. It performs because it has adapted itself to do so, as a result of our species' biological need to survive. Chomsky compares LAD to an internal computer or linguistic menu. He contends that an individual, through experience and language environment, selects particular items from our innate language menu, and that due to the fact that our LAD is an inherent ability, children are able to learn very complex language at a very early age. "Adaptive specialization of mechanism is so ubiquitous and so obvious in biology, at every level of analysis, and for every kind of function, that no one thinks it necessary to call attention to it as a general principle about biological mechanisms." (Gallistel)

Learning - The act, process, or experience of gaining knowledge, awareness or skill.

Libratory (Transformational) Education - Paulo Freire's theory of education that consists of students and teacher in a partnership where meaning is inherent in the communication between the two. Through this dialectical process, sometimes the teacher is a student and the students are teachers. This theory postulates that the teacher is naturally attuned to the students' emerging skills, abilities and state-of-being. Through libratory teaching students are enabled to become involved in cognitive acts and are not simply empty heads waiting to be filled with information. Libertarian education remands that, through dialogue, all individuals can benefit.

Limbic System - A system of functionally related neural structures in the brain that are involved in emotional behavior.

Memory - (1) The mental faculty of retaining and recalling past experience. (2) The act or an instance of remembering; recollection.

Mind - (1) The human consciousness that originates in the brain and is manifested especially in thought, perception, emotion, will, memory, and imagination. (2) The collective conscious and unconscious processes in a sentient organism that direct and influence mental and physical behavior. (3) The principle of intelligence; the spirit of consciousness regarded as an aspect of reality. (4) The faculty of thinking, reasoning, and applying knowledge.

Multiple Intelligences - Howard Gardner's theory that there exist seven major dimensions of intelligence. People have an inherent affinity towards one or more of the following of the intelligences posited by Gardner: Musical, linguistic, bodily-kinesthetic, spatial, interpersonal, intrapersonal and logical-mathematical.

Myofacial Expression - Facial muscles that respond to emotion and allow for an empathic response from others. Conscious and unconscious reflexive reactions to stimuli, expressed through facial muscles.

Negotiation Process - Within Vygotsky's "Zone of Proximal Development", the negotiation process is a particular interaction and communication that takes place between student and teacher. This process requires the teacher to be attuned to the student's skills, abilities and progress in order to arrange objective conditions and stimulate the student to controlled, focused attention. During an effective negotiation process the teacher creates an environment that is conducive for the student to move from an actual (independent) problem solving level to a potential problem solving level. The potential level then becomes the next actual level that "presupposes a specific social nature and a process by which children grow into the intellectual life of those around them." Within this process, learning is always one step ahead of development, congruous with Krashen's Input Theory: (individual + 1 or i + 1).

Neocortex - The dorsal (back or rear) region of the cerebral cortex, especially large in higher mammals and the most recently evolved part of the brain. The larger the

neocortex mass, brain circuitry interconnections rise exponentially, facilitating “higher order” thinking and feeling. This relates to the development of nuances and varied interpretations. The development of our neocortex evolved in response to a need to communicate our intuitions and interpretations of smells.

Ontological Commitments - Agreement to use shared vocabulary in a coherent and consistent manner.

Ontology - An explicit specification (representational vocabulary) of a conceptualization (in this case, the premise of my Independent Personal Project). In an ontology, definitions associate the names of entities in the universe of our discourse (shared by me, the writer, and you, the readers) with text describing what particular terms mean, the meta-language of our field of study, and formal axioms that constrain the interpretation and well-formed use of these terms. (This term is borrowed from Philosophy.) The ontologisms presented in this paper are the following: The Nebulous Bull's-Eye and Proprioception of the Mind.

Perception - (1) Recognition and interpretation of sensory stimuli based chiefly on memory. (2) The neurological processes by which such recognition and interpretation are affected. (3) Insight, intuition, or knowledge gained by perceiving. (4) The capacity for insight.

Paralinguistic Cues - Noticeable expression of thoughts, feelings and/or ideas through physical cues: Facial expressions, posture, body movement, physical proximity and eye contact.

Physiological Attunement - The capacity or ability to respond reflexively and empathically to paralinguistic cues.

Proprioception - From Latin *proprius*, meaning "one's own", it is an unconscious attunement of where the various regions of the body are located at any one time, through nerve receptors (spindle fibers), which detect stimuli within joints and muscles and work to keep our spatial orientation fluid.

Proprioception of the Mind - An attunement with the paralinguistic cues from others, the perception of energy exuding from others and an assimilation of other peripheral stimuli. This form of proprioception is an acute and internalized awareness of the non-verbal, non-linguistic emotional messages communicated from one individual to another. Proprioception of the mind is a stimulus/response function which enables a person to react empathically to others' emotional communications. (Fowler, D. 2005)

Reflex - An inherent, automatic response or reaction to a stimulus.

