PLT eMods™ Learner Contribution Recognition

Participation and Experience-Based Learning

This paper defines participation and explains its process both in eLearning and in the PLT eMods™ learning process. Additionally we explore experience-based learning and show how PLT eMods™ lend themselves to this school of thought by providing the learners with the opportunity to not only participant in their learning process through workbooks, facilitation and content coaching, but to contribute, give back and publish what they have learned (their wisdom) to share it with others.

Life Skills U-A Division of Awareness Communication Technology, LLC

Contents

Introduction

Learner Contribution is the fifth element of the PLT eMod Learning Process. This component involves two fundamental processes, namely: *learner self-assessments* and *learner applications*.

The learner self-assessments assist learners in learning how to take self-authority, self-responsibility and self-accountability for their learning process. The self-assessments provide learners with the opportunity to assess what they learned, what they missed and where they want to go from there. The online self-assessments allow learners to assess their progress using the biofeedback process which provides learners with instant feedback / biofeedback. Additionally the monthly personal progress report assists learners in taking a personal inventory and ownership of their learning experience while aiding in the supervision process.

The learner application process invites learners to join the wisdom incubator and publish their experience and wisdom to share with others. The contribution process provides learners with the opportunity to share their learning experience with others in a structured written format. The wisdom incubator provides the learner with the space to learn how to write in Socratic and clear ways, to best communicate their experience and share it with others (in the form of a published eMod).

The PLT eMod Learning Process
eMod Methodology Supported By Professional Supervision
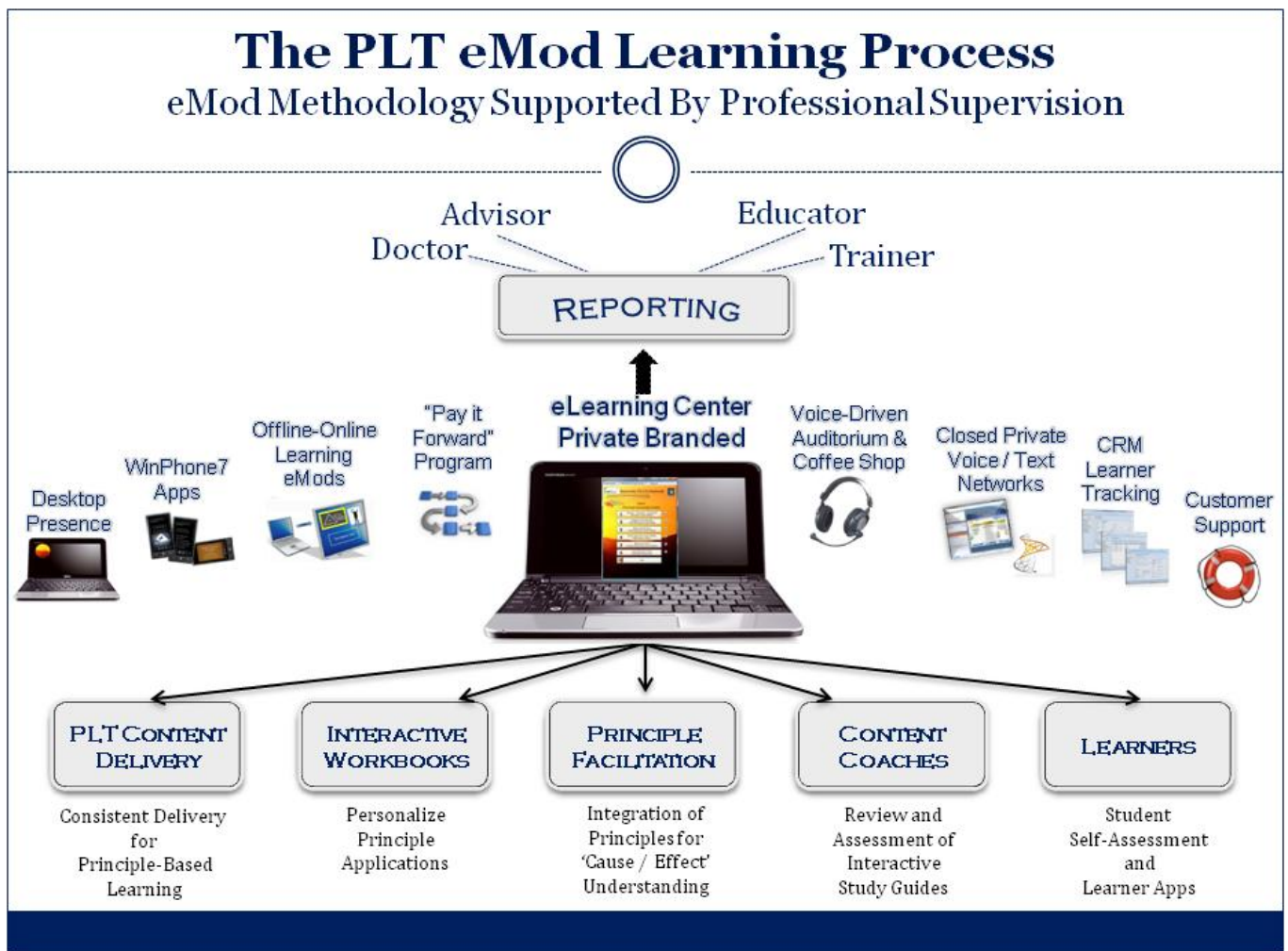
The fundamental emphasis on the "learner" process is to provide learners with the experience to apply the information they are learning to their lives, so that they can take ownership of the experience and establish and accept the value of the lessons they have learned.

Therefore the PLT eMods™ learner contribution process is experiential and participatory in nature. This paper explores the components of the learner contribution process as well as the concept of experiential learning as it relates to the PLT eMods™ process and the learner experience as a whole.

PLT eMods™ Learner Contribution Process

Many a wise person has told us that "we get what we give." Winston Churchill taught us that: "We make a living by what **we get**, we make a life by what **we give**…." These are the principles that cement the PLT eMods™ Learner Contribution Process. So while the process is focused on encouraging and facilitating the increase of participation, the real gift comes from sharing one's knowledge and contributing to those who may follow, so people can learn, how to learn from the wisdom of those who have walked before them.

The PLT eMods™ work to provide learners with the opportunity to participate with the program in the following ways:

- Self- Assessment Questions
- Facilitation and Discussion (Sharing)
- Email Communication
- Content Feedback
- Writing Exercises
- Learner Applications
- Online 24/7 Chat-room
- Posting Thread

Similarly there are opportunities to participate and contribute to the process and learning experience of others in the many of the same ways:

- Facilitation and Discussion (Sharing)
- Writing Exercises
- Learner Applications
- Online 24/7 Chat-room
- Posting Thread

What does this mean? It means that the PLT eMods™ learning process provides learners with the opportunity to serve their personal needs as well as teaching them the value of, and simultaneously providing them with the opportunity to, contribute to the life of others. Hence people receive the theory and the practice all in one. However, when we are talking about participation it seems necessary to emphasize that we are referring to online participation, as we will explore below.

Participation

Participation is seen as an intrinsic part of learning (Wenger, 1998 cited in Hrastinski, 2008, p. 1755). While the PLT eMods™ process is focused on online participation and contribution, the lack of face-to-face contact doesn't hinder the learning process or the creation of trust in the process, or in the facilitators and coaches. Additionally the Service Providers provide the direct client contact during their services and assist learners in implementing and applying the principles and information they learn in the PLT eMods process, to the services they provide.

Hrastinski (2008) defined online learner participation as "a process of learning by taking part and maintaining relations with others. It is a complex process comprising doing, communicating, thinking, feeling and belonging, which occurs both online and offline" (p. 1761). The definition implies that learners learn both online, e.g., by computer-mediated communication with peers and teachers, and offline, e.g., by reading course literature (Hrastinski, 2008, p. 1761). "It moves beyond conceptualizing participation as writing by including terms such as doing and belonging" (Hrastinski, 2008, p. 1761).

 "A key challenge for e-learning, defined as learning and teaching facilitated online through network technologies (Garrison & Anderson, 2003), is to encourage participation (Bento & Schuster, 2003)" (Hrastinski, 2008, p. 1755). Research has indicated that participation, "measured as interaction with peers and teachers, has a positive effect on perceived learning, grades and quality assessment of assignments (e.g., Fredericksen, Picket, Shea, Pelz, & Swan, 2000; Hiltz, Coppola, Rotter, Turoff, & Benbunan-Fich, 2000). Furthermore, it has been argued that participation influences learner satisfaction (Alavi & Dufner, 2005) and retention rates (Rovai,2002) positively" (Hrastinski, 2008, p. 1756).

The PLT eMods™ participation process provides ample opportunities for learners to work both online and offline, in a self-directed and structured way (as can be see above). The issue of contribution expands on the concept of participation and empowers the learner to want to share and give to another, for no other reason than wanting to give. We will now take a deeper look at experiential learning.

Experiential Learning

Experiential learning has been proven throughout history to be an essential component to learning. The history of learning through experience follows the history of epistemology - the search for true knowledge. Aristotle attacked Plato's notion that the value of truth is achieved by pure thought alone, uncontaminated by the world. Aristotle (in McKeon 1948, p. 689–690 cited in Andresen, Boud & Cohen, n.d.) argued that:

"All…by nature desire to know. An indication of this is the delight we take in our senses; for even apart from their usefulness they are beloved for themselves…With a view to action, experience seems in no respect inferior to art, and men of experience succeed even better than those who have theory without experience."

In the 17th century John Locke adopted a similar approach when he asked the question, `whence has it all the materials of reason and knowledge?' to which he answered:

"…in one word, from experience. In that all our knowledge is founded, and from that it ultimately derives itself …Experience here must teach me what reason cannot. (Locke in Woozely 1964, p. 89, 339 cited in Andresen, Boud & Cohen, n.d.)."

In the nineteenth century John Stuart Mill "wrote of the distinction between formal instruction and self-education, and stressed the virtues of learning a foreign language by living in the country where it is spoken rather than by studying it from books" (Houle 1976, p. 27 cited in Andresen, Boud & Cohen, n.d.).

John Dewey, one of the most influential educationalists wrote: "I assume that amid all uncertainties there is one permanent frame of reference: namely the organic connection between education and personal experience." (Dewey, 1939, p. 25, in Andresen, Boud & Cohen, n.d.). Dewey further explained that "all genuine education comes about through experience [but]…not all experiences are genuinely or equally educative" (Andresen, Boud & Cohen, n.d.). As Andresen, Boud and Cohen explained current thinking expands on Dewey's principles in emphasizing that learning is likely to be understood, recognized and applied only in so far as the learner acknowledges, accepts and reflects upon the experience (n.d).

What we can learn from above is that if a learner does not: a) have the opportunity to have an experience; and b) cannot value their experience and take ownership of their experience though writing or sharing with another, no real long term learning is likely to result. Hence the importance of experiential learning.

Experiential Learning Today

Experience-Based Learning is based on a set of assumptions. These have been identified by Boud, Cohen and Walker (1993) as:
- "Experience is the foundation of, and the stimulus for, learning;
- Learners actively construct their own experience;
- Learning is a holistic process;
- Learning is socially and culturally constructed; and
- Learning is influenced by the socio-emotional context in which it occurs."

