

# The Use of **SUGGESTION** in Accelerated Learning

By:  
Charlotte F. LeHecka, PhD

*Institute for Accelerative Learning, Teaching and Research  
1910 West Cone Blvd.  
Greensboro, NC 27408  
"educating mind, body and heart"*

phone: 336-545-4554  
email: [clehecka@msn.com](mailto:clehecka@msn.com)  
website: [www.mindbodyheart.com](http://www.mindbodyheart.com)

© 2004, Charlotte F. LeHecka, PhD  
1910 West Cone Blvd  
Greensboro, NC 27408  
336-545-4554  
clehecka@msn.com

## **Role of Suggestion in AL**

*“Suggestion is everywhere present.”*

If we accept the premise that “suggestion is everywhere present”, then we can make an argument for the notion that the concept of” **suggestion**” is what truly undergirds the core elements of Accelerated Learning. It is the link between our understanding of the role of the teacher in AL, the role of love in AL, the role of consciousness in AL, our understanding of the importance of emotional state, the importance of the learning environment, the role of music and the arts, personal motivation, knowledge about the human brain, multiple intelligences and learning styles, imagination and metaphors, team learning and cooperation and improvement and results.

### **The Role of the Teacher as a Form of Suggestion**

The literature on AL (Lozanov,1991, 1978a, Dhority, 1991, Caliendo, 1990, Prichard, 1980; Berkowitz;1993) is replete with descriptions of the characteristics that AL teachers must strive to embody. So, why the focus on the teacher? Why is the role of the teacher of such paramount importance in AL? Because AL practitioners understand the work of Robert Rosenthal, whose Pygmalion effect metaphor, has become synonymous with the way a teacher’s

unconsciously-generated cues may affect a pupil's feelings about himself and thus his academic performance as well. Dhority (1991) reminds us

The medium is inseparable from the message: as teachers we are embodi-ers, vehicles, channels for what we communicate. Teachers either serve to reinforce or help students transcend self-limiting attitudes and beliefs" (p. 40).

### **The Role of Love as a Form of Suggestion**

To appreciate the depth of the AL practitioner's commitment to the development of the "inner teacher", one is reminded of Meier's (2000) words when he speaks of the soul of the AL practitioner:

AL is systemic, not cosmetic. It's a philosophy that departs from conventional notions of learning in some significant ways. And it requires certain qualities of heart, mind and soul if you are to achieve the greatest amount of success with it. Your whole being has to resonate with the AL philosophy, and you have to sense its human implications on a deep level, or everything you do with AL will be slightly out of tune, disjointed, small, uninspired, and (in terms of long range value) ineffective (p. 237).

For others in the field (DePorter et al 1999; McPhee, 1996) this notion of "love" is perhaps best captured with the word "intention". They consider a teacher's positive intention a key ingredient to student success. Minewiser (2000) offered the following proposal regarding what may happen in a Suggestopedic class, or in any highly effective learning situation, including AL classes. It is her contention that the highly focused *intention* of the caring teacher holds the conviction of his or her ability to help students access their *reserve capacities* of learning and memory. This intention is transmitted to the student

who, relaxed by the passive concert sessions, willingly becomes actively involved in creating new knowledge through role-play, games, songs and other activities. The heart rates and brain waves of the students become more coherent and the group becomes *entrained* and so the information or energy flows more easily between the teacher and the students and between the students (pp. 21-22). Lozanov (1977,1978a) also referenced the notion of the power of a teacher's intention. As part of his training program, he required that when AL teachers read the active concert, they not only read the text in a prescribed manner to the music, but, at the same time, they were to also project positive thoughts to the learner.

### **The Role of Emotions as a Form of Suggestion**

*"Students do not care what you know until they know that you care".*

DePorter et al. (1999) point to the literature demonstrating a direct correlation between emotional engagement and student learning performance as an argument for the necessity of relationship/trust building in teaching. In their own research, the authors found that the top reason kids gave for not listening to/liking teachers was "they don't relate to me" (p. 33).

Because of the great emphasis in Accelerated Learning on the importance of the emotions in creating a positive, suggestive environment, Berkowitz (1993) examined the affective components of an AL classroom.

Her study looked at the dimensions of affectivity, based on Carl Rogers's facilitative qualities (congruence, positive regard, and empathy). Berkowitz (1993) found that University of Houston Accelerated Learning Program (UHALP) instructors were able to model/express all kinds of feelings and emotions through their assumed identity, and that as a consequence, students imitated their teacher's attitude and followed the norms she established for the class, i.e., permission to express feelings, emotions and thoughts. Berkowitz found that UHALP teachers used smiles, laughter, fake identities, acting, clowning, humor, singing and playing as a means of diverting students' attention away from the notion that learning is difficult".