Rhinencephalon - The absolute, rudimentary basis of the neocortex (the thinking brain). Historically, before the evolutionary development of the neocortex, the rhinenchephalon (literally, "nose brain") made distinctions among past and present smells, thereby determining whether one is "good" or "bad". We began to develop memory through a series of these referential smells. The olfactory bulb (nerve receptors that give us the sense of smell) and the limbic system began working together, creating more associations and nuances. It stands to reason, then, that our sense of smell never forgets. Our lives depended on it.

Self-Awareness - The consciousness of one's actions and feelings, as well as how one is relating to the environment and other beings. In addition, self awareness is the continual process of evaluating the significance of internal and external stimulus in relation to one's self.

Self consciousness - An overwhelming sense of how one is being perceived and interpreted. A state of being that focuses on the self, restricting peripheral awareness and suppressing attunement to others.

Sixth Sense - An intuitive understanding. The capacity or ability to perceive vibrations of thought or emotion transmitted in the form of energy from another being or entity.

Sympathy - The capacity or ability to understand another person's emotion or circumstance.

Thalamus - A region of the posterior part of the forebrain that relays sensory impulses to the cerebral cortex.

Universal Grammar - The inherent, basic principles of all languages. Unmarked principles are those which are restrictive to all languages. At the most rudimentary level, all languages are comprised of words, word groups and word order. As a child is exposed to indigenous language, these unmarked principles are reset to marked principles. For example, all languages consist of an arrangement of words as subjects, verbs and objects. Depending upon the language a child is exposed to, he will reset his unmarked principles into the appropriate grammatical structure that he has seen and heard from his community. For example, subject-verb-object or SVO (English), verb-subject-object or VSO (Arabic) or subject-object-verb or SOV (Korean).

Words - (1) An arrangement of sounds, letters or characters that convey meaning. (2) An agreed upon representation of universal categories. (3) An agreed upon representation of ideas and facts. (4) A modality to control experience and make abstract thinking possible. (5) An agreed upon pattern of personal and/or collective expression.

Zone of Proximal Development - Vygotsky's theory of learning that places the emphasis on the co-construction of knowledge by more mature and less mature

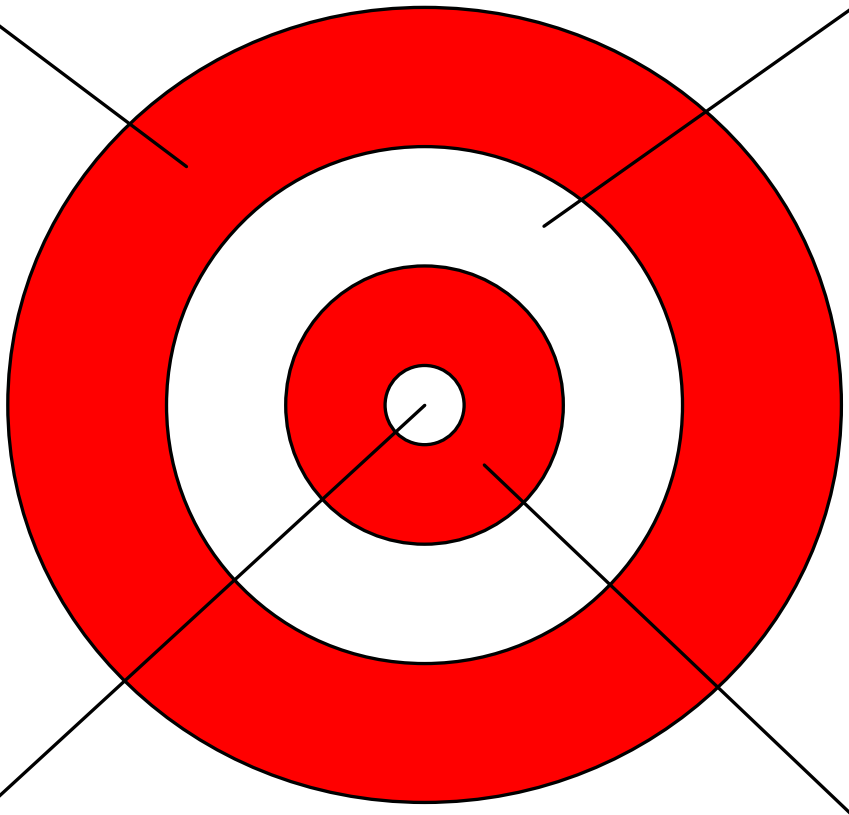
participants engaging in activity together. Vygotsky defines the Zone of Proximal Development as “the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance of and in collaboration with more capable peers. As Gordon Wells states, “His (Vygotsky’s) theory proposes a collaborative community in which, with the teacher as leader, all participants learn with and from each other as they engage together in dialogic inquiry.”

