INTERPRETING LEARNING DIFFICULTIES THROUGH THE THEORY OF MULTIPLE INTELLIGENCES AND THE THEORY OF EMOTIONAL INTELLIGENCE

FLORENTIN REMUS MOGONEA¹

ABSTRACT. In opposition with classical theoretical approaches regarding human intelligence (often defined as that capacity, ability to adapt to the environment, adaptation that occurs in two stages- assimilation-adjustment), at present we witness an increase frequency of the theories that don't regard intelligence as a monolithic, uni-composite structure.

Thus, people are talking about a triarchic structure of the intelligence (Sternberg) or of emotional intelligence (Goleman), and even of social intelligence. In the same category of approaches we find H. Gardner's theory of multiple intelligences which starts from the idea that some children with high intelligence quotient can have not very good results at school, being considered "smart" only those who have good results at the intelligence tests.

The school success is no longer guaranteed by the positive educational valorification of a high intelligence quotient (Intelligence Quotient-IQ), but also by the presence, the valorization and the development of emotional intelligence (Emotional Intelligence Quotient-EQ) and of social one (Social Intelligence Quotient-SQ).

Keywords: Multiple intelligence theory targets: linguistic intelligence, logical-mathematical intelligence, musical intelligence, spatial / naturalistic / kinesthetic / interpersonal / interpersonal / intrapersonal / emotional / social intelligence and learning difficulties.

ABSTRAKT. Im Gegensatz zur klassischen theoretischen Ansätzen über die menschliche Intelligenz (die oft als die Kapazität, Anpassungfähigkeit der Menschen an Umwelt definiert wird, Adaption, was sich in 2 weitere Prozesse teilt: Assimilation – Akkommodation) entdecken wir immer häufiger die Theorien, die in Intelligenz nicht mehr eine monolithische, unzerlegbare Struktur sehen.

Man spricht somit von einer triarchischen Struktur der Intelligenz (Sternberg) oder von einer emotionalen Intelligenz (Goleman), selbst von einer sozialen Intelligenz. In der gleichen Kategorie der Herangehensweise liegt auch die Theorie der multiplen Intelligenzen von H. Gardner, die von der Prämisse ausgeht, dass einige Kinder, die zwar bei Intelligenztests hohe IQ-Werte haben, aber in der Schule nur schwache Leistungen erbringen. Da werden als "Intelligent" nur diejenigen betrachtet, die gute Ergebnisse bei Intelligenztests haben.

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¹ Teaching Staff Training Department, University of Craiova

Schulerfolg wird keinesfalls durch eine positive pädagogische Nutzbarmachung einen hohen IQ-Wert (Intelligenzquotient - IQ) garantiert, man wird auch die Anwesenheit, die Valorisierung und die Entwicklung der emotionalen Intelligenz (Emotional Intelligence Quotient - EQ) und der sozialen (Social Intelligence Quotient - SQ) oder eine ausgewogene Entwicklung benötigt.

Schlüsselwörter: Theorie der multiplen Intelligenzen, Intelligenzen: sprachlichlinguistische, logisch-mathematische, musikalisch-rhythmische, bildlich-räumliche, naturalistische, körperlich-kinästhetische, interpersonale, intrapersonale, emotionale, soziale, Lernschwierigkeiten

Introduction

According to tradition, we are tempted to consider smart, "intelligent" those who are good at the basic subjects in school, that is mathematics or Romanian language, while the others we consider them to be just "talented". If we call some- "intelligences" and the others- "talents", it means we do not consider them as important and equal. Gardner finds equal the talent and the intelligence, because intelligence is a way of solving problems and developing products considered values at least by one culture. Valorizing intelligence is determined by the field or sphere in which it is used. This field can be a science or a profession practiced in society.

Gardner started his research from a series of personalities (Picasso, Einstein, Spielberg, Mozart, Gandhi, Churchill, Freud, and Darwin) who had big problems at school, having different difficulties in acquiring knowledge, especially regarding some subjects.