They also used positive non-verbal gestures to convey positive affect and to create positive interpersonal relationships with the students. The non-verbal behaviors that Berkowitz (1993) observed were: the use of positive facial expressions, open hand gestures and a lot of eye contact. Berkowitz learned that even the style and color of clothing teachers wore was done so with deliberation. The last kind of non-verbal behavior that Berkowitz observed addressed the physical environment. Flowers, props, hats, colorful objects, tablecloths and other visual aids were used to create a pleasant atmosphere.

"It was clear that UHALP teachers found it very important to show their real personality to students, to project themselves truly to the class and to attain credibility in students' eyes" (Berkowitz, 1993, p. 347). This line of

thinking supported Rogers' (1983) belief that teachers should match their internal and external expressions and actions, showing a true self and not a ritualistic façade.

UHALP teachers showed their empathy/understanding by listening and accepting students responses and answers. Berkowitz (1993) quoted one of the AL teachers as saying: "It's like everybody has a book inside them and they open the pages. I am alert to what students say or want to say or cannot sometimes express with words. I am attentive to their needs" (p. 348). Respect or positive regard was another of Rogers (1983) criteria. UHALP teachers showed respect for their students by encouraging students for trying, valuing their efforts even when mistakes were made, and not correcting directly but by simply repeating a statement to the group at large. Providing students with enthusiastic, energetic, and creative teaching, and taking personal responsibility for their failure to understand were other ways the teachers conveyed a respectful attitude toward their learners. The effect created by this positive atmosphere is intended to answer their ontological needs, to be loved, recognized, and respected (p. 349). UHALP teachers felt that the kind of learning in their classrooms combined intellect and feelings, concept and experiential, and content and meaning in such as way as to speed up learning and minimize stress.

### **Role of States of Consciousness as a Form of Suggestion**

*The mind creates and achieves according to the nature of the assumptions it accepts as truth.*

---Prichard, 1977

Probably one of the most intriguing aspects of Suggestopedia/ Accelerated Learning addressed in the literature is its relationship to different aspects/states of consciousness. . AL practitioners, who are aware of the role of unconscious mental processes in learning and who understand AL to be a system of teaching and learning that involves the entire organism, are attuned to the impact of different energy and informational states on the body and how these may affect the energy and information states of others. As a consequence they understand the logic of acceleration of learning and retention rates when both the conscious and unconscious are harmoniously engaged through the use of the arts, music and the utilization of both the left and right hemispheres in the learning process.

### **The Role of Suggestion in AL**

It is Lozanov's (1978a) thesis that a Suggestopedic environment is realized through the teacher's implementation of the suggestive-desuggestive process (removing old concepts of one's capacity to learn and supplanting them with new concepts of one's capacity to learn). Lozanov (1978a) offered the AL practitioner seven tools to help in that process: authority, infantilization, double planeness, intonation, rhythm, and concert pseudo-passiveness.

Prichard (1978a) also referred to seven sources of suggestion to promote superior learning by the SALT teacher. They are: 1) teacher verbals, 2) teacher

non-verbals, 3) classroom décor, 4) lesson materials, 5) activities, 6) peer suggestion and 7) within-student suggestion. Other AL practitioners have offered a similar list (Schuster and Gritton, 1986; Dhority, 1991; McPhee, 1996; DePorter et al., 1999; Meier, 2000). For example, Dhority (1991) suggested the following “how-tos” of suggestion: meditation and/or centering techniques, visualization techniques, rapport-building techniques and metaphorical techniques. Additionally, he focused on the “evocative” power of words as he examined the use of language and its impact on the internal state of the learner. Schuster (1986) described four different kinds of suggestions: direct –verbal, direct non-verbal, indirect verbal and indirect non-verbal, giving detailed examples of how each might be used in an AL environment.

More recently, DePorter et al. (1999) referred to the notion of “state-facilitation” rather than the term “suggestion” as the means by which to maximize the moment of learning. They defined state as comprising three interwoven components: “ thoughts, feelings and physiology” (p. 150). The strategies they suggest range along a continuum from purely physical state-changes (stand and stretch) to cognitive state changes (“Imagine this...”) But, by whatever name, “suggestion” or “state-change”, the purpose of the intervention is to redirect students’ thinking about themselves as learners.