(cited in Andresen, Boud & Cohen, n.d.)

Over time experiential learning has evolved in an eclectic fashion, making its presence felt at all levels of education. Educators like Steiner, Montessori, Hahn and Neill have all identified the importance of experience in learning. And while these educators are all remembered as educators of children, they have nonetheless greatly influenced our understanding of Experience-Based Learning for adults (Andresen, Boud & Cohen, n.d.).

Steiner emphasized the importance of creativity and consciousness in providing a nurturing environment for learners. Montessori's methodology emphasized the importance of creating an environment that reinforced and empowered children learn to think for themselves, through the progressive mastery of their first-hand experiences (Kraft n.d.:10 cited in Andresen, Boud & Cohen, n.d.). Hahn reacting against the formal, German education, placed importance on nurturing adventure and curiosity in learners. Neill a Freudian at heart emphasized the "importance of non-repressive environments in releasing the unconscious to develop self-motivated and self-directed students who would never lose the early joy of learning" (Andresen, Boud & Cohen, n.d.)

Developmental, cognitive and humanistic psychologies have also influenced and contributed to the field. For example Carl Rogers emphasis on teachers demeanor and need to be non-judgmental facilitators whose unconditional positive provides students with the space to be open to experience (Andresen, Boud & Cohen, n.d.). Additionally Abraham Maslow's hierarchy of needs suggested "preconditions for effective learning which took

account of the personal needs of learners and recognized the social context of learning" (Andresen, Boud & Cohen, n.d.).

Additionally UNESCO emphasized that Experience-Based Learning issues extent to third world development issues. ***United Nations Educational, Scientific and Cultural Organization*** (UNESCO's) Faure Report of 1972 argued for the need for *principle lifelong education, work and leisure* to become interdependent facets of life (Andresen, Boud & Cohen, n.d.). "Faure's report envisaged students leaving and returning to studies without penalty at any time, the distinctions between I n-school and out-of-school education being eliminated and all education becoming self-education" (Andresen, Boud & Cohen, n.d.).

The principles explored above are at the heart of Experience-Based Learning (Andresen, Boud & Cohen, n.d.). "A belief in the unity of knowing and doing is not the exclusive property of liberal Western "First World" thinking" (Andresen, Boud & Cohen, n.d.). It was also central to the teachings of Mao Tse-tung.

"All genuine knowledge originates in direct experience . . . human knowledge can in no way be separated from practice . . . practice is higher than [theoretical] knowledge. Whoever wants to know a thing has no way except by coming into contact with it, that is, by living [practicing] in its environment . . . practice, knowledge, again practice, and again knowledge . . . such is the dialectical-materialist theory of the unity of knowing and doing." (Mao Tse-tung 1968, p. 20 cited in Andresen, Boud & Cohen, n.d.)

Similarly the Brazilian educator Paulo Freire stressed the:
"dialectic between action and reflection as the two inescapable aspects of any truly liberating education: Liberation is a praxis: the action and reflection of men upon their world in order to transform it. When a word is deprived of its dimension of action, reflection automatically suffers as well; and the work is changed into idle chatter, into verbalism, into an alienated and alienating `blah'. *On the other hand, if action is emphasized exclusively, to the detriment of reflection, the word is converted into activism …Men are not built in silence, but in words, in work, in action-reflection.*"

(Freire 1973, p.75–76)

David Kolb wrote *Experiential learning in 1984* which has become a foundational text in the field. His experiential learning cycle, which he created with Roger Fry was influenced by the earlier work of Kurt Lewin, and has been widely reproduced and used. His famous model comprises of four elements: "concrete experience, observation and reflection, the formation of abstract concepts and testing in new situations" (Smith, 2001). "He represented these in the famous experiential learning circle that involves (1) concrete experience followed by (2) observation and experience followed by (3) forming abstract concepts followed by (4) testing in new situations. It is a model that appears time and again" (Smith, 2001).

John Heron (1989; 1993) has written extensively on the importance of the role of the facilitator, emphasizing the power relationships between facilitators and learners (Andresen, Boud & Cohen, n.d.). Heron's model of facilitation identifies six dimensions of process and suggests that facilitation styles fall into three modes; hierarchical, co-operative or autonomous (Gould, 2009.). "Heron emphasizes the importance of facilitators in developing an ethical stance which takes account of the often hidden or overlooked manipulative processes that can be part of `neutral' facilitation. Marilyn Peterson's *At Personal Risk* (1992) discusses boundary violations in professional–client relationships which is apposite to many of the issues raised by Heron" (Andresen, Boud & Cohen, n.d.).

PLT eMods™ are aware of the theories and principles described above that work together to explain Experience-Based Learning. The PLT eMods™ methodology and technology provides learners with a holistic learning experience by creating an optimum learn-centered experience. The PLT eMods™ provide learners with an environment that is center around the 4 Absolutes, which opens the space for creativity, empowerment, adventure, independency, interdependency and possibility to be experienced and explored. The PLT eMods™ are very aware of and help learners become aware of their need and wants. The PLT eMods™ Self Assessment process and Learner Application process provide the opportunity for learners to develop self-discipline, self-motivation and Socratic thinking. The PLT eMods™ facilitators and staff provide learners with a space of unconditional positive regard, congruency and empathy assisting in providing the learner with an experience of unconditional love.

Theorist	Theory	PLT eMods™ Learning Apps
Steiner	Creativity	✓
Montessori	Empowering Environment	✓
Hahn	Adventure	✓
Neill	Non-repressive; Self-Motivation; Self-Direction	✓
Piaget	Cognitive Development	✓
Rogers	Unconditional Positive Regard	✓
Maslow	Hierarchy of Needs	✓
Freire	Action and Reflection	✓
Kolb	Experiential Learning	✓
Heron	Importance of Neutral Facilitators	✓
Peterson	Common Boundary Violations	✓

Characteristics of Experience-Based Learning

There is no fixed and concrete way to implement Experience-Based Learning. Andresen, Boud & Cohen explained and explored some features which characterize and distinguish Experience-Based Learning from other approaches:

1. "Experience-Based Learning appears to demand that three factors each be operating, at some level. These are: Involvement of the whole person—*intellect, feelings and senses*. For example, in learning through role-plays and games, the process of playing or acting in these typically involves the intellect, some or other of the senses and a variety of feelings. Learning takes place through all of these.

2. Recognition and active use of all the learner's relevant life experiences and learning experiences. Where new learning can be related to personal experiences, the meaning thus derived is likely to be more effectively integrated into the learner's values and understanding.

3. Continued reflection upon earlier experiences in order to add to and transform them into deeper understanding. This process lasts as long as the learner lives and has access to memory. The quality of reflective thought brought by the learner is of greater significance to the eventual learning outcomes than the nature of the experience itself. `Learning is the process whereby knowledge is created through the transformation of experience.' (Kolb 1984, p.38).

   However, Experience-Based Learning varies in practice according to three possibilities which represent factors that may or not be applicable in a particular instance. These are:

4. Intentionality of design. Deliberately designed learning events are often referred to as `structured' activities and include simulations, games, role play, visualizations, focus group discussions, sociodrama and hypotheticals.

5. Facilitation. This is the involvement of some other person(s) (teachers, leaders, coaches, therapists). When such persons are involved, the outcomes may be influenced by the degree of skill with which they operate. Experience-Based Learning often assumes relatively equal relationships between facilitator and learner, involves the possibility of negotiation, and gives the learner considerable control and autonomy.

6. Assessment of learning outcomes; and in the event that assessment takes place, much depends upon by what means, by whom, and for what purpose it is carried out. Experience-Based Learning is often as much concerned with the process as the outcomes of learning, and assessment procedures should accord with this. Assessment tasks congruent with Experience-Based Learning include individual or group projects, critical essays located in the learner's own experience, reading logs, learning journals, negotiated learning contracts, peer assessment and self-assessment. They might include a range of presentation modes other than writing, so as to enable the holism, context and complexity of the learning to be evidenced."

(Andresen, Boud & Cohen, n.d.)

PLT eMods™ process encourages and encompasses the Experience-Based Learning characteristics. The PLT eMods™ nurtures learners and consistently provides learners with experiential and practical applications that allow them to take ownership of their learning process and establish the value their experiences have for themselves and others.

Characteristics of Experiential Learning (from above)	PLT eMods™ Learning Experience
Experience-Based Learning demands three factors—*intellect, feelings and senses*.	PLT eMods™ process talks to individuals on all three of these levels while fostering intellectual, emotional and logical development.
Recognition and active use of all the learner's relevant life experiences and learning experiences.	PLT eMods Self Assessments allow learners to apply the information they have learned to their lives to take ownership of the learning and find value in it.
"Learning is the process whereby knowledge is created through the transformation of experience."(Kolb 1984, p. 38).	PLT eMods™ focus on creating a process of unlearning and relearning to bring about transformational change in people's lives.
Intentionality of design.	The PLT eMods™ design and learning structure provides the space for facilitation groups to discuss principles and share experiences, peer meetings for support and sharing, writing exercises are provided to stimulate Socratic writing and thinking skills along with the structured program.
Facilitation. This is the involvement of some other person(s) (teachers, leaders, coaches, therapists).	PLT eMods™ facilitation process as described in previous papers is one that is congruent with the principles of Rogers and Winnicot. Providing the client with a space of unconditional love and the 4 Absolutes.
Assessment of learning outcomes; and in the event that assessment takes place, much depends upon by what means, by whom, and for what purpose it is carried out.	PLT eMods™ is a process based approach to learning. The Self-Assessment process assists learners in assessing where they are at, where they were and where they want to be.

Conclusion

The PLT eMods™ encourage participation and contribution. These principles allow learners to take ownership of what they have learned and gain a sense of mastery… in teaching to another what it is "they need to learn." Additionally both the Learner Application process and the opportunity to become a Peer mentor allows learners to create an experience of understanding, retention, application and acceptance of the information learned. The Learner components allow learners to gain a greater understanding of the content, pick up anything they missed, as well as experiencing the joy of sharing and giving to others.

