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ALL THE WAY UP?, ALL THE WAY DOWN?: FROM COGNITIVE SCIENCE TO COGNITIVE CURRICULUM; WHAT ABOUT THE AFFECTIVE COMPONENT?

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Abstract: *This article is directed to English language teachers and / or students of teaching English as a Foreign/Second Language (EFL) (ESL) mainly, but readers from other disciplines are welcome aboard. Its purpose is to present an overview of cognitive science in relation to language teaching and learning. Areas like cognitive psychology, cognitive teaching and learning, and second language acquisition are explored as part of the panorama that is portrayed. The objectives are to briefly delineate some visible historic points and remarkable features of cognitive science, and to relate these characteristics to today`s language teaching and learning trends. The author´s proposal involves taking into account two areas in ESL/EFL simultaneously: the cognitive and the affective, since the latter seems to be overlooked nowadays and more emphasis is being given to cognitive elements like learning strategies. In the conclusion, the author insists on giving the development of eventual school or high school programs on self- esteem the same status as the designing of future learning strategies programs or the teaching / training of learning strategies in relation to subjects like English.*

Key words: *COGNITIVE SCIENCE/ COGNITIVE TEACHING AND LEARNING/ COGNITIVE CURRICULUM/ SELF-ESTEEM/ LEARNING STRATEGIES/*

Resumen: *Este artículo está dirigido a profesores de inglés y estudiantes de enseñanza del inglés como lengua extranjera o como segundo idioma (EFL) (ESL) principalmente, pero lectores de otras disciplinas son bienvenidos. El propósito del artículo es presentar una panorámica general de la ciencia cognoscitiva en relación con la enseñanza y aprendizaje de un idioma. Áreas como la psicología cognitiva, la enseñanza y el aprendizaje cognitivos, y la adquisición de un segundo idioma se incluyen como parte de lo que se quiere dar a conocer. Los objetivos son el delinear someramente algunos puntos visibles e importantes de la ciencia cognitiva y relacionarlos con las características de las tendencias en cuanto a enseñanza y aprendizaje de un idioma hoy en día. El autor propone tomar en cuenta dos áreas de ESL/EFL simultáneamente: la cognitiva y la afectiva, ya que esta última pareciera haberse dejado de lado últimamente, dándosele más énfasis a elementos cognitivos como las estrategias de aprendizaje. En la conclusión, el autor insiste en dar el mismo status al desarrollo eventual de ambos programas: a los del desarrollo de la autoestima y los de estrategias de aprendizaje que eventualmente se puedan estar diseñando tanto en escuelas como en colegios.*

Palabras clave: *CIENCIAS COGNITIVAS/ ENSEÑANZA Y APRENDIZAJE COGNITIVOS/ PLAN DE ESTUDIOS COGNITIVO/ AUTOESTIMA/*

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To trace or study out, either in detail or in general, the development or progress of a discipline, in our case, **cognitive science,** might be carried out from its present results to its origin or from its birth to its most recent outcomes: all the way up or all the way down. In both cases, it could be a fine intellectual exercise and possibly a time-consumming hobby as well. Due to space constraints, one cannot but proceed by giving a condensed historical account of when, where, why, and how cognitive science was born, and continue, all the way down, uncovering partially the veil of an amazing movement –the cognitive revolution - whose profound educational implications related to teaching / learning strategies and styles are paramount in these swirling and quivering beginnings of the XXI century.

The general purpose of this article is, then, to overview this thought-provoking issue and its objectives are to briefly delineate some conspicuous historic peaks of cognitive science, and to relate this field´s general characteristics to today´s trends in language teaching and learning. In order to analyze today´s cognitive trends, some goals of an English language textbook written by Dr. David Nunan will be pointed out. Thus, the textbook´s author´s perspective regarding cognitive ideas will also be explored. Consequently, for a better understanding of the points to be developed here, it will be necessary to compress and generalize information on a cognitive science subfield: cognitive psychology. Its branches: cognitive learning and teaching and cognitive curriculum will also be summarized. As a complement, a quick review on cognitive linguistics and second language acquisition will be included to help us to create a much clearer panorama.