Bordon and Schuster (1976) examined the effects of the use of suggestion, synchronized breathing and music on the learning and retention of Spanish words. Schuster (1976) created different treatment situations in which

each of the three variables were utilized independently, in pairs and in combination.

In his study “suggestion” was operationalized as verbal messages and instructions dealing with three phenomena: a) setting up an expectation that learning would take place, b) instruction in the use of imaginal meditational procedures, and c) an indirect suggestive atmosphere conducive to learning (p. 29). His results indicated that the effect of the three independent variables was that suggestion showed a 60% improvement over the non-suggestion condition. The synchronized breathing condition showed a 47% improvement, and the orchestrated music condition showed a 25% improvement over the non-orchestrated music condition. The combination of all three, however, showed the greatest change, an improvement of 141%.

### **Role of the Learning Environment as a Form of Suggestion**

*“If you change the environment, you change the people.”*  
Buckminster Fuller

A great deal of stress is placed on the creation of a positive physical learning environment in Accelerated Learning. McPhee (1996) said:

The environment is the first thing we encounter as we come together to learn. How we perceive the surroundings and the atmosphere will have everything to do with the success of our learning. Thus, the foundation of our framework for Accelerated Learning lies here” (p. 31).

DePorter et al. (1999) maintained that by changing the classroom environment to include peripheral vision aids, iconic posters, affirmation posters, color, music, props, plants, aromas and other organic elements as well as arranging student desks to support the learning objectives, an AL practitioner can greatly enhance students understanding and retention. Why? Is it perhaps because the unique ambience *suggests* that the class will be exceptional?

Wallace (1994) stated

As students we were told by a knowledgeable teacher that we would experience optimal learning. We expected to, so we did. Our brain accepted the forgotten truth that we could learn quickly and easily without strain or coercion (p. 384).

Both Lozanov (1978c) and Pashmakova (1976) wanted to test the effectiveness of peripheral stimuli on learning. Pashmakova (1976) drew the following conclusions from his study: As one of the suggestive factors, the peripheral visual stimuli had a considerable effect in improving students' spelling. Lozanov (1978c) also detailed several experiments in which material that had been only peripherally called attention to was learned with a curve of recollection that showed improvement days after exposure to the material. The positive results of these experiments led to more frequent use of peripheral perception as a *suggestive* factor in the teaching process.

### **The Role of Relaxation as a Form of Suggestion**

Using relaxation as a form of suggestion is hotly debated. On the one hand, Lozanov maintains that Suggestopedic relaxation is naturally produced in the

concert sessions, and, therefore, does not need special attention, so he dropped the formal use of relaxation exercises in his program in 1978. However, as research in this country will reflect, American practitioners believe that the cultural differences between the United States and Bulgaria warrant the adaptation of Lozanov's model to include the use of relaxation and visualization techniques. Because of our positive results with the use of relaxation and visualization techniques in our foreign language program at the University of Houston, I have seen the value of these techniques in helping students overcome barriers to learning. Moreover, as a child in the public school system in the US, I have fond memories of my experiences with relaxation—only it wasn't called relaxation, it was called "nap time"! We would put our heads down on our desks after lunch and our teacher would read us wonderful stories like Black Beauty and Heidi. Naptime is really no different in my estimation than what we in AL refer to as "relaxation techniques"

Wenger (1976) drew on the insights from Information Science for an explanation of why the deeper brain rhythms—alpha and theta—associated with successively deeper levels of relaxation—may allow for more brain wave cells to become activated. His theory was that as the brain slows down, it allows more and more of the brain cells to "catch the beat" so to speak thereby multiplying the effects of synchronicity. If this hypothesis is correct, then, according to Wenger (1976), it is not surprising that a teaching method including the use of deep

relaxation would be associated with profound increases in apparent learning capacity and performance.

### **The Role of Music and the Arts as a Form of Suggestion**

Racle (1979) reiterated Lozanov's words when he suggested that the fine arts are the highest form of suggestion. Racle said, therefore, that the arts must be integrated into teaching. He mentioned the fact that mime, singing, dramatic expression, artistic reading and rhythm are all included in the Suggestopedic learning process as are concert recitals which he described as the best known artistic component of Suggestopedia (p. 134).