Gardner sees intelligence as a way of solving problems and of developing products accepted or considered values by the human cultures. By studying the way in which people solve problems, Gardner has drawn the conclusion that there are 8 types of intelligence that can be defined on the basis of ten criteria among which: the existence of a personal system of symbols (words, numbers); having shown that respective ability from the first signs of the existence of people on earth; the part of the brain where the respective intelligence is located must be known.

The phrase" learning difficulties" refers to a multitude of obstacles and times of oscillation resulting in a wide range of private events which are involved in the personality development of the individual involved in a continuous learning process.

In the pedagogical view this phrase summarizes a defective organization of learning activities that may alter its acquisition (perception and reception), organization, retention, understanding, the information processing being it either verbal or nonverbal, and its reproduction.

In other words, these obstacles and difficulties affect the input and informational output including the cognitive and metacognitive aspects especially when talking about some individuals who prove to have rational integrity. Learning difficulties are different from mental shortage and they depict average children, their state of sanity and normality being linked to limitary or average intelligence.

Possible links between interpersonal intelligence (Gardner) and emotional intelligence (Goleman)

On the basis of detailed studies, Gardner distinguishes 8 types of intelligence: linguistics, logical-mathematical, musical, spatial, naturalist, kinesthetic, interpersonal, and intrapersonal.

Interpersonal intelligence aims at developing capacities regarding the mechanisms involved in thinking about other people and understanding them, aims at being empathetic, at recognizing differences between people and at appreciating their way of thinking, by being sensitive to their motives, intentions and states of mind. It implies an efficient interaction with one or more persons in the family or society. The persons with this sort of dominant intelligence are the leaders, the salesmen and the psychologists who understand how people "function". But this type of intelligence interferes very well with intrapersonal intelligence too. The latter implies self-thinking and self- understanding, as well as to be aware of the strong and weak points of your own person, to plan efficiently the achievement of personal goals, to monitor and control efficiently thoughts and emotions, the ability to monitor yourself in relation with others. It's about self-knowledge and making decisions on this basis, involving also an ensemble of metacognitive strategies.

On the basis of Gardner's theory, Th. Armstrong, in 1994, in his work "Multiple intelligences in the classroom" (a revision of his doctoral thesis presented in 1987) draws the conclusion, as a result of some interviews with the parents of the children who had difficulties in learning and of some questionnaires, that the pupils encountering difficulties at school, within the activity of learning, are endowed with abilities that subordinated to the 8 intelligences described by Gardner. Depending on the type of intelligence, these abilities are described in table 1.

R. Leblanc (1997) considers that intelligence is, first of all, that capacity of solving problems and of creating, elaborating creative, original solutions in certain situations. According to his theory, approaching learning difficulties through multiple intelligences means to know these pupils, to describe them and to characterize them also in the light of the skills subordinated to the 8 types of intelligence. Only by knowing these skills subordinated to the types of intelligence, by quantifying what a pupil knows and can do, in relation to each of the eight types of intelligence, can we take adequate measures of stimulation, compensation, recovery, remedy.

Approaching learning difficulties from the perspective of the multiple intelligences theory aims at developing each type of intelligence and of each in

relation to the others, in view of the development of the skills and capacities subordinated to the eight identified areas, contributing to the diminution of the frequency of the learning difficulties.