This article will end up analyzing an area that has been somewhat overlooked by some cognitive - oriented language teaching colleagues – the affective factor in teaching and learning. Since all these subjects are multifaceted and huge, it is logical that it will not be possible to include all the different perspectives related to them. Hopefully, by the end of this trip, we will have exercised our minds with a stimulating activity, and, why not, we will probably have discovered a new hobby to entertain ourselves in our leisure time and will find it fascinating to go beyond the ideas presented here. The author hopes that this article will be read mainly by students of teaching English as a foreign language and / or by English language teachers. There is a feeling that the topic treated is a strategic piece in the puzzle of our professional growth and that it deserves more analysis and research. Readers in general are welcome aboard.

1. Brief historic review of cognitive science

To start up one should say that cognitive science was developed as a reaction against behaviorism whose principles dominated from the 20´s through the 50´s approximately. At that time, for many scientists, it was evident that behaviorist ideas were not capable of explaining organized, complex, sequencial, activities like playing the piano or learning a language. Also, some creative minds realized that human behavior was not the product of environmental forces exclusively, but the product of brain processess as well. They came to the conclusion that the nervous system is dynamic and continuously active: a mixture of interacting systems (Gardner, 1987; p. 1-3).

This is why in september, 1948, at the Institute of Technology of California, a symposium called Influence of Brain Mechanisms on Behavior was held and many scientists enphasized that scientific behavioral answers were not valid at all. In this symposium, the human brain processess were considered closer to those of a computer and behaviorism began to be left behind. This event preceded many others which started helping to define what cognitive science was going to be. Eventually, on september 11, 1956, some 47 years ago, at the Massachussetts Institute of Technology, a second symposium about Information Theory took place. Very well-known scientists and psychologists like Chomsky, Newell, Simon and Miller met, presented their ideas and that day cognitive science was born as a definite movement towards explaining the mind and how and why human beings learn. A revolution had begun – the so – called cognitive revolution (Gardner, 1987; Capra, 1996, Pozo, 1997).

2. Cognitive science:

But, what do we understand by cognitive science? Steven Pinker (1995, pag. 17), and Rodolfo Rodríguez (1996, pag. 429) claim that cognitive science, a new science born around forty years ago, combines tools from psychology, computer science, linguistics philosophy, neurobiology, anthropology and artificial intelligence to explain how the human intelligence works and to better understand human cognition processess. José Miguel Rodríguez (2001, pag. 15) includes other fields like neuroscience, psychopatology, genetics, sociology of knowledge, ethology, and theory of ideology.

Rodríguez (1996, pag. 429) goes even farther saying that logic, epistemology, philosophy of language, philosophy of science and philosophy of mind are crucial fields within cognitive science. He also says that cognitive science looks through philosophy of mind, especifically

to the body – mind relationship which is the central axis of the latter and which has had a long history in philosophy.

Richards and Platt (1994, p.60) define this science as that field that

> deals with scientific study of thinking, reasoning and the intellectual processess of the mind; it is concerned with how knowledge is represented in the mind; how language is understood; how images are understood and with what the mental processesses underlying inferencing, learning, problem – solving and planning are.

Moreover, Gardner (1987, p. 22) considers the following five features as essential to cognitive science

- Cognitive scientists separate biology / neurology from sociology and culture.
- Also, they claim that in order to understand the mind, computers are paramount.
- Furthermore, they deliberately put away affective aspects, cultural or historic elements and / or contextual elements that might complicate scientific research, although they can be important for the cognitive functioning.
- Besides, they believe that interdisciplinary research is important.
- Last but not least, the topics, program and philosophic questioning regarding how human beings learn go back to the ancient greek philosophers like Plato and Aristotle.

3. Cognitive psychology:

From cognitive science, cognitive psychology developed like a natural outcome. This field plays an important role in this brief trip to exploring today´s trends in English language teaching. J.I. Pozo (1997, pag.40) asserts that cognitive psychology, a subfield of cognitive science, was also born on september 11, 1956 at the Massachussetts Institute of Technology. In those days, very important works related to cognitive psychology were published and respected scholars and scientists like Binet, Piaget, Vygotskii and others were doing research from a cognitive point of view.