Lozanov (1977) went on to say that peripheral perceptions exist in millions of different art forms. The reader is referred to two previously discussed studies (Lozanov, 1978c; Pashmakova, 1976) that demonstrated the effectiveness of learning as the result of the use of peripherals). Gateva (1991b) noted that because contrast is at the root of every work of art, the importance of its use in the classroom should be leveraged as it creates states of expectation, surprise, and increases interest and motivation in the learner. Within this context, Gateva (1991b) referred to the human voice as being yet another art form, because the voice with its ability to create contrast is a kind of music. Lozanov (1977), in discussing the role of the arts in Suggestopedia referred to the high level of suggestion that takes place in the arts. He noted, for example, that when we

listen to music, or watch a performance, etc., the impact is mostly at the subconscious level.

Gateva in training teachers in Suggestopedia focused her attention on the use of the voice in the alternate use of lyrical and dramatic intonations, in the use of high and low tones. She also paid attention to the intensity of tones and the timbres of the teachers' voices. According to Gateva: "The waves of tension and relaxation, the states of concentration and relaxation alternate with mathematical accuracy" (p. 223).

To truly understand the importance of art to the Suggestopedic/AL learning process, one cannot stop at just the inclusion of music, art works, etc. It is important to understand that the introduction of classical art into the educational teaching process also requires artistry in the corresponding textbooks, visual aids, etc. And most importantly, it demands artistic professionalism and special preparation on the part of the teachers in the introduction of the new educational content as well as in the development of all of the teaching materials. AL practitioners must truly think of themselves as artists, whose job it is to "orchestrate the learning environment".

Brisian (1987), who conducted a study to measure music's physiological effect upon person's placed in stress situations found that both music stimuli treatments—exciting and calming music—resulted in significant decreases in anxiety-state scores compared with those who had no noise or 'white noise' as background. In a second study, Brisian looked at the effects of music on such

autonomic functions as strength and frequency of pulse, muscle activity and respiration. He found, for example, that respiratory movements during the playing of music gradually adjusted themselves to the beat of the music. Brisian also discovered that individual modes of response were widely reproducible whenever the tests were repeated with the same piece of music and even within the piece itself. Therefore, according to Brisian, these findings are highly significant and have implications for the kind of music used in accelerative learning. These findings also collaborated Lozanov's (1978a) own work and his rationale for the pieces of music he suggested using during the active and passive concerts.

Racle's (1979) understanding of Suggestopedia led him to the conclusion that the key concept behind Suggestopedia was the recognition of the conscious/subconscious duality of the individual. And because music— more specifically the concert sessions—played a specific role in this double-level operation, therein lay its importance within the Suggestopedic cycle. Lozanov and Lehman (cited in Racle, 1979, p. 137) reported that music neutralized the anti-suggestive barriers, particularly the emotional barrier while at the same time, on the second level, the content of the lesson directly penetrated the subconscious where it is assimilated and stored.

### **Brain/Body Theory and It's Relationship to Suggestion**

Davalos-Beale (1997), from her own 20 year's of experience as a Suggestopedic teacher, has observed the following:

- 1) Students will occasionally come out with a word or phrase that they swear they have never been exposed to before.
- 2) The sense of interconnectedness of teacher and class participants appears to be the most powerful element in achieving high results.
- 3) One of the precepts of accelerative learning to which most of its adherents agree to is that "the total result is greater than the sum of the elements that make up a Suggestopedic class" (p. 24).

These observations led Davalos-Beale (1997) to the work of Rupert Sheldrake, a biologist and the author of the hypothesis of formative causation. Briefly, he proposes that the form, development, and behavior of living organisms are shaped and maintained by fields, which he refers to as "morphogenetic fields". In essence he is saying that once enough members of a species learn something, the chances of other members learning it faster due to access to the morphogenetic field are vastly increased. According to Sheldrake, examples of learning through morphic resonance are: parallel inventions, the intuitive knowing of psychomotor skills such as tennis, drawing or music composition, the power of legends, myths, stories, and ritual, and the cumulative effect of an idea held by a number of individuals.

If this theory or some variant of it should prove to be true as Davalos-Beale (1997) suggested, then perhaps morphogenetic fields could explain the power of several Suggestologic principles. One such principle is the concept of prestige. Based on the theory of morphic resonance, since many people have learned from the prestigious person, it is more likely that other people will also learn more quickly from this same person as opposed to someone relatively unknown. Another principle is the use of classical music in learning. Based again on the principle of morphic resonance, is it not surprising that Lozanov found classical music, which has been appreciated by millions of people, to be more effective with learners than music composed yesterday. The same might also be said for classical pieces of art used in the classroom. As teaching media, myths, stories, symbols and rituals that have touched many peoples over centuries would affect students more powerfully than a translation of a current movie, for example.