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Appendix

Appendix A: Topics, Books & Theories that Apply to PLT eMods

Topics	Authors and Experts
Brain, Emotions and Learning	
Addiction and the Brain	Carlton Erickson
Archetypes	Carl Jung
Brain Balance Music	Robert J. Mellilio
Brain Balanced Learning	Richard Jorgensen
Brain Plasticity	Michael Merzenich
Brain-Based Learning	Eric Jensen
Conscious and Non-Conscious Learning	Richard Jorgensen; Milton Erickson
Emotions	Antonio Damasio
Lucid Learning	Richard Jorgensen
Language of Vision	Gyorgy Kepes
Languages of Art	Nelson Goodman
Memory and Emotion	Joseph LeDoux
Symbolistics	Richard Jorgensen

The Human Brain, Mind and Matter	James Corick
The Senses	Diane Ackerman
Trust vs. Fear	Jack Gibb; Richard Jorgensen
Whole Brain Thinking	Ned Herrmann

Educational Philosophy	
Chinese philosopher, Confucius, "tell me and I will forget, show me and I may remember, involve me and I will understand."	
Boolean Logic	George Boole
Conscious Based Education	David lynch
"Democracy and Education" and "Art as an Experience"	John Dewey
Essentials in Education and "The Golden Mean"	Aristotle
Expeditionary Learning	Kurt Hahn
Learning and The Loss Of The Stable State	Donald Schon
Montessori	Maria Montessori
Relationships of Equality (Teacher-Student)	Paulo Freire
Socratic Method of Teaching	Socrates
Student-Centered Education	Carl Rogers
Suggestopedia / Suggestology	Giorgi Lozanov
Waldorf Education	Rudolph Steiner

Current Educational Concerns	
8 Multiple Intelligences	Howard Gardner; Kerri Zajaczkowski
Blooms Taxonomy	Benjamin S. Bloom
Collaborative Peer Learning	Linda Darling- Hammond
Conditions of Learning	Robert M. Gagne
Curriculum	William Schubert
Differentiated Instruction	Howard Gardner; Robert M. Gagne; Benjamin S. Bloom; Richard Jorgensen; Linda Darling-Hammond; Edward Deming
Dynamic Assessment	David Holt and Coleen Willard-Holt
Educational Experts	Linda Darling- Hammond Chester Finn; Diane Ravitch
Emotional Intelligence	Daniel Goleman
Horace's Compromise	Ted Sizer
Johari Window	Joseph Luft and Harry Ingham
Marzano's New Taxonomy	Robert J. Marzano
The Schools Our Children Deserve	Alfie Kohn

Learning	
Experiential Learning	David A. Kolb
Optimal Learning	Michael Csikszentmihalyi
Restorative Learning (Unlearning and Relearning)	Richard Jorgensen
Transformative Education	Robert Boyd; Richard Jorgensen
Transformative Learning Theory	Jack Mezirow

| Educational Psychology Theories	
Adult Learners	Malcolm Knowles
Attachment Theory	John Bolwby
Attribution Theory	Fritz Heide; Harold Kelley; Edward E. Jones; Lee Ross.
Behaviorism	John B. Watson
Behaviorism: Thorndike's Theory of Learning	Edward Lee Thorndike
Classical Conditioning	Ivan Pavlov
Cognitive Constructivism	Jean Piaget
Conscious Based Education	David lynch
Constructivism	Jerome Bruner; Lev Vygotsky
Ecological Systems Theory	Urie Bronfenbrenner
Flow	Michael Csikszentmihalyi; Edward Deming; Richard Jorgensen; Carl Rogers
Gestalt	Wilhelm von Bode; Fritz Perls
Group Dynamics	Kurt Lewin
Letting Go / 5 Stages of Loss	Elizabeth Kubler-Ross
Logotherapy	Victor Frankl
Manufacturing Victims	Tana Dineen
Maslow's Hierarchy Of Needs	Abraham Maslow
Operant Conditioning	B. F. Skinner
Social Development	Erik Erikson
Social Learning Theory	Albert Bandura
Suggestopedia / Suggestology	Giorgi Lozanov
The Gift of Therapy	Irvin D. Yalom
The Zone of Proximal Development	Lev Vygotsky
Theory of Self-efficacy	Albert Bandura; Julian Rotter
Creating Structure	
Codependency	Melody Beattie
Emotional Structural Authority	Richard Jorgensen
Interdependence and Transformation	Edward Deming; Richard Jorgensen; Joel Barker; Steven Covey
Overcoming Organizational Defenses	Chris Argyris
Paradigm Shifts	Joel Barker
Technology as a Cultural Force	Albert Borgmann
Creativity	
Active learning	Charles C. Bonwell and James A. Eison
Creativity and Imagination	Maxine Greene; Julia Cameron; Richard Jorgensen
Discovery Learning	Jean Piaget; Jerome Bruner; Seymour Papert
Discovery Wisdom	Richard Jorgensen
Knowledge building	Carl Bereiter and Marlene Scardamalia
Passion	Rhonda Watrin; Robert Solomon; Michelle Z Rosaldo
Other	

Emotions	Antonio Damasio
"Democracy and Education" and "Art as an Experience"	John Dewey
Critical Incident Stress Management (CISM) / Critical Incident Stress Debriefing (CISD)	Jeffrey T. Mitchell; George S. Everly
Collaborative Peer Learning	Linda Darling- Hammond
Conditions of Learning	Robert M. Gagne
Creativity and Imagination	Maxine Greene; Julia Cameron; Richard Jorgensen
Curriculum	William Schubert
Differentiated Instruction	Howard Gardner; Robert M. Gagne; Benjamin S. Bloom; Richard Jorgensen; Linda Darling-Hammond; Edward Deming
Educational Experts	Linda Darling- Hammond Chester Finn; Diane Ravitch
Emotional Structural Authority	Richard Jorgensen
Horace's Compromise	Ted Sizer
Language of Vision	Gyorgy Kepes
Languages of Art	Nelson Goodman
Manufacturing Victims	Tana Dineen
Memory and Emotion	Joseph LeDoux
Overcoming Organizational Defenses	Chris Argyris
Passion	Rhonda Watrin; Robert Solomon; Michelle Z Rosaldo
Relationships of Equality (Teacher-Student)	Paulo Freire
Technology as a Cultural Force	Albert Borgmann
The Gift of Therapy	Irvin D. Yalom
The Human Brain, Mind and Matter	James Corick
The Schools Our Children Deserve	Alfie Kohn
The Senses	Diane Ackerman
Transactional Analysis	Eric Bern

	Theory	Theorist/s
1.	8 Multiple Intelligences	Howard Gardner
2.	Adult Learners	Malcolm Knowles
3.	Addiction and the Brain	Carlton Erickson
4.	Archetypes	Carl Jung
5.	Attribution Theory	Fritz Heider, Harold Kelley, Edward E. Jones, and

		Lee Ross.
6.	Behaviorism	John B. Watson
7.	Behaviorism: Thorndike's Theory of Learning	Edward Lee Thorndike
8.	Behaviorism	Ivan Pavlov; B. F. Skinner; Edward Lee Thorndike; Edward C. Tolman; Murray Sidman; John B. Watson
9.	Blooms Taxonomy	Benjamin S. Bloom
10.	Boolean Logic	George Boole
11.	Brain Balance Music	Robert J. Mellilio
12.	Brain Balanced Learning	Richard Jorgensen
13.	Brain-Based Learning	Eric Jensen
14.	Brain Plasticity	Michael Merzenich
15.	Cognitive Constructivism	Jean Piaget
16.	Conditions of Learning	Robert M. Gagne
17.	Conscious-Based Education	David lynch; Richard Jorgensen
18.	Conscious and Non-Conscious Learning	Richard Jorgensen; Milton Erickson
19.	Constructivism	Jerome Bruner; Lev Vygotsky
20.	Differentiated Instruction	Howard Gardner; Robert M. Gagne; Benjamin S. Bloom; Richard Jorgensen; Linda Darling-Hammond; Edward Deming
21.	Discovery Learning	Jerome Bruner
22.	Discovery Wisdom	Richard Jorgensen
23.	Dynamic Assessment	David Holt and Coleen Willard-Holt
24.	Critical Incident Stress Management (CISM)	Jeffrey T. Mitchell; George S. Everly
25.	Critical Incident Stress Debriefing (CISD)	Jeffrey T. Mitchell; George S. Everly
26.	Ecological Systems Theory	Urie Bronfenbrenner
27.	Eye Movement Desensitization Reprocessing	Francine Shapiro
28.	Emotional Intelligence	Daniel Goleman
29.	Emotional Structural Authority	Richard Jorgensen
30.	Emotions	Antonio Damasio
31.	Essentials in Education and "The Golden Mean"	Aristotle
32.	Expeditionary Learning	Kurt Hahn
33.	Experiential Learning	David A. Kolb
34.	Flow: Optimal Learning	Michael Csikszentmihalyi; Edward Deming; Richard Jorgensen, Carl Rogers
35.	Gestalt	Wilhelm von Bode
36.	Group Dynamics	Kurt Lewin
37.	Interdependence and Transformation	Edward Deming; Richard Jorgensen; Joel Barker; Steven Covey
38.	Johari Window	Joseph Luft and Harry Ingham

39.	Knowledge building	Carl Bereiter and Marlene Scardamalia
40.	Language of Vision	Gyorgy Kepes
41.	Learning and The Loss Of The Stable State	Donald Schon
42.	Letting Go / 5 Stages of Loss	Elizabeth Kubler-Ross
43.	Logotherapy	Victor Frankl
44.	Lucid Learning	Richard Jorgensen
45.	Maslow's Hierarchy Of Needs	Abraham Maslow
46.	Marzano's New Taxonomy	Robert J. Marzano
47.	Optimal Learning	Michael Csikszentmihalyi
48.	Paradigm Shifts	Joel Barker
49.	Restorative Learning (Unlearning and Relearning)	Richard Jorgensen
50.	Social Development	Erik Erikson
51.	Social Learning Theory	Albert Bandura
52.	Student-Centered Education	Carl Rogers
53.	Suggestopedia/ Suggestology	Giorgi Lovanov
54.	Symbolistics	Richard Jorgensen
55.	The Zone of Proximal Development	Lev Vygotsky
56.	Transactional Analysis	Eric Bern
57.	Transformative Education	Robert Boyd; Richard Jorgensen
58.	Transformative Learning Theory	Jack Mezirow
59.	Trust vs. Fear	Jack Gibb
60.	Waldorf Education	Rudolph Steiner
61.	Whole Brain Thinking	Ned Herrmann

Appendix B: Suggestopedia
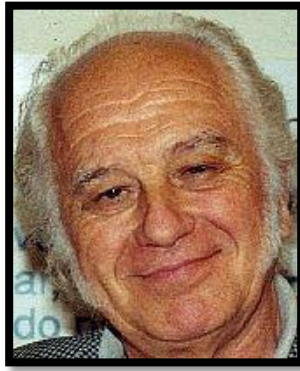
Suggestopedia was originally developed by Dr. Giorgi Lozanov, a Bulgarian medical doctor, psychotherapist, Yogi and educator. Lozanov developed Suggestopedia as he identified a need for an effective educational system to *accelerate learning*. He saw a new way of learning as essential for human evolution in order to keep up with technological advancements. More importantly he developed Suggestopedia in order to **help learners achieve optimum mental, physical and spiritual health**.

Suggestopedia is a learning methodology that works with *relaxation, music and suggestion* to effectively overcome barriers by *lowering the affective filter*[1] thus enhancing the learning process (Harmer, 2001). Making use of "Baroque music, relaxed alertness, positive expectation, and highly orchestrated classroom methods to achieve increased memory and to accelerate learning" (Minewiser, 2000).

"Lozanov contends that the purpose of Suggestopedia is **to liberate and stimulate not only memory and other mental functions, but the entire personality**" (in Schuster & Miele, 1978, as cited in Minewiser, 2000, p.9). Krippner (1980) notes that Lozanov claimed to have developed a system, which activates many areas of the brain, particularly the right brain and the limbic systems (as cited in Minewiser, 2000, p.9).