Pozo (1997, p. 40-41) expresses that Bruner, one of the founders of this field said that the new cognitive movement adopted an approach according to the new post - industrial revolution technological demands visualizing the human being as an information processor.

Also, Pozo (1997, p. 42) considers that cognitive psychology tries to explain behavior in relation to entities, states, processes and dispositions of mental nature: he states that this

field is concerned with the way in which the human mind thinks and learns. More specifically, cognitive psychologists are interested in the mental learning processes including aspects such as to how people build up and draw upon their memories and the ways in which they become involved in the process of learning. Other authors (Williams and Burden, 1997, p. 13-14) assert that cognitive psychology has also been studied from two extreme positions. One comes from information theorists, who have paralleled the human brain to a highly complex computer, and who try to explain its functions by using rules and models. These information theorists have also been working on artificial intelligence systems. The second position comes from the constructivist movement represented by Piaget and George Kelly, who were concerned with ways in which individuals come to make their own sense of the world. In short, cognitive psychology studies the nature of learning related to thought, perception, comprehension and memory.

4. Cognitive Learning:

Coming directly from cognitive psychology and deeply rooted in cognitive science, cognitive learning, according to Williams and Burden (1997; p.13), has had a paramount influence on todays´s language learning and , of course, language teaching methodology. They also claim that in the cognitive learning approach

> the learner is seen as an active participant in the learning process using various mental strategies in order to sort out the system of the language to be learned ...learners are required to use their minds to observe, think, categorize and hyphotetisize, and in this way to gradually work out how the language operates.

Thus, information processing theorists claim that they can predict what mental processes are needed for effective learning and that they can identify where something goes wrong and when a student is showing learning difficulties (Williams and Burden,1997, p. 15). These authors made clear that this work is "not at all concerned with meanings or emotions" (an aspect that will be analyzed later in this paper), ...and that "much of the work on learner strategies in language learning, which includes memory strategies, has drawn on such information processing models" (p.15). Thus, cognitive learning takes the language learner as an individual involved actively in the construction of meaning, making their own sense of the language imput that surrounds them." In this view, learners are not passive receivers of the language (Williams and Burden, 1997).

4.1 Learning strategies

Over the last 25 years, an overwhelming quantity of research has been conducted and many books have been written about language learning strategies. Let us just mention that several attempts have been made to find out what specific learning strategies learners can be used to do a particular type of learning. In this sense, research has shown that some of these strategies are used

- consciously, but also unconsciously
- they can be objectively observed or not
- they can be cognitive or social in nature (Williams and Burden, 1997; p. 145).

Furthermore, a distinction between skills and strategies has been established. Williams and Burden (1997) consider that strategies operate at a level above skills. They are "the executive processes which manage and coordinate the skills." A strategy "is a series of skills used with a particular learning purpose in mind": guessing the meaning of a word is a skill; the learner can use it when appropriate (this is strategic). The whole purpose behind learning strategies is to help students to learn how to learn. Thus, the teacher is supposed to help students to develop the idea that learning is a lifelong process and that they can become autonomous language learners. This can be acquired through a specific learner training where metacognition, a central skill needed in order to learn how to learn effectively, can be developed. Metacognition refers to the awareness of what the student is doing and of the strategies he is employing: knowing about knowing. This includes the knowledge of the actual process of learning and the ability to manage and regulate consciously the use of appropriate learning strategies for different situations." The authors mentioned above (1997, p. 146-149) believe that "much of this has clearly been influenced by developments in cognitive psychology". The important point is that, we, teachers are supposed to teach / train students in acquiring those strategies, and this is the aspect that will be analyzed in the next section: cognitive teaching and how teachers can deal with teaching strategies among other aspects.