Minewiser (2000) noted that Lozanov claimed Suggestopedia was formulated to “satisfy the optimum functioning needs of the central nervous system” (Lozanov, in Minewiser, p. 16). Schuster (1995) proposed “the major factor in brain-body communication is the limbic-hypothalamic-pituitary system which is like a great funnel taking in information from neural nets all over the brain and transforming it into messenger molecules for distribution throughout the body, including of course, the brain itself” (p. 32). Schuster (1995) made the tieback to Accelerated Learning by pointing out that “joy”, a key principle of AL, is

associated with hormonal endorphins and encephalins, important elements in learning. He also pointed out that music, although more obscure psychobiologically, most probably leads to relaxation (more encephalins) and a richer stimulatory environment (a bigger network for cells). According to Minewiser (2000) this lack of negative tension in the AL environment keeps neurotransmitters such as serotonin, dopamine, adrenaline and noradrenaline, cortisol and acetylcholine levels low. This is critical because research has shown that elevated levels of these chemical substances in the body impair long and short-term memory.

Minewiser (2000) speculated that what happens in an AL classroom focused on motion, music, involvement of the students, enjoyment, positive expectation and relaxation is the creation of new neural networks as well as the growth of new neurons in the hippocampus, thought to be involved in learning and memory (p. 20). Minewiser also suggested that perhaps new networks grew under the condition of “infantilization”, Lozanov’s notion of a mental set-up that brings the exploratory behavioral system into play. Based on Gould’s work on neurogenesis (in Bower, 1998), Minewiser also offered the possibility that the enriched environment, and reduction of threat in a AL class may actually allow for new brain cells to grow and connect in the dentate gyrus.

Recent biofeedback research, according to Bancroft (1997) has been developed to measure brain waves. Morrissey (in Bancroft, 1997, p. 55) claimed that now educators have a means by which to detect and/or confirm suggestive

effects in the classroom through the collection and utilization of scientific data. With his system, called brainwave biotek, Morrissey shows that one can scientifically demonstrate and provide feedback on the effects that various suggestive means (dimmed lights, concert readings, use of special music, etc.) as well as various teaching strategies (games, songs, readings, etc.) have on intellectual performance and achievement (in Bancroft, 1997, p. 56).

Right/left cerebral dominance—Split-brain research began with the work of Roger Sperry, who shared the Nobel Prize in 1981 for his pioneering research in hemispheric functions. Donovan (1982) analyzed the components of AL and described how the split brain theory and research explained why AL worked so well. The author described AL as a “shotgun” educational approach (p. 199). What she meant by this was that AL features logical, informational lectures (left) presented in a dramatic, sensory way (right). There is rote learning with repetition and drill (left) with music and rhythm built in (right). There is verbalization and reading (left) coupled with relaxation and positive suggestion (right). By simultaneously engaging the right and left hemispheres in learning, AL succeeds in holistic education.

According to Donovan (1982), brain research and therapy show clearly that the right brain is an ever present, powerful force in thinking and behavior. She described the characteristics of the right brain as playful, musical, fun loving, and emotional. She referred to the dichotic listening research as proof that when two separate messages are sent to the brain, the left-brain message sent

through the right ear preferred verbal descriptions of water, for example, whereas the right-brain message sent through the left ear preferred to hear the sounds of a waterfall or ocean waves because it carried a comforting, reassuring emotional message.

The author reminded educators that if they would keep in mind the characteristics of the right brain, then they will be able to understand and appreciate why positive, simple, playful, musical messages are so important in learning, and understand why the relaxing, amusing methods of AL are so effective. Donovan (1982) also referred to several features of AL, which she said quiet the judgmental, critical left brain. Three techniques to which she referred were: altered state, visual imagery, and relaxation. According to Donovan, all of these techniques effectively bore the left-brain, so the right brain can dominate. The altered state in AL, Donovan described as “the slow beat of the baroque music and positive but repetitive message which sets the stage for deep relaxation” (p. 201).

Triune Brain Theory—This theory, developed by Paul MacLean, identified three distinct evolutionary stages in the development of the human brain: the reptilian or paleommammalian brain, the mammalian brain and the neocortex. According to MacLean, each of these brains has its own special abilities and functions. Although interconnected by neuronal pathways, each brain is anatomically and neurochemically distinct from each other. The R-complex controls basic biological needs such as hunger and sex drive. The mammalian

brain or the limbic system controls needs which are not biological in nature such as emotions and attitudes. The neocortex deals more with external and environmental events. MacLeans' theory differs from the theory of right and left hemispheric specializations in that MacLean ascribes many of the creative, emotional functions to the limbic system rather than the right hemisphere. According to his theory, music and vocal intonation can affect the emotions of the limbic system to stimulate feelings of pleasantness and happiness. Short-term memory and long-term memory are functions primarily of the limbic system with long-term memory being a function of all three portions of the triune brain (Stein et al., 1982, pp. 346-347).