APPENDIX A

THE NEBULOUS BULL'S-EYE

A. Student's emotional and thinking energy reacting with environment and energy from "otherness"

B. Student actual (individual) problem-solving level



D. Student potential problem-solving level

C. **Negotiation process** - (transformational interaction) predicated by emotionally intelligent judgments that encourage student potential level

(Fowler, D 2005)

APPENDIX B
DESCRIPTION OF THE NEBULOUS BULLSEYE

A. When a student enters a learning environment, there are myriad variables being simultaneously registered; the most prominent being the student's visceral reaction to sensory stimulus. However, apart from physical comforts students are also emanating, processing and responding to the energy of thoughts and emotions from others. A student will either perceive the environment as safe, questionably safe or potentially hostile.

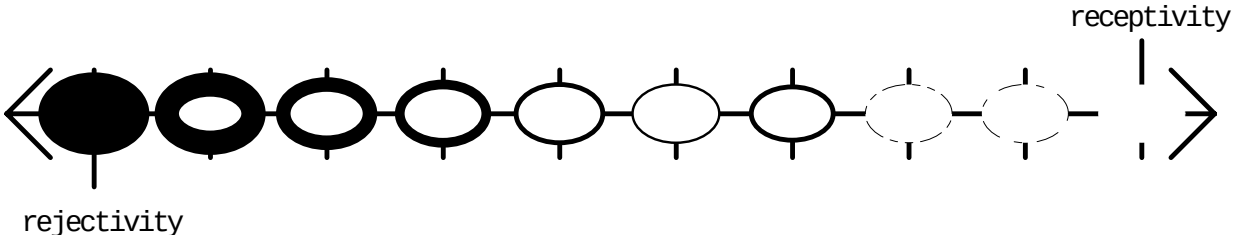
B. A student will oscillate the boundary between sensory awareness and engagement with a proposed problem or task. The safer a student feels, the more focused attention he or she will place on the problem or task at hand, and the less aware he or she will be of their immediate surroundings.

C. As a student is challenged, the teacher is continually attuned to the student's paralinguistic cues and energy while simultaneously gauging whether the posed problem or task is of the appropriate intellectual challenge. The teacher makes adjustments of the objective conditions in order to lead the student towards the maximum challenge congruous with the student's emotional and cognitive skills.

D. The potential problem solving level of the student is metaphorically represented in size and location. Once this potential level has been met, it then becomes the new actual or individual level, morphing exponentially.

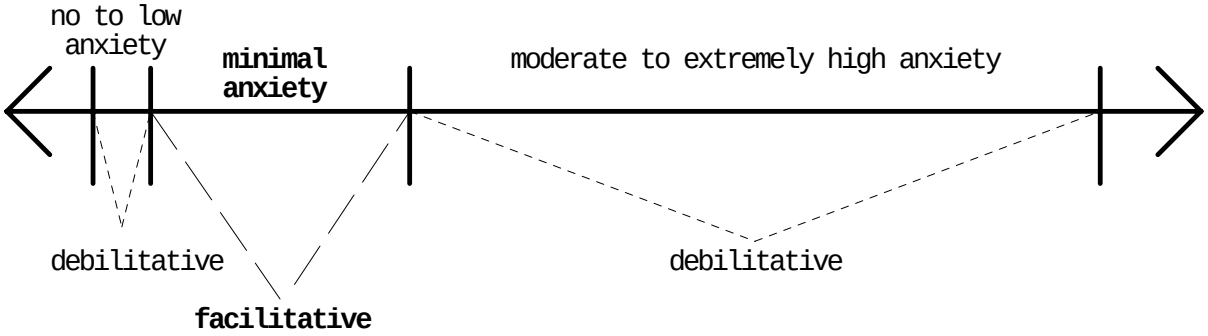
APPENDIX C

AFFECTIVE FILTER SPECTRUM



(Fowler, 2005)

ANXIETY SPECTRUM

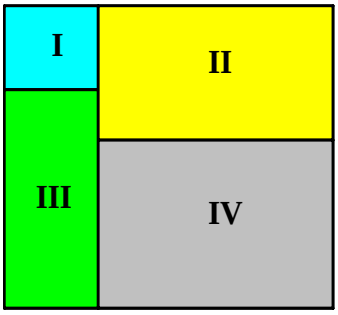


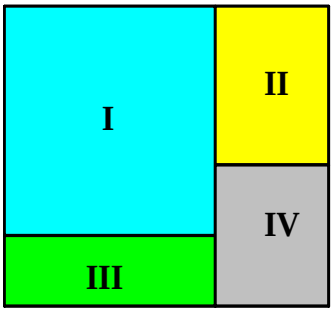
(Fowler, 2005)