5. Cognitive Teaching:

A direct result of cognitive psychology, too, cognitive teaching has some outstanding ideas to share. In this context, there is some kind of parallelism between Williams and Burden (1997) and Nunan (1999). They have similar points regarding cognitive teaching. For the former authors, this area has several important aspects: first, choice. It is a cognitive factor of

central importance in teaching. Students should be given the chance to choose and to have control of their actions. Learners must be "aware of the probable results of what they decide to do. This is also related to determining learning goals and how to achieve them." "The role of the teacher, thus, becomes one of helping and enabling learners to make suitable decisions." These authors, however, mention an important fact: "such a view fails to take account of the influence of affective factors, the emotions, or of social and contextual influences." (p.119). Second, strategy training also plays an important role. Some programs have been developed to deal especifically with helping students to make comparisons, categorize, organize thoughts, find differences. Nevertheless, some researchers have argued that "skills and strategies are best taught in relation to specific curriculum subject areas" (Williams and Burden, 1997; p. 157).

Another interesting aspect is that research has also shown that people from different cultural backgrounds respond differently to strategy training. The same has been observed regarding gender and personality traits. In brief, several models have been proposed: "some related to teaching strategies separately and others more concerned with integrating strategies to language tasks"(Williams and Burden 1997). O´Mally and Chamot (1989; 158,190-204) created their on training procedure called CALLA (Cognitive Academic Language Learning Approach).

Nunan (1999) wrote about the conceptual basis of language teaching and learning mentioning five different aspects:

- humanistic education,
- experiential learning,
- learner – centered education,
- negotiated curricula and
- task - based language teaching.

For our purpose,. We will concentrate in the last two aspects which follow the cognitive line that is backbone of this article.

5.1 Negotiated curricula

Nunan (1999) expresses that it is important to motivate learners by letting them be part of the decision–making process of planning a class or syllabus (that is, to give them a choice). They should have a voice in deciding what and how to learn (that is, to negotiate). For some authors (Arnold and Douglas Brown, 1998; p.6-7), participation in the decision – making

process is directed to develop the learner´s whole potential and, thus, from this point of view, this aspect belongs more to humanistic than cognitive teaching. They stress that responsibility, negotiation skills, and self – evaluation lead to self – esteem and self – awareness. In our opinion, the decision – making process involves elements of both: cognitivism and humanism. It is cognitive because students have to think, process information and make decisions. It is a humanistic because it deals with human interaction and self – awareness.

5.2 Task-based language teaching and learning

The use of a task – based language teaching aproach is also important and fundamented cognitively. Let us see why. In his book, Nunan defines that a pedagogical task is

> a piece of classroom work that involves learners in comprehending, manipulating, predicting, or interacting in the target language while their attention is focused on mobilizing their grammatical knowledge in order to express
> meaning and in which the intention is to convey meaning rather than to manipulate form. The task should also have a sense of completeness, being
> able to stand alone as a communicative act in its own right with a beginning, a middle and an end (Nunan, 1999; p. 25).

If we highlighted cognitive – related words in the former paragraph, we would have to select: comprehend, manipulate, predict, interact, mobilize, express, and convey meaning. Why?, simply because those words imply mental processes. There is nothing in this paragraph about memorizing or repeating, which are well – known behavioristic ideas. This gives us an idea of the influence cognitivism has on today´s language theoriticians and that a task is directed to the cognitive processes of the learner´s brain.

At this point, In order to complement the previous information, It is important that the reader get acquainted with another aspect of Nunan´s work: his series *Atlas,* (1997). In the introduction to these textbooks, Nunan expresses that this series focus on helping "learners to develop strategies that will help them learn" (Nunan, 1997; p. XI).
Besides, he establishes cognitive goals stating that

- "learners are taught about the learning process through a focus on learning strategies"
- "learners are involved in monitoring their own progress,"

- learners are encouraged to explore ways of learning that work for them." (Nunan, 1997)

Again, he expresses his desire that students classify, predict, brainstorm, select, practice, role play, and so on. All of these words are again related to mental processes. Nunan´s textbook´s goals definetely fall under what Williams and Burden (1997), Pozo (1997) and Richards (1998) called a cognitive approach to language teaching. In spite of this, it is interesting to notice that Nunan´s conceptual basis of language teaching and learning has more humanistic components than cognitive ones.