Lozanov (1978a) suggested baroque music might help to produce a relaxed condition. According to triune brain theory, relaxation as produced by this music, would affect the R-complex. The limbic portion of the brain is influenced by positive affective environments that Lozanov (1978b) suggested could be achieved by proper teacher training. This integration of the R-complex and the limbic portions of the brain, according to MacLean (1973), would enhance the neocortical processing of new cognitive information.

Holographic Memory—According to Davalos-Beale (1997) Pribram believed that the brain's "deep structure" was essentially holographic, and that the brain-cell synapses could contain thousands of holographic images. Pribram contended that all inputs were intertwined. This model could account for the phenomenon of association in which one image or experience recalls another somewhat like it—a

constant unfolding and refolding of holographically stored memory. He suggested that the brain operated according to the same mathematical principles as a hologram with sensory inputs creating interference patterns. Brain cells acting as frequency analyzers resonate to auditory wave frequencies from within the brain. The appropriate hologram is activated by waveforms from “situational” cues when recalling information from long-term memory. Memory can be reconstructed from the waveforms stimulated in a particular site. This stimulates the waveforms in other sites, increasing the amount of memory recall. The number of waveforms associated with the memory increases as the number of sensory inputs associated with the learning situation is increased.

Multiple channels of information input increase the number of waveforms assimilated, increasing the specificity of the interference pattern and ultimately storing portions of the memory in multiple locations. All aspects of the particular memory may be retrieved from stimulation of any storage location, just as a hologram is reconstructed from any portion of the holographic plate (Pribram, 1979 as cited in Stein et al., 1982, pp. 347-348).

Lozanov’s theoretical model of how the brain learns is very similar to Pribram’s model in that Lozanov (1999, author’s class notes) believed that incoming information spread both horizontally and vertically throughout the system. Lozanov (1978a, 1978b) stressed multiple channel and sensory input to enhance and accelerate information retention. The multiple channels used by Lozanov were music, relaxation, imagery, psychodrama and suggestion. It can

be seen how this multiple channel input is more than additive. The addition of each channel of input produces more waveform patterns so that the wave pattern which forms when there is auditory input, visual input and imagery input should be still more specific. According to Davalos- Beale (1997) both Lozanov and Pribram suggested that learning would be more efficient when access and recall are handled non-linearly.

### **The Link between Motivation and Suggestion**

IAL describes its core element of “motivation” in the following way: “The desire to continue learning is based on self-confidence and personal expectations”. Although “motivation” is not addressed directly in the AL literature, from a review of research articles, the author found that AL researchers engaged the topic of motivation in three ways: 1) through its emphasis on “positive emotions” (Berkowitz, 1993; Merritt, 1987; Brodeur, 1981), 2) through attention to the learning environment (Whitacre, 1994; Loubaton, 1979), and 3) through the use of art in its broadest sense (Gateva, 1991b).

Within the AL literature, several researchers (Singer-Nourie, 1999; Erskine, 1986; Nolan and Farrall, 1998) in summarizing their results suggested that preliminary research indicated increased motivation and increased self-esteem . In fact, Erskine (1986) reported being startled as he observed how the new confidence and high motivation students in his math class had achieved also carried over to their other subjects (p. 228).

Although there is the belief among AL practitioners that Accelerated Learning impacts self-concept and although studies which applied some of the AL techniques to developing self-concept did prove to be effective, studies carried out to measure this result have not been able to prove a strong link between AL classroom practice and “self-concept” development.