Krippner (1980) stated that when he was part of the "Working Group on Suggestology as a Learning Methodology" for the United Nations Educational, Scientific and Cultural Organization (UNESCO) with Schuster, Miele, and Pollack, he found that Lozanov's teachers:

> *"learn how to orchestrate classroom instruction, combining all elements of*
> *suggestopedia harmoniously.... Suggestopedic methods involve simultaneous*
> *activation of concentration and relaxation, of logic and emotion, of the*
> *brain's left and right hemisphere, of the brain's higher and lower centers, and*
> *of the unification of conscious and paraconscious mental activity." (p. 133)*

Lozanov's methodology was examined and proven effective by UNESCO who now recommend Suggestopedia Methodology for educational environments around the world.

Lozanov maintains that the objectives of Suggestopedia are to: tap memory reserves, intellectual reserves, creativity reserves, and reserves of the entire personality, to avoid tiredness, create a pleasant learning experience, help students adapt to society, and create a positive psychotherapeutic effect (in Schuster & Miele, 1978, as cited in Minewiser, 2000, p 9).

Lozanov believes that his system enables a child to go through school without trauma and stress, while retaining their innate drive for learning, as well as allowing him/her to uncover innate but hidden capacity and talent which he calls the *reserve capacities of the mind*.

Principles of Suggestopedia

Lozanov found that learning is enhanced when tension, stress, and pre-existing concepts or beliefs are removed. Additionally he stated that true learning must engage both the analytical brain and the emotional brain, along with both states of consciousness - conscious and the unconscious. With this knowledge he formulated the following principles and concepts:

PRINCIPLES OF SUGGESTOPEDIA (LOZANOV, 1978)

- Learning is characterized by joy and the absence of tension.
- Learning takes place on both a conscious and an unconscious level.
- The learner's reserve potential can be tapped through suggestion.

BASIC CONCEPTS BEHIND SUGGESTOPEDIA (Integral Learning Systems llc Website, n.d.)

- People possess mental capacities that they seldom use under normal circumstances.
- People's response to stimuli is complex.
- The more we can do to communicate to the unconscious and the conscious faculties of the brain through effective learning, the greater our ability to break through the conditioned, automatic patterns and "open the access to the greater potential of the mental reserve.

Suggestopedia is a method that implements these principles by working not only on the conscious level of human mind but also on the subconscious level, which allows the mind to engage in a process of unlearning for the purpose of relearning. And since it works to transform learning and open the mind and brain, which are said to have unlimited capacities, one can teach more than other methods can teach in the same amount of time.

Additionally through his learning approach Lazonov's sought to equip and offer students more choices.   While placing a **great emphasis on the classroom / learning environment and atmosphere**. Lazonov expresses the necessity for the "*the students feel comfortable and confident*" in order for effective learning to occur (Harmer, 2001).

Origins of the Name: Suggestopedia

The name Suggestopedia is derived from two words – "suggestion" and "pedagogy".

Suggestion is the psychological process by which one person guides the thoughts, feelings, or behaviour of another (Suggestion, 2010.).

Pedagogy is the art, study and science of being a teacher or the process of teaching. The term generally refers to strategies of instruction, or a style of instruction (Pedagogy, 2010.).

Linguistically and logically speaking the term simply meant *"learning through suggestion"* (Felix, 1989, Chap. 1). The method's main concern is the *influence of suggestion in the teaching/ facilitating/ training environment* – that is to say: *What does what an educators do to 'suggest' to the learner:*

- *That learning is easy and fun? OR*
- *That learning is difficult and that mastery is impossible?*

In examining suggestions we need to examine the suggestions that people bring into the learning environment about their capabilities, intelligences and beliefs about people and facilitators.

In doing so we will explore how facilitators can help learners move beyond their limiting beliefs and reinforce the positive.

Suggestopedia, Accelerated Learning, Super learning And PLT eMods™

Accelerated Learning is an educational method that that "creates an environment and teaching processes to enable learners to move beyond limiting beliefs and misconceptions and tap into their hidden potential." The method encompasses and incorporates detailed studies and research of the human mind and how it acquires knowledge.

To understand Accelerated Learning and what distinguishes it from other teaching philosophies and methodologies, it is important to go back to the roots of the method and look at its development over the years.

The aim of this section is to inform you about Suggestopedia / Accelerated Learning / Super Learning, while providing the framework for you to understand that PLT eMods™ are considered an Accelerated Learning tool, yet the technology and methodology extend and expand the concept and definition first proposed by Georgi Lozanov.

Suggestopedia

Suggestopedia is the scientific educational methodology that set the stage for the Accelerated Learning wave of the 70's and the Super Learning wave still occurring.

Lozanov developed Suggestopedia as he identified a need for an effective educational system to *accelerate learning*. He saw a new way of learning as essential for human evolution in order to keep up with technological advancements. More importantly he developed Suggestopedia in order to **help learners achieve optimum mental, physical and spiritual health**.

Suggestopedia is a learning methodology that works with *relaxation, music and suggestion* to effectively overcome barriers by *lowering the affective filter*[1] thus enhancing the learning process (Harmer, 2001). Making use of "Baroque music, relaxed alertness, positive expectation, and highly orchestrated classroom methods to achieve increased memory and to accelerate learning" (Minewiser, 2000).

"Lozanov contends that the purpose of Suggestopedia is **to liberate and stimulate not only memory and other mental functions, but the entire personality**" (in Schuster & Miele, 1978 Cited from Minewiser, 2000, p.9). Krippner

(1980) notes that Lozanov claimed to have developed a system, which activates many areas of the brain, particularly the right brain and the limbic systems (Minewiser, 2000, p.9).

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BASIC CONCEPTS BEHIND SUGGESTOPEDIA (Integral Learning Systems Llc Website, Date Unknown)

- People possess mental capacities that they seldom use under normal circumstances.
- People's response to stimuli is complex.
- The more we can do to communicate to the unconscious and the conscious faculties of the brain through effective learning, the greater our ability to break through the conditioned, automatic patterns and "open the access to the greater potential of the mental reserve.

The applications of Suggestology

"The applications of Suggestology are said to be the stimulation of often unused mental capacities, referred to as *hidden reserves* of the brain and the mind. These include "long-term hypermnesia, stimulation of creativity, and learned self-control of autonomic functions such as pain, bleeding, metabolism, etc" (Lozanov, in Schuster & Miele, 1978, p. 212, as cited in Minewiser, 2000, p19).

"Belanger (1978) proposes that the role of the unconscious during learning is to facilitate the activation of the reserves of human potential in the right hemisphere, which regulates such processes as intuition, imagination, space orientation, musical perception, and emotions "(as cited in Minewiser, 2000, p.19)

Structure of Suggestopedia
The lesson of Suggestopedia initially consisted of three phases: deciphering, concert session (memorization séance), and elaboration. However it has now expanded into four phases: introduction, concert session, elaboration, and production.

> **"Introduction:** *The teacher teaches the material in "a playful manner" instead of analyzing lexis and grammar of the text in a directive manner.*

> **Concert session (active and passive):** *In the active session, the teacher reads with intoning as selected music is played. Occasionally, the students read the text together with the teacher, and listen only to the music as the teacher pauses in particular moments. The passive session is done more calmly.*

> **Elaboration:** *The students sing classical songs and play games while "the teacher acts more like a consultant*

> **Production:** *The students spontaneously speak and interact in the target language without interruption or correction."*

The 10 Elements of Accelerated Learning

From International Alliance of Learning: http://www.ialearn.org/ALElements.php

KNOWLEDGE ABOUT THE HUMAN BRAIN

Scientific knowledge and understanding of the brain supports the design of effective teaching and learning experiences. As we learn more about how the brain functions, and how that knowledge translates to classroom practices, the Accelerated Learning model adapts to integrate what we know about learning and what we do in the learning environment to support learning.

EMOTIONAL STATE

Without emotion, there is no learning. Our emotions powerfully influence the learning process and either hinder or enhance retention. When emotions are positive, we are open to new possibilities, our total mental capacity is available for learning, We are ready to move into new experiences. Accelerated Learning creates and maintains an environment in which each person is involved in the learning, engaged in what is happening and always feels empowered and resourceful.

THE LEARNING ENVIRONMENT

Accelerated Learning aims to create a positive learning environment. One in which learners are held within an emotionally, socially and physically secure environment- one that creates an environment of relaxation and stimulation. The accelerated learning environment takes into consideration every aspect of the learning environment that can positively or negatively affect the experience, such as lighting, temperature, acoustics, seat arrangement, color, décor, as well as the emotional and mental qualities of the environment. Accelerated Learning aims to create and maintain a fun, engaging, and rewarding environment that invites learners to experiment, discover and learn."[1]

THE ROLE OF MUSIC AND THE ARTS

Because music creates emotional engagement and memorability, it is a valuable, and often overlooked, educational tool. It can influence the entire pace, mood and energy level of the learning experience. Art in its various forms facilitates self-understanding, emotional involvement and the application of knowledge to real life situations. Research shows that the arts – everything from storytelling to drama, to the visual arts enhances learning and speaks to us at both the conscious and subconscious level. AL uses all of the Arts to promote the development of the entire person and make learning inspiring and transformational.

PERSONAL MOTIVATION

The desire to continue learning is based on self-confidence, intrinsic motivation, and personal expectations. Accelerated Learning supports the intrinsic motivation of the learner as opposed to extrinsic awards like grade and prizes. In the AL classroom, learning is shared, cooperation stressed, and the learning community and group cohesion supports each individual in becoming the best they can be. By enabling learners to tap into their innermost desires, goals and vision, they naturally become engaged learners.

MULTIPLE INTELLIGENCES AND LEARNING STYLES

The theory of multiple intelligences and the many theories of individual learning and processing styles are an integral part of Accelerated Learning program design. IAL subscribes to Howard Gardner's perspective. . ."to respect the many differences among people, the multiple variations in the ways that they learn, the several modes by which they can be assessed, and the almost infinite number of ways in which they can leave a mark on the world."

IMAGINATION/METAPHORS

Imaginative games and activities enrich verbal and written information with physical movement, color, depth, and positive emotions. Visualization skills enhance spelling, memory, creativity, and other abilities, and metaphors bring stronger meaning to any subject. AL uses ritual, metaphor, similies and analogies in various forms to support earning and make it more memorable.

SUGGESTION/DE-SUGGESTION

Learners come into learning with many pre-conceptions about themselves, the world, the subject matter and learning. Personal suggestions, often called beliefs or mental models, sometimes enhance our ability to learn and often limit what is possible. In Accelerated Learning, the facilitator pays attention to each individual and supports him or her in moving beyond limitations. The AL facilitator designs the program, uses both verbal and non-verbal communication carefully and intentionally to be a supporter of learning and not an added barrier. What is not spoken may often be conveyed by body language, attitude, choice of words and thinly veiled expectations. Though subtle, positive suggestions, aided by a rich variety of learning tasks, music, movement and exercise, can create a positive mental state and raise energy levels and attentiveness.

TEAM LEARNING AND COOPERATION

Cooperative learning activities allow participants of all abilities to benefit as mentors and learners, develop interpersonal and time-management skills, and more fully develop their creative talents. The sharing of learning reinforces individual learning and group results.

Learning expectations should be clearly defined and shared with participants and constituents so that:

- Learners are able to comprehend the relevance of the subject matter to their lives; and
- Facilitators of learning can measure progress and generate objective data that can be used to continuously improve and add value to planning, assessment, and process improvement.