6. Linguistics and Second Language Acquisition:

These two areas have been influenced by cognitive ideas. Ellis (1997) defines linguistics as the study of language as a system of human communication (Ellis, 1997). For him, it is well known that Chomsky´s new linguistics was born as an intend to show that behaviorist ideas were uncapable to deal with a language learning theory. Here, it is necessary to remember that

> Chomsky´s attack on the behaviourist underpinnings of structural linguistics in the late 1950´s proved decisive, and its associated pedagogical approach – audiolingualism began to fall out of favour. Supplanting the behaviourist idea of habit-formation, language was now seen as governed by cognitive factors, in particular a set of abstract rules which were assumed to be innate (Schmitt and Celce-Murcia, 2002; p.5)

This new linguistics gave birth, through Chomsky to Universal Grammar, which is a definite cognitive element that claims to account for the grammatical competence of every adult no matter what language he or she speaks. It states that speakers know a set of principles that apply to all languages and also a set of parameters that can vary from one language to another. Nevertheless, "the existence of some contradictory positions shows that the role of Universal Grammar in second language acquisition is still uncertain (Ellis, 1997; p. 69).

In general, today´s linguistics and second language acquisition goals are stated in two ways:- description and explanation. Description is related to pronunciation, accent, vocabulary and grammar. Explanation, (and this is the interesting part) deals with external and internal factors: external with social conditions and internal with the learner´s cognitive mechanisms: -

knowledge, general and about the world; communcation strategies, knowledge of how language works (Ellis, 1997). In short, It is easy to observe how these two fields have been influenced by a cognitive orientation.

However, a contrasting point arises here since, according to Schmitt and Celce-Murcia (2002; p.11) a new view of cognition is being developed. It is called sociocultural theory and is influencing the field of applied linguistics. It suggests that in order to understand the human mind, one must look at "the inter-personal interface" between a person and his or her environment and the "intra-personal mechanisms and processes" in an integrated manner, since it is "only through social interaction with others that humans develop their language and cognition. Furthermore, most language interaction is co-constructed with others and not the product of one individual acting alone" (p.11).

7. Cognitive Curriculum:

Closely related to teaching and learning, curriculum has been defined as an educational program that is based on the following points

- the educational purpose of the program;
- the content,
- teaching procedures and learning experiences which will be necessary to achieve this purpose;
- some means for assessing whether or nor the educational ends have been achieved" (Richards, Platt and Platt, 1994; p.94).

Another definition is given by Nunan (1999; p.22) who visualizes curriculum as a field "concerned with the planning, implementation, evaluation, management and administration of education programmes."

Nunan´s curricular perspective is that curriculum and curriculum development represent a delicate act involving information about the learner, the language and the learning process, and that the language curriculum should concern itself not only with language content goals, but also with learning process goals which are cognitive oriented points.

In order to reinforce what was expressed before, it is important to be guided by Orsntein and Hunkins. These authors (1998; p. 107) claim that cognitive scientists investigate "the various

cognitive structures that individuals create in order to generate meaning and ultimately knowledge...they focus their energies on the process of thinking, that is on what is happening inside a person´s head. Guilford, cited by Ornstein and Hunkins
present a model about the complexity of the intellect and human thinking. He mentions three dimensions

- Operations: evaluations, convergent thinking, divergent thinking, memory cognition.
- Products: units, classes, relations, systems, transformations, and implications.
- Contents: information and comprehension.

Within this framework that summarizes most of what has been expessed about cognitivism, Orstein and Hunkins state that "most curriculum specialists and learning theorists and teachers tend to be cognitive oriented because

- The cognitive approach constitutes a logical method for organizing and interpreting learning.
- The approach is rooted in the tradition of subject – matter
- Educators have been trained in cognitive approaches and better understand them" (p. 123).

These authors also maintain that learning in schools, high schools and universities involves cognitive processes giving emphasis to the cognitive domain of learning.

8. And so...what about the affective factor:

After the fast excursion we went through in the last sections, it is important to observe how, like a pendulum, science has moved from one extreme (behaviorism) to another (cognitivism). In so doing, cognitive - oriented professionals have denied the importance of the affective factor in learning and teaching (see p. 5). However, in the last years, their position has soften a little bit since a new understanding regarding the human being has been taking place. In this line, it is fascinating to read Dr. Capra´s insights (1997; p.68) when he claims that

> recent developments in cognitive science have made it clear that human intelligence is utterly different from machine, or `artificial intelligence´. The human nervous system

> does not process any information (in the sense of discrete elements existing readymade in the outside world, to be picked up by
> the cognitive system), but interacts with the environment by continuously modulating its structure.