### **Learning Styles/Multiple Intelligences and Suggestion**

Research into Learning Modalities, Learning Styles and Multiple Intelligences has one very important implication: teachers must become informed observers in order to recognize and respect the different learning modality, learning style and multiple intelligence strengths and weaknesses of their individual students. The explication of learning modalities, learning styles and multiple intelligence research has allowed AL practitioners to become aware of their own learning modality, learning style and multiple intelligence strengths/weaknesses. This knowledge helps practitioners stay open to differences rather than making assumptions about how people learn based upon their own learning strengths and weaknesses. In so doing, they are able to become more self-monitoring allowing them to create a more-balanced classroom learning environment. When AL practitioners are confronted with teaching students writing, for example, knowledge of the learning modality, learning style and intelligence of their learners allows practitioners to create meaningful composing strategies in line with the writer’s strengths and

weaknesses. For example, one might suggest to a student who has a high linguistic and interpersonal intelligence and who has a preference for giving speeches over writing that they think of any written assignment they have to do as a speech first. Such a student might want to get with other students first and rehearse their presentation to get feedback on coherence, choice of words, etc. before writing. Allowing students with strong interpersonal skills to form writing groups gives students with strong interpersonal intelligences much needed support and encouragement. Conversely, students with well-developed intrapersonal intelligence may welcome the chance to explore their own feelings and experiences about a particular topic before writing about it alone. Kinesthetically oriented students might find it helpful to use cue cards; students with high musical intelligence may benefit by listening to music as they write. Again, the question is not so much whether the strategy or technique is useful, but rather, does that particular strategy work for that particular student?

### **The Role of Imagination / Metaphors as Tools in Suggestion**

The imagination and metaphors are two tools of Accelerated Learning that enrich the learning environment. Within the AL research literature, these two topics are addressed through the use of games, imagery/visualization activities and the use of metaphors.

### **Imagery/Visualizations as Suggestive Tools**

While imagery/visualization techniques can and are used to teach new information in Accelerated Learning, they are also used as a form of suggestion.

Held (1979) reported on a single case study in which he applied the Lozanov approach to remedial reading. The student, Johnny, was a seven year old non-reader and in the first grade for the second time. Held (1979) noticed that Johnny's visual and auditory discrimination appeared to be adequate, but he lacked skill in both visual and auditory memory. He was extremely "uptight", and had a poor self-image and attitude about learning.

The lessons Held (1979) developed were designed using the suggestive/de-suggestive process. His purpose was to build a positive self-image and learning attitude and to de-suggest the barriers Johnny had developed. Held found such Suggestopedic techniques as the "new identity", mind-calming imagery and positive-suggestion imagery along with newly created stories based on his student's new biography helped move Johnny from a nonreader to a fluent reader at a second grade level within three months

In another study, the students who received training in music-assisted relaxation and mental rehearsal techniques learned piano skills faster and with greater ease than the students taught in piano classes without this training. Beyond these measurable results, Petrie and Ross-Happy (1988) reported that students in the experimental group appeared to be much calmer and more cooperative with their peers and instructors. These students not only were more receptive to learning, but exhibited an exuberance and enthusiasm which aroused the curiosity of the students in the control group, demonstrated by questions like: "When are we going to learn to relax?" (p. 176).

A report by Wark (1986) gave the reader a number of examples of ways to use imagery to teach study skills to college students. He explained how he used imagery to help students discover their favored representational system, auditory, visual or kinesthetic. Students were shown how to use imagery to improve their survey skills, their reading speed and accuracy with more challenging material and memorization techniques. Wark also showed students how to develop concrete imagery of abstract concepts, how to organize and associate their images and how to retrieve them, and he gave them strategies to reduce test-taking anxiety (p. 217).

Several other researchers--Phillipov, 1978; Render & Boyle, 1982; Render et al, 1986; Gaylean, 1980; and Emmerling, Hwoschinsky, and Montgomery, 1980—all reported on studies they conducted for purposes other than to determine learner performance. In introducing the principles of Suggestopedia to the Western culture, one of the areas that Philopov (1978) focused on in particular was suggestion and imagery. In an effort to apply imagery within the Suggestopedic method, Philopov stated that she “inducted a state of reverie while impressing images upon the mind for the impartation or knowledge” (p.77). She also employed imagination extensively in the form of symbolic suggestions. These suggestions involved archaic images as symbols. They were intended to inspire transpersonal and synergetic experiences for the purpose of desuggesting previously imposed limitations and creating an “open” and receptive attitude. She stated:

The education of the imagination and the intuition in the Suggestopedic process are not directed primarily toward knowledge of one's inner self; they are directed instead toward the actualization of spiritual and mental potentials for the purpose of factual knowledge acquisition (p. 77).