Appendix C: Gardner's Multiple Intelligences

The Nine Types of Intelligence
By Howard Gardner

Logical-Mathematical Intelligence ("Number/Reasoning" Smart)

Logical-mathematical intelligence is the ability to calculate, quantify, consider propositions and hypotheses, and carry out complete mathematical operations. It enables us to perceive relationships and connections and to use abstract, symbolic thought; sequential reasoning skills; and inductive and deductive thinking patterns. Logical intelligence is usually well developed in mathematicians, scientists, and detectives. Young adults with lots of logical intelligence are interested in patterns, categories, and relationships. They are drawn to arithmetic problems, strategy games and experiments.

Linguistic Intelligence ("Word Smart")

Linguistic intelligence is the ability to think in words and to use language to express and appreciate complex meanings. Linguistic intelligence allows us to understand the order and meaning of words and to apply meta-linguistic skills to reflect on our use of language. Linguistic intelligence is the most widely shared human competence and is evident in poets, novelists, journalists, and effective public speakers. Young adults with this kind of intelligence enjoy writing, reading, telling stories or doing crossword puzzles.

Musical Intelligence ("Musical Smart")

Musical intelligence is the capacity to discern pitch, rhythm, timbre, and tone. This intelligence enables us to recognize, create, reproduce, and reflect on music, as demonstrated by composers, conductors, musicians, vocalist, and sensitive listeners. Interestingly, there is often an affective connection between music and the emotions; and mathematical and musical intelligences may share common thinking processes. Young adults with this kind of intelligence are usually singing or drumming to themselves. They are usually quite aware of sounds others may miss.

Spatial Intelligence ("Picture Smart")

Spatial intelligence is the ability to think in three dimensions. Core capacities include mental imagery, spatial reasoning, image manipulation, graphic and artistic skills, and an active imagination. Sailors, pilots, sculptors, painters, and architects all exhibit spatial intelligence. Young adults with this kind of intelligence may be fascinated with mazes or jigsaw puzzles, or spend free time drawing or daydreaming.

Bodily-Kinesthetic Intelligence ("Body Smart")

Bodily kinesthetic intelligence is the capacity to manipulate objects and use a variety of physical skills. This intelligence also involves a sense of timing and the perfection of skills through mind–body union. Athletes, dancers, surgeons, and craftspeople exhibit well-developed bodily kinesthetic intelligence.

Naturalist Intelligence ("Nature Smart")

Designates the human ability to discriminate among living things (plants, animals) as well as sensitivity to other features of the natural world (clouds, rock configurations). This ability was clearly of value in our evolutionary past as hunters, gatherers, and farmers; it continues to be central in such roles as botanist or chef. It is also speculated that much of our consumer society exploits the naturalist intelligences, which can be mobilized in the discrimination among cars, sneakers, kinds of makeup, and the like.

Interpersonal Intelligence ("People Smart")

Interpersonal intelligence is the ability to understand and interact effectively with others. It involves effective verbal and nonverbal communication, the ability to note distinctions among others, sensitivity to the moods and temperaments of others, and the ability to entertain multiple perspectives. Teachers, social workers, actors, and politicians all exhibit interpersonal intelligence. Young adults with this kind of intelligence are leaders among their peers, are good at communicating, and seem to understand others' feelings and motives.

Intra-personal Intelligence ("Self Smart")

Intra-personal intelligence is the capacity to understand oneself and one's thoughts and feelings, and to use such knowledge in planning and directing one's life. Intra-personal intelligence involves not only an appreciation of the self, but also of the human condition. It is evident in psychologists, spiritual leaders, and philosophers. These young adults may be shy. They are very aware of their own feelings and are self-motivated.

## Spiritual/Existential Intelligence

Sensitivity and capacity to tackle deep questions about human existence, such as the meaning of life, why do we die, and how did we get here.

{Content from the Blog of Dr Jonathan Moch (March 26th 2010), FOTEO: Nine brain circuits - muliple intelligences (H Gardner) retrieved from http://drjdmoch.blogspot.com/2010/03/foteo-nine-brain-circuits-muliple.html on 5 December 2010. Overview of the Multiple Intelligences Theory. Association for Supervision and Curriculum Development and Thomas Armstrong.com}

Appendix D: Bloom's Taxonomy

In 1956 Benjamin Bloom and a committee of top psychologists identified three domains / categories / behaviors associated with learning:

- o **Cognitive**: Mental Skills and Acuity (*Knowledge*)
- o **Affective**: Growth in Feelings or Emotional Areas (*Attitude*)
- o **Psychomotor**: Manual or Physical Skills (*Skills*)
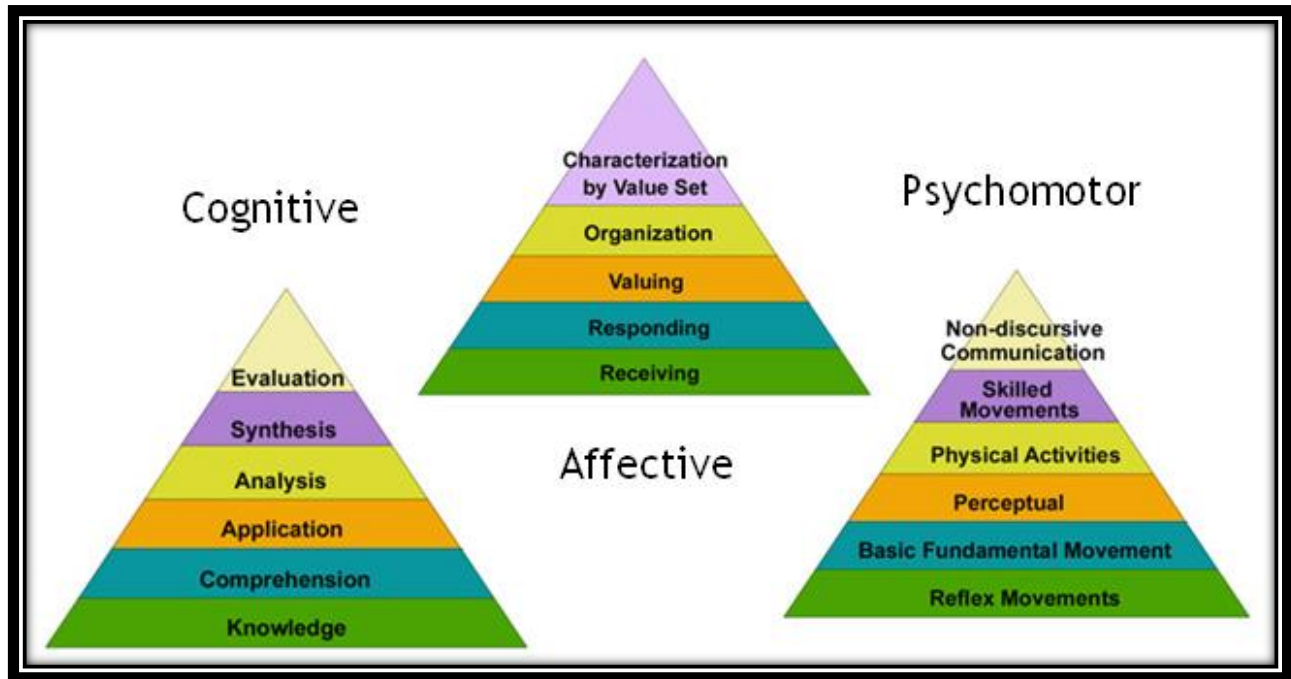
Thus in effect Bloom's Taxonomy identified that there is more than one way of learning. So the "taxonomy of learning behaviors can be thought of as 'the goals of the learning process.' And after a learning episode, the learner should have acquired new skills, knowledge, and/or attitudes."[1]

Each domain has been divided into subdivisions, starting from the simplest behavior to the most complex. However, the divisions outlined are not finite thus there are numerous other systems that have been designed and theorized in the educational and training world. "But, Bloom's taxonomy is easily understood and is probably the most widely applied one in use today."[1]

Cognitive Domain. Bloom identified six levels within the cognitive domain. He structure the description in a hierarchical fashion with the simple recall or recognition of facts, being the lowest level, through increasingly more complex and abstract mental levels, to the highest order- evaluation. Below is a list of

1. *Knowledge*: arrange, define, duplicate, label, list, memorize, name, order, recognize, relate, recall, repeat, reproduce state.
2. *Comprehension*: classify, describe, discuss, explain, express, identify, indicate, locate, recognize, report, restate, review, select, translate,
3. *Application*: apply, choose, demonstrate, dramatize, employ, illustrate, interpret, operate, practice, schedule, sketch, solve, use, write.

4. ***Analysis***: analyze, appraise, calculate, categorize, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.
5. ***Synthesis***: arrange, assemble, collect, compose, construct, create, design, develop, formulate, manage, organize, plan, prepare, propose, set up, write.
6. ***Evaluation***: appraise, argue, assess, attach, choose compare, defend estimate, judge, predict, rate, core, select, support, value, evaluate.

Revised Bloom's Taxonomy: by Lorin Anderson, a former student of Bloom. She revisited the cognitive domain in the learning taxonomy in the mid-nineties and made some changes, with perhaps the two most prominent ones being, 1) changing the names in the six categories from nouns to verbs and 2) slightly rearranging them (Pohl, 2000).

This new taxonomy reflects a more active form of thinking and is perhaps more accurate[1]:
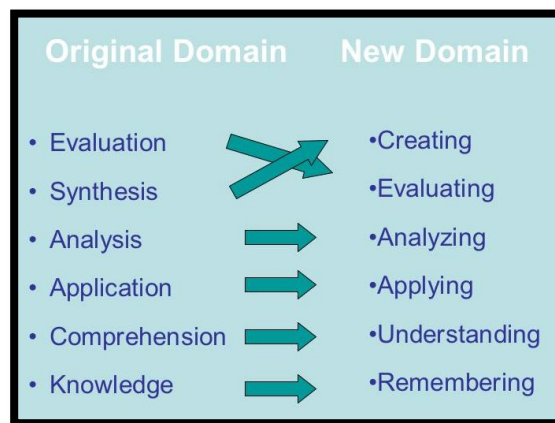
The affective domain (Krathwohl, Bloom and Masia, 1973) includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes. The five major categories are listed from the simplest behavior to the most complex:

Category	*Example and Key Words (verbs)*
Receiving Phenomena: Awareness, willingness to hear, selected attention.	**Examples**: Listen to others with respect. Listen for and remember the name of newly introduced people. **Key Words**: asks, chooses, describes, follows, gives, holds, identifies, locates, names, points to, selects, sits, erects, replies, uses.
Responding to Phenomena: Active participation on the part of the learners. Attends and reacts to a particular phenomenon. Learning outcomes and may emphasize compliance in responding, willingness to respond, or satisfaction in responding (motivation).	**Examples**: Participates in class discussions. Gives a presentation. Questions new ideals, concepts, models, etc. in order to fully understand them. Know the safety rules and practices them. **Key Words**: answers, assists, aids, complies, conforms, discusses, greets, helps, labels, performs, practices, presents, reads, recites, reports, selects, tells, writes.
Valuing: The worth or value a person attaches to a particular object, phenomenon, or	**Examples**: Demonstrates belief in the democratic process. Is sensitive towards individual and cultural differences (value diversity). Shows the ability to solve

behavior. This ranges from simple acceptance to the more complex state of commitment. Valuing is based on the internalization of a set of specified values, while clues to these values are expressed in the learner's overt behavior and are often identifiable.	problems. Proposes a plan to social improvement and follows through with commitment. Informs management on matters that one feels strongly about. **Key Words**: completes, demonstrates, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, works.
Organization: Organizes values into priorities by contrasting different values, resolving conflicts between them, and creating an unique value system. The emphasis is on comparing, relating, and synthesizing values.	**Examples**: Recognizes the need for balance between freedom and responsible behavior. Accepts responsibility for one's behavior. Explains the role of systematic planning in solving problems. Accepts professional ethical standards. Creates a life plan in harmony with abilities, interests, and beliefs. Prioritizes time effectively to meet the needs of the organization, family, and self. **Key Words**: adheres, alters, arranges, combines, compares, completes, defends, explains, formulates, generalizes, identifies, integrates, modifies, orders, organizes, prepares, relates, synthesizes.
Internalizing values (characterization): Has a value system that controls their behavior. The behavior is pervasive, consistent, predictable, and most importantly, characteristic of the learner. Instructional objectives are concerned with the student's general patterns of adjustment (personal, social, emotional).	**Examples**: Shows self-reliance when working independently. Cooperates in group activities (displays teamwork). Uses an objective approach in problem solving. Displays a professional commitment to ethical practice on a daily basis. Revises judgments and changes behavior in light of new evidence. Values people for what they are, not how they look. **Key Words**: acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, questions, revises, serves, solves, verifies.

http://www.nwlink.com/~donclark/hrd/bloom.html

The psychomotor domain (Simpson, 1972) includes physical movement, coordination, and use of the motor-skill areas. Development of these skills requires practice and is measured in terms of speed, precision, distance, procedures, or techniques in execution. The seven major categories are listed from the simplest behavior to the most complex:

Category	*Example and Key Words (verbs)*
Perception: The ability to use sensory cues to guide motor activity. This ranges from sensory stimulation, through cue selection, to translation.	**Examples**: Detects non-verbal communication cues. Estimate where a ball will land after it is thrown and then moving to the correct location to catch the ball. Adjusts heat of stove to correct temperature by smell and taste of food. Adjusts the height of the forks on a forklift by comparing where the forks are in relation to the pallet. **Key Words**: chooses, describes, detects, differentiates, distinguishes, identifies, isolates, relates, selects.

Set: Readiness to act. It includes mental, physical, and emotional sets. These three sets are dispositions that predetermine a person's response to different situations (sometimes called mindsets).	**Examples**: Knows and acts upon a sequence of steps in a manufacturing process. Recognize one's abilities and limitations. Shows desire to learn a new process (motivation). NOTE: This subdivision of Psychomotor is closely related with the "Responding to phenomena" subdivision of the Affective domain. **Key Words**: begins, displays, explains, moves, proceeds, reacts, shows, states, volunteers.
Guided Response: The early stages in learning a complex skill that includes imitation and trial and error. Adequacy of performance is achieved by practicing.	**Examples**: Performs a mathematical equation as demonstrated. Follows instructions to build a model. Responds hand-signals of instructor while learning to operate a forklift. **Key Words**: copies, traces, follows, react, reproduce, responds
Mechanism: This is the intermediate stage in learning a complex skill. Learned responses have become habitual and the movements can be performed with some confidence and proficiency.	**Examples**: Use a personal computer. Repair a leaking faucet. Drive a car. **Key Words**: assembles, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches.
Complex Overt Response: The skillful performance of motor acts that involve complex movement patterns. Proficiency is indicated by a quick, accurate, and highly coordinated performance, requiring a minimum of energy. This category includes performing without hesitation, and automatic performance. For example, players are often utter sounds of satisfaction or expletives as soon as they hit a tennis ball or throw a football, because they can tell by the feel of the act what the result will produce.	**Examples**: Maneuvers a car into a tight parallel parking spot. Operates a computer quickly and accurately. Displays competence while playing the piano. **Key Words**: assembles, builds, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches. NOTE: The Key Words are the same as Mechanism, but will have adverbs or adjectives that indicate that the performance is quicker, better, more accurate, etc.
Adaptation: Skills are well developed and the individual can modify movement patterns to fit special requirements.	**Examples**: Responds effectively to unexpected experiences. Modifies instruction to meet the needs of the learners. Perform a task with a machine that it was not originally intended to do (machine is not damaged and there is no danger in performing the new task). **Key Words**: adapts, alters, changes, rearranges, reorganizes, revises, varies.
Origination: Creating new movement patterns to fit a particular situation or specific problem. Learning outcomes emphasize creativity based upon highly developed skills.	**Examples**: Constructs a new theory. Develops a new and comprehensive training programming. Creates a new gymnastic routine. **Key Words**: arranges, builds, combines, composes, constructs, creates, designs, initiate, makes, originates.

http://www.nwlink.com/~donclark/hrd/bloom.html

"As mentioned earlier, the committee did not produce a compilation for the psychomotor domain model, but others have. The one discussed above is by Simpson (1972). There are two other popular versions"[1]:

Dave's (1975)[1]:

- Imitation — Observing and patterning behavior after someone else. Performance may be of low quality. Example: Copying a work of art.
- Manipulation — Being able to perform certain actions by following instructions and practicing. Example: Creating work on one's own, after taking lessons, or reading about it.
- Precision — Refining, becoming more exact. Few errors are apparent. Example: Working and reworking something, so it will be "just right."
- Articulation — Coordinating a series of actions, achieving harmony and internal consistency. Example: Producing a video that involves music, drama, color, sound, etc.
- Naturalization — Having high level performance become natural, without needing to think much about it. Examples: Michael Jordan playing basketball, Nancy Lopez hitting a golf all, etc.

Harrow's (1972)[1]:

- Reflex movements — Reactions that are not learned.
- Fundamental movements — Basic movements such as walking, or grasping.
- Perception — Response to stimuli such as visual, auditory, kinesthetic, or tactile discrimination.
- Physical abilities — Stamina that must be developed for further development such as strength and agility.
- Skilled movements — Advanced learned movements as one would find in sports or acting.
- No discursive communication — Effective body language, such as gestures and facial expressions.

Appendix E: The 50 Strategies to Combat ADD/ADHD by Dr Thomas Armstrong

1. Provide a balanced breakfast.
2. Consider the Feingold diet
3. Limit television and video games
4. Teach self-talk skills.
5. Find out what interests your child.
6. Promote a strong physical education program in your child's school.
7. Enroll your child in a martial arts program.
8. Discover your child's multiple intelligences
9. Use background music to focus and calm.
10. Use color to highlight information.
11. Teach your child to visualize.
12. Remove allergens from the diet.
13. Provide opportunities for physical movement.
14. Enhance your child's self-esteem.
15. Find your child's best times of alertness.
16. Give instructions in attention-grabbing ways.
17. Provide a variety of stimulating learning activities.
18. Consider biofeedback training.
19. Activate positive career aspirations.
20. Teach your child physical-relaxation techniques.
21. Use incidental learning to teach.
22. Support full inclusion of your child in a regular classroom.
23. Provide positive role models.
24. Consider alternative schooling options.
25. Channel creative energy into the arts.
26. Provide hands-on activities
27. Spend positive times together.
28. Provide appropriate spaces for learning.
29. Consider individual psychotherapy.
30. Use touch to soothe and calm.
31. Help your child with organizational skills.
32. Help your child appreciate the value of personal effort.
33. Take care of yourself.
34. Teach your child focusing techniques.
35. Provide immediate feedback.
36. Provide your child with access to a computer.
37. Consider family therapy.
38. Teach problem-solving skills.
39. Offer your child real-life tasks to do.
40. Use "time-out" in a positive way.
41. Help your child develop social skills.
42. Contract with your child.
43. Use effective communication skills.
44. Give your child choices.
45. Discover and treat the four types of misbehavior.
46. Establish consistent rules, routines, and transitions.
47. Hold family meetings.
48. Have your child teach a younger child.
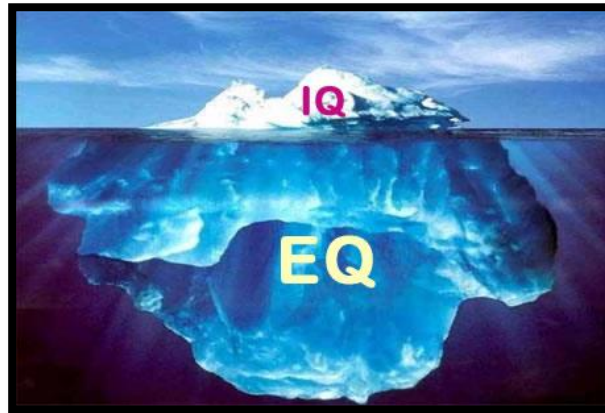49. Use natural and logical consequences.

50. <mark>Hold a positive image of your child</mark>.

http://www.thomasarmstrong.com/add-adhd_strategies.php

Note: Yellow highlighting are provided by the PLT eMod™ Learning Process

Appendix F: Emotional Intelligence

Development of Emotional Intelligence (EI)

Emotional intelligence (EI) describes the individual's "*ability, capacity, skill or, in the case of the trait EI model, a self-perceived ability to identify, assess, and control the emotions of one's self, of others, and of groups.*"[1]

"A learned capability based on emotional intelligence that results in outstanding performance at work. Our emotional intelligence determines our potential for learning the practical skills based on the five elements : self-awareness, motivation, self-regulation, empathy, and adeptness in relationships. Our emotional competence shows how much of that potential we have translated into on-the-job capabilities."

(Goleman, 1998)[1]

The earliest reference of EI can be traced back to Darwin's work on the importance of emotional expression for survival and second adaptation.[1] Even as far back as the 1900s researchers began to recognize the importance of non-cognitive aspects of intelligence. "For instance, as early as 1920, E.L. Thorndike used the term social intelligence to describe the skill of understanding and managing other people."[1]

In 1940 David Wechsler described the influence of non-intellective factors on intelligent behavior, and argued that our models of intelligence would not be complete until we can adequately describe these factors.

In Howard Gardner's book *Frames of Mind: The Theory of Multiple Intelligence* (1983), introduced the idea of multiple intelligences. Amongst these intelligences he included both *Interpersonal intelligence* (the capacity to understand the intentions, motivations and desires of other people) and *Intrapersonal intelligence* (the capacity to understand oneself, to appreciate one's feelings, fears and motivations). Gardner's multiple intelligences clearly point to the fact that traditional definitions and measures of intelligence (IQ) fail to fully explain and assess intelligences and abilities.