Furthermore, Capra asserts that neuroscientists

> "have discovered strong evidence that human intelligence, human memory, and human decisions are never completely rational but are always colored by emotions....Our thinking is always accompanied by bodily sensations and processes. Even if we often tend to supress these, we always think *also* with our body, truly human problems wil always be foreign to their (the computers´) intelligence." (p.68)

Capra (1997) also argues that in

> "actual brains there are no rules; there is no central
> logical processor, and information is not stored locally. Brains seem to operate on the basis of massive connectivity, storing information distributely and manifesting a self – organizing capacity that is nowhere to be found in computers."

Dr. Capra´s comments will serve as a transition from what was extracted regarding cognitivism to the synthesis on affective factors in language teaching which follows.
It is accepted that affective factors, for instance, self – esteem, play a trascendental role in human learning. Just by thinking of a person whose self-esteem is low, we see the trascendental role feelings and emotions play in learning in general and learning a language in particular (Arnold, 1999; p.2.)

Let us begin by expressing that self-esteem was defined as a judgement people make of themselves. It is related to attitudes, feelings and knowledge of personal appearance, social acceptability and capacity produced by experiences and information obtained from interaction with the environment, by other people´s judgements, by ethnicity factors, gender, social and economic status. Self-esteem is in a permanent changing situation. It is the last stage of several different steps like: self-knowledge, self-concept, self-evaluation, self-acceptance and self-respect. (Montes de Oca, 1995; p. 53)

Throughout history, self-esteem has been an important topic for philosophers, psychologists, teachers and even spiritual leaders. For instance, ancient Hindi, Greek and Palestinian writings and oral traditions stressed the importance of developing a high self-esteem as a means to achieve personal growth and good interpersonal relationships. That biblical phrase, "Thou shalt love thy neighbour as thyself," (Mark, 12:31) summarizes most of these ideas (Montes de Oca, 1995; p.1).

In modern times, specifically during the 60´s and 70´s, paramount thinkers, and psychologists like A. Maslow and C. Rogers developed important concepts regarding self-esteem and incorporated this factor into what today is called Humanistic Teaching, or the third force in psychology after psychoanalysis and behaviorism. In fact, humanistic teaching developed from humanistic psychology which was a reaction to cognitivism and behaviorism. A research done in the 60´s, summarized most of the message of humanistic education: it was a research conducted by Dr. Rosenthal from Harvard University. It was called the "Pygmalion Effect" and was claimed as crucial in teaching and learning, since this investigation demonstrated that students who are expected to be succesful achieve success, meanwhile, those who are expected to fail will definetely do it (Ferguson, 1989). Thus, since then, research has been done in terms of connecting self-esteem and academic performance as a logical relationship. Interesting results have been obtained since this personality construct seems to play an important role in getting good academic results either in school or university. Nevertheless, Gorrel (1990) found a problem in correlating general self – concept or self –esteem with specifc aspects like language learning. This author believes researchers should pay attention to areas such as academic self – esteem or language learning self – esteem. Anyhow, besides academic points, it looks like most of the self-destructive actions showed by teenagers for example: suicide, adolescent pregnancy, aggresive behavior and drugadiction among others, come from a low self-esteem or have a strong correlation to it, too (Montes de Oca, 1995; p. 2-7, 41)

Closely related to self-esteem there are other important aspects such as emotional intelligence. Goleman (1997) concluded that there are two main ways of building our mental life. One is logical and rational; the other is emotional. Based on this argument, he states that our rational mind is typically conscious but our emotional, impulsive, ilogic mind is, on the other hand, unconscious. This author adds that a high I.Q. has nothing to do with being successful or feeling capable. Many intellectually bright but emotionally unstable people might

take extremely risky decisions in social, political or economic situations. Others are victims of uncontrolled emotions and impulses due to a poor self-image or opinion. In constrast, less bright but emotionally stable individuals might be succesful in life. Finally, Goleman (1997) mentions that abilities like self-motivation and persistence against all odds, control of impulses, regulation of states of mind, empathy and hope are characteristics of a well-balanced emotional intelligence.