Table 1. Synoptical Table of the abilities "attached" to the types of intelligence

Intelligence	Abilities	Vocation	
Linguistics	Sensitivity to sounds, structures,	Writer, orator	
	meanings and functions of the words		
	and language		
Logical-	Sensitivity and capacity of choosing	Man of science,	
mathematical	logical or numerical models;	mathematician	
	capacity of maneuvering trains of		
	judgments		
Visual-spatial	Capacity to perceive correctly the	Athlete, dancer,	
	spatial-visual world and to	sculptor	
	transform others' initial perceptions		
Musical/rhythmic	Capacity to produce and appreciate	Composer,	
	pace, height, tone of voice;	soloist	
	appreciation of the forms of musical		
	expressiveness		
Corporal-kinesthetic	Capacity to control the movements	Councilor,	
	of the body and to handle objects	politic leader	
Natural	Sensitivity to esthetic, plants,	Naturalists, ecologists,	
	animals	farmers, silviculturist	
Intrapersonal	Access to one's own emotional life	Psychotherapist,	
	and capacity to differentiate it from	religious leader	
	the others'		
Interpersonal	Capacity to distinguish and to	Councilor,	
	answer properly at the others'	politic leader	
	dispositions, motivations,		
	temperaments and wishes		

The literature tends to identify between interpersonal intelligence's characteristics (corroborated with the interpersonal intelligence) from Gardner's theory a common ensemble of traits specific to the emotional intelligence- a new syntagm circulated by the specialists (alongside of the social intelligence). Whether it is called interpersonal or emotional, its stimulation plays an important role in putting in performances in general as well as school performances in special.

The present theories on school success point out the fact that interpersonal intelligence (and intrapersonal intelligence too)- identified by other authors as *emotional intelligence and/or social intelligence*- plays a significant role, not at all to be ignored. Therefore the school success ensues from three conditions: high 124

intelligence quotient (IQ), emotional intelligence (EQ) and social intelligence (SQ). We consider that these three types lie at the bedrock of the development and good functioning of the other intelligences in Gardner's theory, ensuring successes in different domains of the science and art. Alone, a high intelligence quotient (IQ) cannot guarantee success, being just one of the compulsory conditions, but not unique. Thus, it is explained why children who get a high IQ at the intelligence tests (or the gifted ones, the geniuses), often encounter learning difficulties.

The development of the emotional intelligence- essential condition for removing learning difficulties

The term "emotional intelligence" was used for the first time, seemingly, in an article in 1990 by the psychologists Peter Salovey and John Mayer. Although the studies on emotional intelligence are relatively recent, intuitively, its importance has always been recognized. Regarding the emotional intelligence, we are in the same area of theoretical-practical approaches on intelligence, starting with Binet's theory (1905) on the quotient of intelligence, Spearman's theory (1927) regarding the "G" factor of the intelligence, Thurston's theory (1938) regarding the multiple factors of intelligence, continuing with Gardner's theory of multiple intelligences (1938) or Stenberg's- the triarchic theory of intelligences and finishing with Salovey's and Mayer's theory on the cognitive intelligence and emotional intelligence.

Since 1990 up to the present, the studies and the research on emotional intelligence have diversified, at present people are talking even about forming an "emotional pedagogy" (D. Chabot and M. Chabot, 2006).

In 1995, the American psychologist Daniel Goleman published a volume (Emotional Intelligence: Why it can matter more than IQ) in which he rendered topical the notion and succeeded in defining it too. Considered by the author the key of professional success, the emotional intelligence is considered by the author to be a mixture of self-control, empathy, motivation, original thinking, tact and diplomacy. Making use of these characteristics, a person, even with a low or medium IQ, can get noticed, succeeding in achieving remarkable success. A good composure, a perfect self-control, a good control of both positive and negative emotions, in other words a management of the stress and powerful emotional states are indicators for a high quotient of emotional intelligence (EQ).

His other studies (1998, 1999, 2001), but also the studies of C. Dreyfus and M. Mangino (2001) underline that different human competences and abilities such as self-control, self-discipline, perseverance and empathy are qualities that success and good results depend on, and that pupils must acquire, through an education received in this sense. These qualities depend indispensably on the functioning of the individual's emotions (called "emotional competences") and coordinate and imply drafts and thinking strategies.