APPENDIX D

JOHARI WINDOW

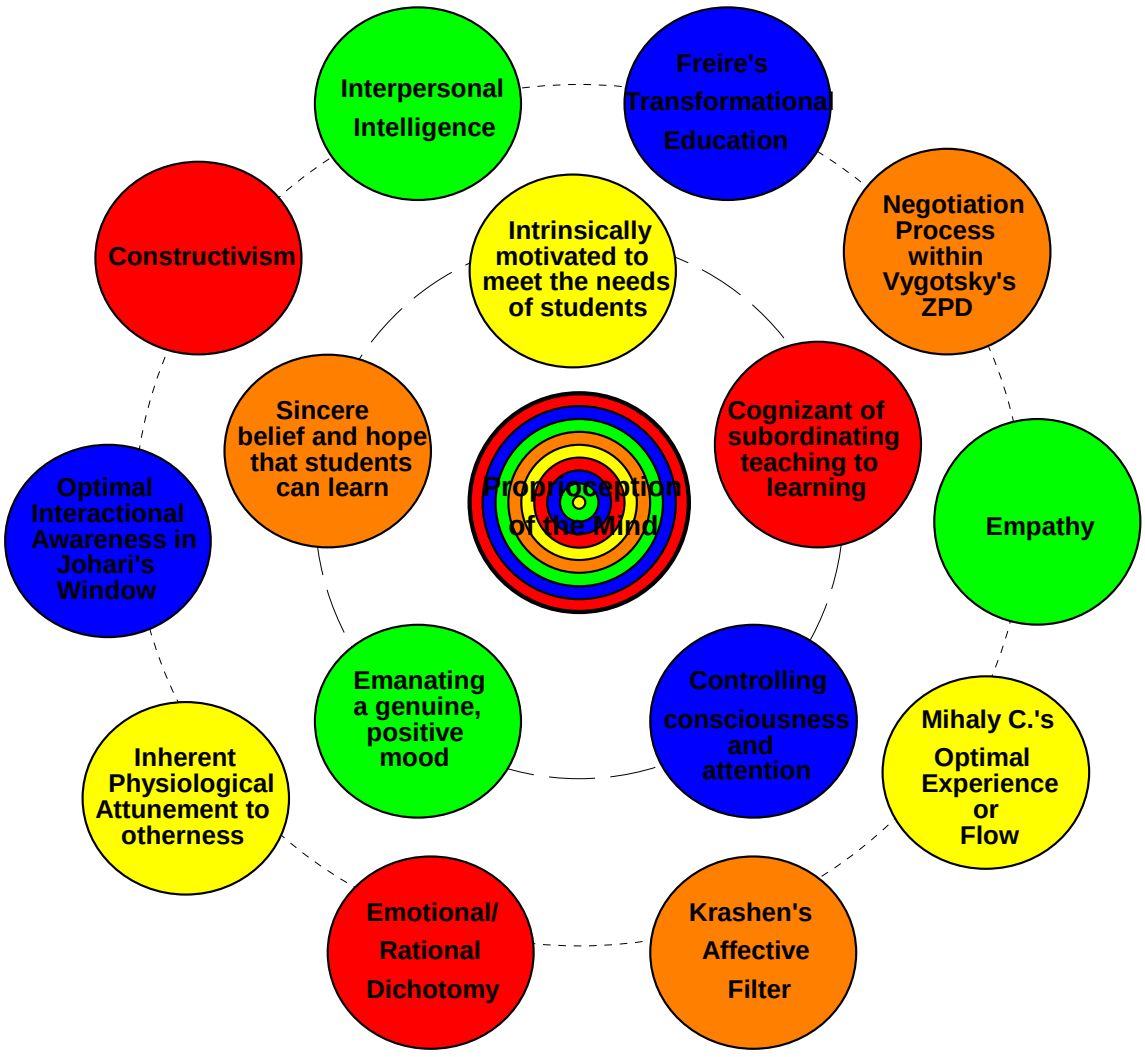
	Known to Self	Not known to self
Known to Others	**I** Area of Free Activity	**II** Blind Area
Not Known to Others	**III** Avoided or Hidden Area	**IV** Area of Unknown Activity





APPENDIX E

PROPRIOCEPTION OF THE MIND



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