Salovey and Mayer's (2005) conception of EI strives to define EI within the confines of the standard criteria for a new intelligence. Their current definition of EI is: *"The ability to perceive emotion, integrate emotion to facilitate thought, understand emotions and to regulate emotions to promote personal growth."*

"The ability-based model views emotions as useful sources of information that help one to make sense of and navigate one's social environment.   The model proposes that individuals vary in their ability to process information

of an emotional nature and in their ability to relate emotional processing to a wider cognition. This ability is seen to manifest itself in certain adaptive behaviors. The model claims that EI includes four types of abilities:

1. Perceiving emotions – the ability to detect and decipher emotions in faces, pictures, voices, and cultural artifacts—including the ability to identify one's own emotions. Perceiving emotions represents a basic aspect of emotional intelligence, as it makes all other processing of emotional information possible.
2. Using emotions – the ability to harness emotions to facilitate various cognitive activities, such as thinking and problem solving. The emotionally intelligent person can capitalize fully upon his or her changing moods in order to best fit the task at hand.
3. Understanding emotions – the ability to comprehend emotion language and to appreciate complicated relationships among emotions. For example, understanding emotions encompasses the ability to be sensitive to slight variations between emotions, and the ability to recognize and describe how emotions evolve over time.
4. Managing emotions – the ability to regulate emotions in both ourselves and in others. Therefore, the emotionally intelligent person can harness emotions, even negative ones, and manage them to achieve intended goals."[1]

PLT teaches the tools to help adults and children learn how to see all their choices and to make effective decisions based on their emotional, physical, social, mental, and ethical well-being. The PLT system fosters emotional intelligence by teaching people about perceptions, attitudes, thinking, feeling and behaviors of self and others. Through the PLT process people learn what it means to make adult decisions based on self-authority, self-responsibility and self-accountability.
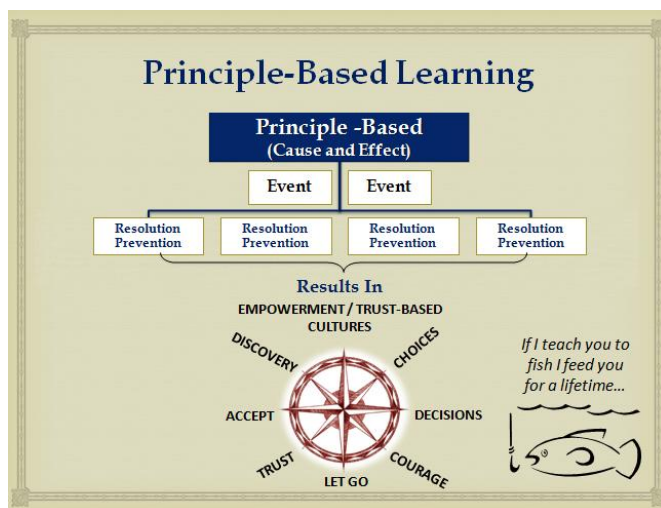
In that sense PLT fulfills all 4 requirements above, teaching people: how to perceive emotions, balance emotions, understand emotions and learn from emotions.

The Ten Habits of Emotionally Intelligent People
Extract

Hein, S. (1999) *The Ten Habits of Emotionally Intelligent People*, The EQ Institute Retrieved on December, 23rd 2010 from http://blogs.monografias.com/sistema-limbico-neurociencias/2010/05/27/emotional-intelligence-emotional-competence/

High EQ people:

EMOTIONAL COMPETENCE:

"A learned capability based on emotional intelligence that results in outstanding performance at work. Our emotional intelligence determines our potential for learning the practical skills based on the five elements : self-awareness, motivation, self-regulation, empathy, and adeptness in relationships. Our emotional competence shows how much of that potential we have translated into on-the-job capabilities." (Goleman, Working with Emotional Intelligence)

The table below lists Golemans' 5 dimensions of emotional intelligence and the 25 emotional competencies.

The emotional intelligence capabilities are Independent (each contributes to job performance);Interdependent (each draws to some extent on certain others with strong interactions);Hierarchical (the emotional intelligence capabilities build upon one another);Necessary, but not sufficient (having an emotional intelligence doesn't guarantee the competencies will be demonstrated); Generic (different jobs make differing competence demands.

The competencies:

PERSONAL COMPETENCE

SELF-AWARENESS
1. Emotional Awareness– People with this competence:
   - Know which emotions they are feeling and why
   - Realize the links between their feelings and what they think and say
   - Recognize how their feelings affect their performance
   - Have a guiding awareness of their values and goals

2. Accurate Self-Assessment – People with this competence:
   - Are aware of their strengths and weaknesses
   - Reflective, learning from experience
   - Open to candid feedback, new perspectives, continuous learning, and self-development
   - Able to show a sense of humor and perspective about themselves
   - BLIND SPOTS: Blind Ambition-need to win or be right at any cost
   - Unrealistic Goals- sets overly ambitious, unattainable goals for group
   - Relentless Striving- compulsively hardworking at expense of all else, vulnerable to burnout

- Drives Others-pushes others too hard, takes over instead of delegating
- Power Hungry- seeks power for own reason rather than for company
- Insatiable need for recognition- addicted to glory-takes credit for other's work and blames them for mistakes
- Preoccupation with Appearance-needs to look good at all costs-craves material trappings
  Need to seem perfect-enraged by or rejects criticism, can't admit mistakes

3. Self Confidence –People with this competence:
   - Present themselves with self-assurance; have "presence"
   - Can voice views that are unpopular and go out on a limb for what is right
   - Are decisive, able to make sound decisions despite uncertainties and pressures

SELF-REGULATION

1. Self-control –People with this competency:
   - Manage their impulsive feelings and distressing emotions well
   - Stay composed, positive and unflappable even in trying moments
   - Think clearly and stay focused under pressure

2. Trustworthiness and conscientiousness –People with this competency:
   - Trustworthiness–Act ethically and are above reproach
   - Build trust through their reliability and authenticity
   - Admit their own mistakes and confront unethical actions in others
   - Take tough, principled stands even if they are unpopular
   - Conscientiousness –Meet commitments and keep promises
   - Hold themselves accountable for meeting their objectives
   - Are organized and careful in their work

3. Innovation and Adaptability –People with this competency:
   - Innovation - Seek out fresh ideas from a wide variety of sources
   - Entertain original solutions to problems
   - Generate new ideas
   - take fresh perspectives and risks in their thinking
   - Adaptability - Smoothly handle multiple demands, shifting priorities, and rapid change
   - Adapt their responses and tactics to fit fluid circumstances
   - Are flexible in how they see events

MOTIVATION

1. Achievement Drive –People with this competency:
   - Are results-oriented, with a high drive to meet their objectives and standards
   - Set challenging goals and take calculated risks
   - Pursue information to reduce uncertainty and find ways to do things better

- Learn how to improve their performance

2. Commitment –People with this competency:
   - Readily make sacrifices to meet a larger organizational goal
   - Find a sense of purpose in the larger mission
   - Use the group's core values in making decisions and clarifying choices
   - Actively seek out opportunities to fulfill the group's mission

3. Initiative and Optimism –People with this competency:
   - Initiative: Are ready to seize opportunities
   - Pursue goals beyond what's required or expected of them
   - Cut through red tape and bend the rules when necessary to get the job done
   - Mobilize others through unusual, enterprising efforts
   - Optimism: Persist in seeking goals despite obstacles and setbacks
   - Operate from hope of success rather than fear of failure
   - See setbacks as due to manageable circumstance rather than personal flaw

SOCIAL COMPETENCE

EMPATHY

1. Understanding Others –People with this competency:
   - Are attentive to emotional cues and listen well
   - Show sensitivity and understand others' perspectives
   - Help out based on understanding other people's needs and feelings

2. Developing Others –People with this competency:
   - Acknowledge and reward people's strengths and accomplishments
   - Offer useful feedback and identify people's needs for further growth
   - Mentor, give timely coaching, and offer assignments that challenge and foster a person's skills

3. Service Orientation –People with this competency:
   - Understand customers/clients needs and math them to services of products
   - Seek ways to increase customers' satisfaction and loyalty
   - Gladly offer appropriate assistance
   - Grasp a customer's perspective, acting as a trusted advisor

4. Leveraging Diversity –People with this competency:
   - Respect and relate well to people from varied background
   - Understand diverse worldviews and are sensitive to group differences
   - See diversity as opportunity, creating an environment where diverse people can thrive

- Challenge bias and intolerance

5. Political Awareness –People with this competency:
   - Accurately read key power relationships
   - Detect crucial social networks
   - Understand the forces that shape views and actions of clients, customers, or competitors
   - Accurately read organizational and external realities

SOCIAL SKILLS
1. Influence –People with this competency:
   - Are skilled at winning people over
   - Fine-tune presentations to appeal to the listener
   - Use complex strategies like indirect influence to build consensus and support
   - Orchestrate dramatic events to effectively make a point

2. Communication –People with this competence:
   - Are effective in give-and-take, registering emotional cues in attuning their message
   - Deal with difficult issues straightforwardly
   - Listen well, seek mutual understanding, and welcome sharing of information fully
   - Foster open communication and stay receptive to bad news as well as good

3. Conflict Management –People with this competency:
   - Handle difficult people and tense situations with diplomacy and tact
   - Spot potential conflict, bring disagreements into the open and help to de-escalate
   - Encourage debate and open discussion
   - Orchestrate win-win solutions

4. Leadership –People with this competency:
   - Articulate and arouse enthusiasm for a shared vision and mission
   - Step forward to lead as needed, regardless of position
   - Guide the performance of others while holding them accountable
     Lead by example

5. Change Catalyst –People with this competency:
   - Recognize the need to change and remove barriers
   - Challenge the status quo to acknowledge the need for change
   - Champion the change and enlist others in its pursuit
   - Model the change expected of others

6. Building Bonds –People with this competency:
   - Cultivate and maintain extensive informal networks

- Seek out relationships that are mutually beneficial
- Build rapport and keep others in the loop
- Make and maintain personal friendships among work associates

7. Collaboration and Cooperation –People with this competency:
   - Balance a focus on task with attention to relationships
   - Collaborate, sharing plans, information and resources
   - Promote a friendly, cooperative climate
   - Spot and nurture opportunities for collaboration

8. Team Capabilities –People with this competency:
   - Model team qualities like respect, helpfulness, and cooperation
   - Draw all members into active and enthusiastic participation
   - Build team identity, esprit de corps, and commitment
   - Protect the group and its reputation, share credit

Appendix G: Music and the Brain

BRAIN STRUCTURES INVOLVED IN MUSIC PERCEPTION, PERFORMANCE, AND COGNITION.