Galyean (1980) investigated the behavioral effects of guided imagery consistently used in one section of a beginning Spanish class in high school vs. no guided imagery in a comparable class section in the same school and taught by the same teacher. The imagery activity was designed to assist the students to a) focus on their inner strengths, b) view themselves as potentially successful learners, and c) view the teacher and others as helpers in their quest for success. The dependent variables considered for the study were: 1) attentiveness, 2) involvement in the lesson being taught, 3) supportive interactions among the students themselves, and 4) supportive responses to the teacher. From the raw data totals, it was clear that the observers recorded less than half the amount of "negative" behaviors in the experimental classroom than in the comparison classroom. The total number of negative behaviors observed in the comparison classroom was significantly greater at the .001 level of significance. Of the four positive or engagement behavior categories, two showed significant differences: students addressing each other by name, and students smiling while participating. Another finding of the study was that, whereas there was a significant increase in negative behaviors in the comparison

class from the first to the last observation period, there was no significant change in the class participating in the guided imagery.

Galyean (1980) concluded that the finding of differences in negative or disruptive behaviors between the two classes suggested that the students' reports about their experiences were valid: the meditations created a climate of positive self-image and community, in which fear, tension, put-downs were no longer evoked or needed.

Emmerling et al. (1980) presented a psychosynthesis model that used guided imagery to help students to harmonize and synthesize the many aspects of themselves at higher levels of organization. They suggested that this model be used with adult students to

- 1) Recognize that the personality consists of many divergent parts which are often in conflict with one another,
- 2) Accept these parts, and integrate them into new ways, and
- 3) Bring the different parts together into a working relationship

The authors explained that one of the tools psychosynthesis offered for learning, for increasing one's capacity for learning and for teaching was the ability to identify parts of oneself that get in the way of various kinds of growing experiences and to learn to disidentify with these parts. "What we tell ourselves about learning is not enough. A positive image must be available. Once available, it creates a dynamic potency" (p. 27).

### **Games as Suggestive Tools**

For Belanger (1981), a former student of Lozanov, the word “game” would be much too narrow a definition for what happens in an AL class. Belanger chose the more comprehensive term “play” to describe what goes on in an AL classroom. Games are only one way of playing. According to Belanger, the Lozanov method of teaching/learning was developed to address psychological factors of confidence, motivation, interest and positive anticipation and to ensure the participation of both hemispheres of the brain. Accordingly, AL uses psychotherapeutic techniques in the classroom such as educational play; cathartic play and role-play to transform learning. Throughout the course, the teacher, surroundings, lesson texts and teaching techniques together contribute to the maintenance of the suggestive atmosphere with its positive affects.

In an AL classroom, “everything is play and everything is serious” (Belanger, 1981, p. 70). In accordance with AL theory, a student must receive a large body of knowledge, but within the context of an atmosphere of relaxation, pleasure and stimulation. Therefore, in AL, play comes into the classroom as a deliberately used teaching method. It is not just a psychological play activity; it is an integral part of both teaching and learning at the same time. For example, while throwing a ball to a student, a teacher can improvise a little grammar, some vocabulary on a particular theme.

The AL approach alternates intellectual activities with play techniques: linguistic games, role-play, sketches, songs, rounds, competitions, and riddles,

etc. In this manner, AL maintains positive emotions and motivation through play, which according to Belanger (1989) explained why AL students are not tired, even after four hours of intensive work.

### **Team Learning and Cooperation and Suggestion**

Although Accelerated Learning uses games, activities, etc. during the majority of the class time, and although AL practitioners value team learning and cooperation as is evidenced by the importance placed on creating community, there have been no research studies conducted that examined the issue of cooperative learning. Perhaps it is so imbedded in the methodology, such a given, that no one in the field has even considered it a topic of research. Perhaps McPhee (1996) sums up the AL attitude toward team learning and cooperation best. He said:

Collaborative creation is a natural process as much as a planned process. If you have used cooperative learning activities in your classroom you have already laid the groundwork for collaborative creation (p. 121).

### **Improvement and Results in AL**

If it is true that suggestion is the glue that binds AL into a unique teaching methodology, then what happens when we understand the implications of suggestion in the learning process and apply the different Suggestopedic tools addressed in this paper? We get phenomenal results. We find that our students learn two to three times faster than in more traditional settings, they retain what

they have learned over time, enjoy the learning experience which they find relevant to their life experience. Research (LeHecka, 2002) suggests that AL participants also develop their creativity and problem-solving skills. AL practitioners also report changes in students' self-confidence, in their desire to learn and in their willingness to be a risk-taker as well as an increased tolerance for and deeper understanding of self and others. These results describe a learning experience that involves the whole person—mind, body and spirit and SUGGESTS the truth of Lozanov's proposition that: one brings the whole person to the learning process: his conscious and unconscious self.

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