With regard to motivational support in learning, it is known that the pupil learns the better if he applies immediately what he has learnt. The emotional education helps him enrich the motivational sphere during practice. At school, the bunch of emotional experiences is nuanced both within the learning activity and the breaks between the activities. The matters discussed, analyzed in the classroom and outside the classroom are based on interpersonal relations. Together, the pupils must learn to listen, to talk, to keep their temper, to discipline themselves, to control themselves, to respect the others' opinion without becoming furious or getting irritated if the opinions are contradictory, to get involved actively and not to become passive. Emotional intelligence also refers to the art of cooperating/ collaborating, solving conflicts and negotiating solutions, even making compromises accepted by both parts. Obviously, these aspects are related to a social intelligence or, according to Gardner's classification (1996) to an interpersonal intelligence. But emotional intelligence refers to also one's own person, so it has a connection with intrapersonal intelligence too.

Thus, the emotional intelligence represents the ability to control one's personal emotions and the others', to differentiate them and to use them in order to draw up viable strategies for the situations in which a certain person is.

School learning implies that the cognitive obstacles and the cognitive conflict must be overcome permanently. The learning difficulties emerge due to the pupils' helplessness of solving the cognitive conflicts and of overcoming them. In the classroom, relations are established, there is a vertical and/or horizontal communication (verbal, non-verbal, para-verbal, empathic) as well as an emotional intercourse. The wide range of feelings is diversified, nuanced and the pupils can oscillate emotionally, from joy to disappointment and vice versa. Between pupils there are relations of closeness, sympathy, cooperation, but also strained relations, stressful relations, relations of antipathy, competition and envy.

The learning difficulties can be sustained, caused and amplified also by a bad management of the emotional states. Some children abandon themselves to indifference, self-pity, lack of confidence in own strength; they manifest a weak or absent tolerance for frustration. They often complain about their helplessness or they bottle up their feelings, refusing to communicate with the others (usually teachers and parents) anymore (sometimes totally). Others, on the contrary, they can manifest an attitude of self-sufficiency, false superiority over the others, lack of realism and objectiveness regarding the situation in which they are. Both categories can be confronted with different learning problems.

Moreover, we point out the role of the family in this context. The emotional intelligence can be learned, formed, educated. An overprotective behavior of the parents or, on the contrary, a "laissez-faire" behavior is harmful to the pupil's behavior. In these situations, usually the protected pupils have a tendency to seek refuge in the calm, tranquil ambiance of the family, avoiding the obstacles of the school learning (often developing aversion to it), while those who are not supervised, often, they have violent, aggressive outbursts, tendencies to overestimate themselves, superiority attitudes, ignoring the teachers' exigencies and demands or the school discipline.

This kind of situations can be generated/ stimulated also by monoparental families or families going through divorce, or reunited through a new marriage, by children who have lost both their parents etc. In these situations the emotional intelligence cannot be educated any longer, monitored from the outside by a person (family), but, it is under the control of priorities, expectancies, interests of every pupil. Self-education, self-constraint, self-control, self-assessment of one's own feelings, reactions, attitudes, they all represent possibilities of stimulation of the emotional intelligence.

Results of a research of improvement method

Starting from the idea that frequent expression of learning difficulties of some students for a certain subject can be diminished if one or other type of intelligence identified by Gardener is being stimulated in order to develop it to a great extent.

We have made an improvement research which focused mostly on:

- identifying some types of difficulties among students of a certain subject (Romanian language);
 - listing symptomatic and etiological issues;
- the achievement of an improvement research to reduce the frequency of manifestation in relation to the causes and manifestations.

Taking into account that the study is performed in Romanian the experimental approach focused on stimulating the development of linguistic intelligence. Linguistic intelligence stands out at individuals who think mainly in words and master the language easily in order to express and understand complex relations. They are very sensible to the meaning and word order, sonority and rhythm of language. Children with a predominantly linguistic intelligence learn mother tongue and foreign languages quickly, use metaphors and later they make their career choice according to their language abilities. In this research we synthetically identify the following important factors.