The sound of music takes shape in our brains through the concerted activity of millions of neurons in the cerebral hemispheres and brainstem. These central auditory neurons are connected directly or indirectly to peripheral auditory neurons in the organ of Corti, which resides in the cochlea of the inner ear (see the illustration on the next page). The lateral surface of the right hemisphere is shown below; the colors indicate brain regions that may perform the music-related functions listed in boxes of the same color.
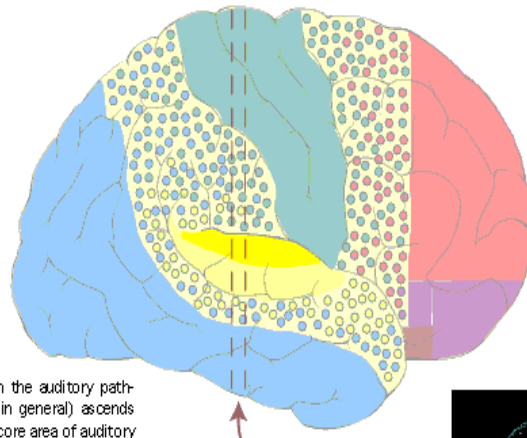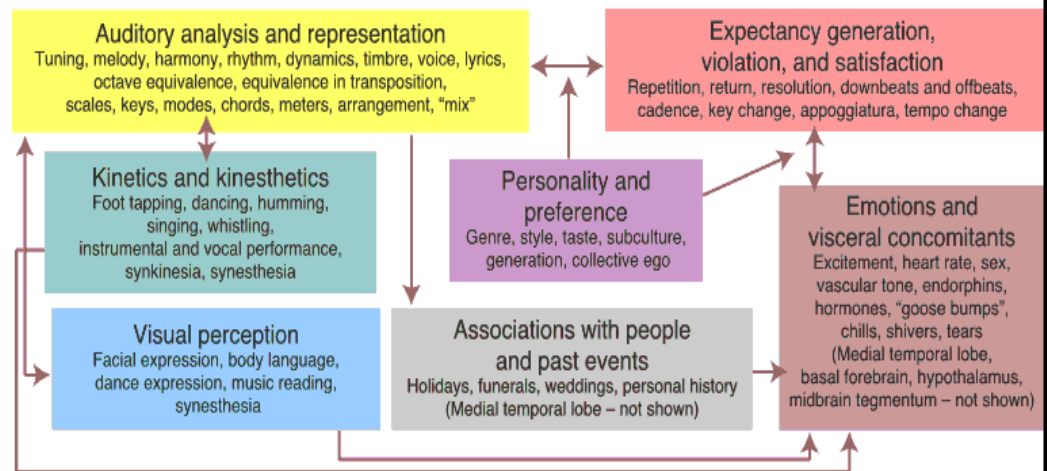

The popular notion that the right hemisphere is the "musical hemisphere" is overstated: both the left and right hemispheres are involved in music perception, performance, and cognition. Pitch perception (e.g., the ability to discern whether one note is slightly higher or lower than another) is one music-related function that does depend heavily, if not entirely, on the integrity of the right hemisphere's auditory cortex — especially its core area. This assertion holds true for most right-handers without absolute pitch ability.

The auditory cortex is the highest station in the auditory pathway. Information about music (and sound in general) ascends from the ear to the brainstem and on to the core area of auditory cortex in approximately one hundredth of a second. Music is processed hierarchically [core to belt to parabelt to multimodal areas (colored dots) and supramodal areas (pink, purple, brown, gray)]. There is also parallel processing: some information sent from the brainstem bypasses the core area and goes directly to the belt area. Strokes, tumors, and other brain lesions that destroy the core areas in both hemispheres cause transient deafness and permanent deficits in music, voice, speech, and environmental sound perception. Lesions that destroy the belt and parabelt areas in both hemispheres do not cause deafness or loss of pitch perception but do affect melody and rhythm perception.

Core
Belt
Parabelt

Auditory cortex
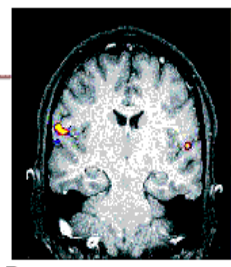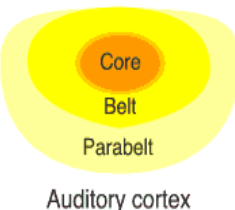
This functional magnetic resonance image (fMRI) shows where neurons are consuming large quantities of oxygen in the cerebral hemispheres of a young volunteer who is listening to Beethoven's Seventh Symphony. "Hot spots" (yellow, red) of neuronal activation are seen in the core areas and adjacent belt areas of right (R) and left (L) auditory cortex (J.R. Melcher, Auditory Neurology Unit, Eaton-Peabody Laboratory, Massachusetts General Hospital and Massachusetts Eye & Ear Infirmary)

R   L

Auditory analysis and representation
Tuning, melody, harmony, rhythm, dynamics, timbre, voice, lyrics, octave equivalence, equivalence in transposition, scales, keys, modes, chords, meters, arrangement, "mix"

Expectancy generation, violation, and satisfaction
Repetition, return, resolution, downbeats and offbeats, cadence, key change, appoggiatura, tempo change

Kinetics and kinesthetics
Foot tapping, dancing, humming, singing, whistling, instrumental and vocal performance, synkinesia, synesthesia

Personality and preference
Genre, style, taste, subculture, generation, collective ego

Emotions and visceral concomitants
Excitement, heart rate, sex, vascular tone, endorphins, hormones, "goose bumps", chills, shivers, tears (Medial temporal lobe, basal forebrain, hypothalamus, midbrain tegmentum – not shown)

Visual perception
Facial expression, body language, dance expression, music reading, synesthesia

Associations with people and past events
Holidays, funerals, weddings, personal history (Medial temporal lobe – not shown)

Emotion and meaning in music derive from several different types of associative brain functions. Songwriters and composers use a number of music-specific devices (e.g., appoggiatura, key changes, cadences) that affect our emotional state and effect changes in our autonomic state (e.g., a change in heart rate, "goose bumps"). These music-induced changes take shape via numerous connections between the auditory cortex (especially its parabelt area) and supramodal cortex (pink, purple, brown, gray). When we move to music, the motor and somatosensory cortices (green) influence our emotional and autonomic states. When we watch music videos, movies, and musical theatre, information processed by the visual cortex (blue; e.g. facial expressions, dance, scene design, lighting) also influences how music makes us feel. Another powerful route for evoking emotion is through associations with people and episodes in one's life. At some unknown level of interaction between sensory systems and supramodal systems, preference, personality, acculturation, and identification with different cultures, subcultures, and generations influence how we feel about the music we are listening to; evidence from neurological patients with neurodegenerative disease (e.g., frontotemporal dementia) suggests portions of the anterior frontal lobe (purple) may play an important role in deciding what music we like to listen to. Many of the structures that generate emotions and their visceral concomitants (brown, gray) lie towards the middle of the anterior hemispheres and upper brainstem and cannot be seen from this lateral view.

Adapted from "Music of the Hemispheres", MJ Tramo, Science 2001; Vol. 291, pp. 54-56. Copyright 2001 by the American Association for the Advancement of Science.

Appendix H: EMDR
(Eye Movement Desensitization & Reprocessing)

One day in 1987, Dr Francine Shapiro was walking in the park when she realized that eye movements served to decrease negative emotions associated with her own distressing / traumatic memories.[1][1] From this chance observation Shapiro hypothesized and assumed that eye movements had a desensitizing effect. She went on to experiment with this and she found that others also had the same response to eye movements. It became apparent however that eye movements by themselves did not create comprehensive therapeutic effects and so Shapiro added other treatment elements, including a cognitive component, and developed a standard procedure that she called Eye Movement Desensitization (EMD).

Shapiro wrote "a single session of the procedure was sufficient to desensitize subjects' traumatic memories, as well as dramatically alter their cognitive assessments[6]." Unfortunately, Shapiro has often been erroneously cited as claiming that "EMDR can cure [posttraumatic stress disorder] PTSD in one session (F. Shapiro, 1989)."[7] Shapiro never made this statement; what she actually wrote was that the EMD procedure "serves to desensitize the anxiety … not to eliminate all PTSD-related symptomatology and complications, nor to provide coping strategies for the victims[8]" and reported "an average treatment time of five sessions"[8] to comprehensively treat PTSD.

Dr. Shapiro studied this effect scientifically and, in 1989, she reported success using EMDR to treat victims of trauma in the *Journal of Traumatic Stress*.[1]

1989 was the first year that controlled studies investigating the treatment of PTSD were published. Besides Shapiro's article, three other studies. were published. Shapiro continued to develop this treatme nt approach, incorporating feedback from clients and other clinicians who were using EMD. In 1991 she changed the name to Eye Movement Desensitization and Reprocessing[1] (EMDR) to reflect the insights and cognitive changes that occurred during treatment, and to identify the information processing theory that she developed to explain the treatment effects.

Since the initial studies were published in 1989, hundreds of case studies have been published, and there have been numerous controlled outcome studies. These studies have demonstrated EMDR's effectiveness in PTSD treatment and EMDR is now recognized as efficacious in the treatment of PTSD [See Efficacy of EMDR and Summary of PTSD Studies].

Despite its demonstrated effectiveness, similar to most new approaches in psychotherapy, EMDR has been surrounded by controversy. While some critics have labeled EMDR a "pseudoscience" others have commented that these conclusions are based on misinterpretations of the literature [see **"Confusion, Misinformation, and Charges of "Pseudoscience"**]. Another area of debate is the role of eye movements in EMDR [See Eye Movements and Alternate Dual Attention Stimuli and What has research determined about EMDR's eye movement component? In the Commonly Asked Questions section.

The therapy process and procedures are according to Shapiro (2001)

Phase I

In the first sessions, the patient's history and an overall treatment plan are discussed. During this process the therapist identifies and clarifies potential targets for EMDR. Target refers to a disturbing issue, event, feeling, or memory for use as an initial focus for EMDR. Maladaptive beliefs are also identified.

Phase II

Before beginning EMDR for the first time, it is recommended that the client identify a safe place, an image or memory that elicits comfortable feelings and a positive sense of self. This safe place can be used later to bring closure to an incomplete session or to help a client tolerate a particularly upsetting session.

Phase III

In developing a target for EMDR, prior to beginning the eye movement, a snapshot image is identified that represents the target and the disturbance associated with it. Using that image is a way to help the client focus on the target, a negative cognition (NC) is identified – a negative statement about the self that feels especially true when the client focuses on the target image. A positive cognition (PC) is also identified – a positive self-statement that is preferable to the negative cognition.

Phase IV

The therapist asks the patient to focus simultaneously on the image, the negative cognition, and the disturbing emotion or body sensation. Then the therapist usually asks the client to follow a moving object with his or her eyes; the object moves alternately from side to side so that the client's eyes also move back and forth. After a set of eye movements, the client is asked to report briefly on what has come up; this may be a thought, a feeling, a physical sensation, an image, a memory, or a change in any one of the above. In the initial instructions to the client, the therapist asks him or her to focus on this thought, and begins a new set of eye movements. Under certain conditions, however, the therapist directs the client to focus on the original target memory or on some other image, thought, feeling, fantasy, physical sensation, or memory. From time to time the therapist may query the client about her or his current level of distress. The desensitization phase ends when the SUDS (Subjective Units of Disturbance Scale) has reached 0 or 1.

Phase V

The "Installation Phase": the therapist asks the client about the positive cognition, if it's still valid. After Phase IV, the view of the client on the event/ the initial snapshot image may have changed dramatically. Another PC may be needed. Then the client is asked to "hold together" the snapshot and the (new) PC. Also the therapist asks, "How valid does the PC feel, on a scale from 1 to 7?" New sets of eye movement are issued.

Phase VI

The body scan: the therapist asks if anywhere in the client's body any pain, stress or discomfort is felt. If so, the client is asked to concentrate on the sore knee or whatever may arise and new sets are issued.

Phase VII

Debriefing: the therapist gives appropriate info and support.

Phase VIII

Re-evaluation: At the beginning of the next session, the client reviews the week, discussing any new sensations or experiences. The level of disturbance arising from the experiences targeted in the previous session is assessed. An objective of this phase is to ensure the processing of all relevant historical events.