In relation to language acquisition or teaching, Richard – Amato (1997) cited studies where it was found that students with a high – self esteem performed better in French and this author claims that self – esteem leads to self – confidence and that "we may perform well because our attitude toward self is positive..." and that if a person feels that he is what he would like to be as an intelectual and social being, then, he / she will be able to engage in the hard process of acquiring a second language.

Thirty years ago, Combs (1973) expressed that "...what a person believes about himself is crucial to his growth and development...the student takes his self – concept to Latin classes, to arithmetic class... and he takes it home with him" (Cited by Moskowitz, 1978). Also, Brown (1971) and Castillo (1973) both cited by Arnold (1995 p. 59 "stressed the need to unite the cognitive and the affective domains in order to educate the whole person." Similar positions are maintained by Krashen (1984) and Blay-Broman (1989). The latter even expresses that

> There is a universal concensus among second language researchers as well as among second language teachers and students, that such factors are essential in foreign language learning...the central role of affect in foreign language learning is absolutely indisputable." (p. 49)

Moskowitz (1978; p.13) asserts that if we teach language so that students improve their self-image and generate "more positive feelings about themselves, this will help them develop high self-esteem....fascilitating growth in the direction of being more self- actualized, since self-actualization is such a powerful inherent need in humans, as students see the subject – matter as self – enhancing. It will be viewed as relevantly related to their lives."

9. Conclusion

Subsequently, when analyzing some of the most striking ideas regarging teaching and learning in the cognitive and humanistic fields, it seems that both movements are not

contradictory at all. They are like complementary sides of each other like the YING YANG. They must be considered in an integral way and never like separate and / or antagonic aspects. At this point, we can go back to one of the most important findings used as a coat of arms and impulsed firmly by cognitive teaching and learning: learning strategies. These learning strategies fall under what Oxford (1990 p. 17) called *direct strategies:* memory, cognitive and compensation strategies, and *indirect strategies* like metacognition, but not *indirect strategies* such as affective, and social strategies. From this perspective, it can be argued that designing a direct / indirect learning strategy program or teaching direct / indirect learning strategies in relation to specific curriculum subject areas would be of no help if the student´s emotional life is not under control or if he / she has low self – esteem (It has been demonstrated that an affective unbalance produces negative effects in academic performance). Oxford (1990; p. 141) claims that "self – esteem is one of the primary affective elements. It is a self – judgement of worth or value on a feeling of efficacy." This is why our thesis supports the idea of helping students develop these two areas simultaneously:

- first, the learner´s development of more positive attitudes towards self, taking into account his / her self-esteem and emotional intelligence (in relation to general and specific self – esteem.)
- second, a training on direct / indirect (metacognitive)learning strategies.

This would be quite a big challenge for teachers, but it would benefit our students much more than teaching or training him / her direct learning strategies in isolation or helping them develop a general high self – esteem exclusively.

In favor of this position, Andrés (1999; p. 87) summarizes very well the ideas analyzed in the last paragraph when she asks herself why children fail at school, what learning blocks hinder achievement, and so on. Her answer is self-explanatory

> There is no doubt that these complex questions cannot have a single, simple answer. They open up a multifold spectrum of delicate matters, but most of these problems seem to have the same root: a poor self-image, a deep fear of failure, a feeling of inadequacy. In other words, low self- esteem. Psychologist Nathaniel Branden (1987) claims that all problems, except those that have a biological origin, are related to low self-esteem.
>
> The question of what makes the difference between a child that can easily grasp concepts, words, meaning in a second language and one that can hardly understand

or utter a word often baffles language teachers. One answer can be found in research which has shown that children who suffer from low self-esteem are greatly incapacitaded for reaching their learning potential...The strong link between self-esteem, social relationships, and academic performance can be witnessed in the everyday world of the classroom.

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