- a) The fundamental goal of this intervention aimed at identifying ways of improving the recovery of school educational practice in order to minimize the effects on learning difficulties and school performance results primarily from the discipline under discussion, and, as a as an extension of this effect, by contagion, in all disciplines of the curriculum, either completed mandatory or optional by the students in the IXth grade. To achieve this goal, several objectives were established. We have outlined them as points to be reached during the late conduct research and.
- b) Fundamental hypothesis of the research and the main lines of action were based on the reality that students' learning difficulties affect students' capacities(in Romanian, but also the other school activities and even the social ones).

Then the basic theory, relies on the following assumption: the promotion of active and interactive learning in a constructivist framework (cognitive-constructivist and socio-constructivist) leads to a significant reduction in a frequent manifestation of learning difficulties.

This general assumption was based on the approach of three courses of action and intervention(experimental classes are targeted)

- the use, in school practice of constructivist models of education to determine and generate students' perception, personal involvement in school activities and increased efficiency.
- founding the act of teaching on inciting students to work cooperatively during Romanian Language and Literature classes
- the development and application of techniques, methods, strategies based on differentiated instruction, personalized and individualized for students in formal educational activities of Romanian language and literature.
- c) The variables used in the research were: independent variables (Iv) which have the status of "cause or decisive condition, dependent variables (Dv) which expresses the "effect" of the first ones (Radu, 1993) and explanatory variables. We symbolize the relationship between dependent and independent variables as it follows: Dv = F (Iv). Dv changes whenever Vi varies. From the general assumption we conclude that the independent variable in our experiment is the following:
- Vig = the promotion of active and interactive learning in a constructivist environment. If we take into account and the proposed courses of action and intervention (DAI) by which Vig are reflected in educational activities undertaken in the experimental classes, we get:
 - d.a.i.1. = Use in school practice of constructivist models of instruction;
 - d.a.i. 2. = Stimulation of(inter) active-cooperative and collaborative learning;
- d.a.i.3. = Design and application of techniques, methods, strategies based on differentiated instruction, personalized and individualized,

The relationship between variables and lines of action is highlighted in Figure 1:

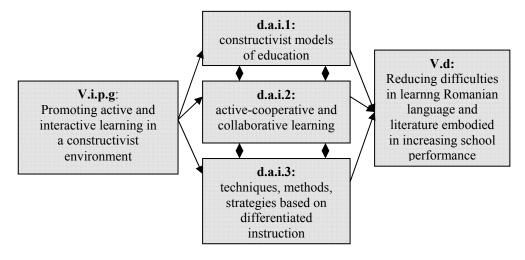


Fig.1. Determination of logical variables

d). The research was conducted over **several stages**, each with specific objective as:

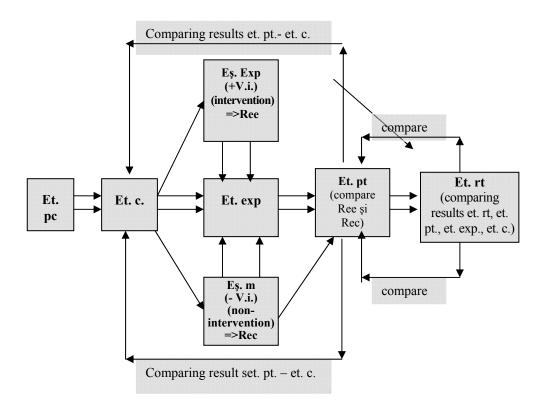


Fig. 2. – Sequence of steps establishing relations between them

Et. PC. = preconstatative round

Et. v = certifying phase

Et exp. = experimental stage

Et. pt. post-test phase

Et. rt. = Stage of re-test

ES. m = control sample

Es exp. = experimental sample

Ree = experimental results classes

Rec = results class control

V.i. = independent variables

e) Offering to help us **reduce the difficulties** of learning Romanian language and literature, **by stimulating the development of students' linguistic intelligence,** we schematize the conducting research, based on multiple intelligences theory of Howard Gardner, as in Figure 3:

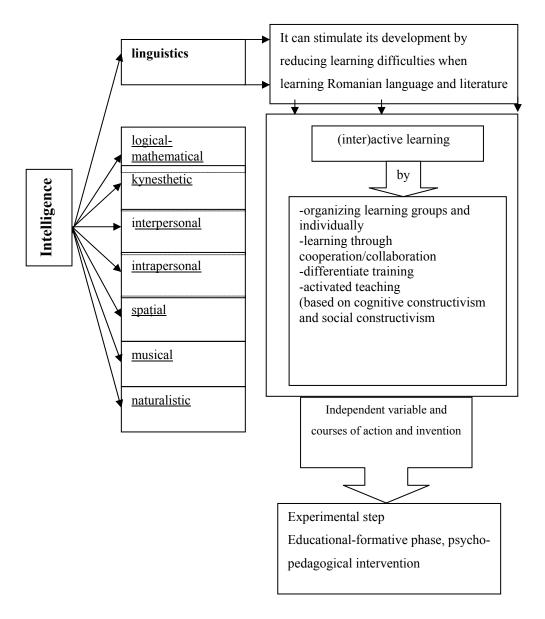


Fig. 3. Theoretical basis of experimental researchthe theory of multiple intelligences

It has to be specified that the independent variable is considered in light of constructivism, namely cognitive constructivism and social constructivism.

f) The sample of subjects was composed of both students and teachers of Romanian language and literature

Table 2. Distribution of sample of students and teachers on stages of research

Certifying step		Experimental stage The re-test and post-test			
Initial sample		Sample		Experimental sample	
Students	Teachers	Students	Teachers	Students	Teachers
1100	29	549	15	551	14

g) Research Methodology resting on a different methodological instruments present in all stages of research (certifying, experimental, posttest, re-test). We present it in table 3., Inventory methods used in all stages of research:

The set of methods of research, the stages

	Steps of research			
	Found	Experim.	Posttest	Retest
Method		1		
Autoobservația	X	X	X	X
Sistematic observation	X	X	X	X
The survey-based questionnaire(for teachers and students)	X	X	X	-
Analysis of the curricular documents	X	X	X	X
Test	X	X	X	X
Interview		X	X	-
Experiment	-	X	-	-
Case study	-	X	X	-
Interpretation	X	X	X	X
Work product analysis	X	X	X	X
Sociometric test	-	X	-	X
Pedagogical sheet	-	X	X	-
Statistic methods for collection, interpretation and correlation data	-	Х	X	Х

h) Training activities program for teachers who supported teaching activities in the experimental class included a set of processing activities based on the following topics:

Table 3.

Table 4. Inventory of continuous training activities / training of teachers of experimental classes, conducted in the experimental stage

Nr. crt.	Week	Title /Subject -activity		
1	1 oct	"A modern teaching. Highlights of current training"		
2	9 oct.	"Active and interactive learning"		
3	16 oct.	"Cooperative learning and collaboration"		
4	23 oct.	"Differntiated and customized instruction"		
5	30 oct.	"Theoretical and practical constructivist models while training"(I)		
6	6 nov	"Theoretical and practical constructivist models while training (II)"		
7	13 nov	"Teacher's role and the classroom management"		
8	20 nov	"The theory of multiple intelligences. Consequences applied"		
9	27 nov	"Learning difficulties. Prevention and improvement."		
10	4 dec	"Conditions of an effective learning"		

i) The results of formative assessment tests are presented in Table 5:

Table 5. Average marks of the two groups during formative assessment tests in the experimental stage

Tests Grup	Test 1	Test 2	Test 3	Test 4
Control Test	6,64	6,89	6,72	6,78
Experimental	6,56	6,98	7,15	7,30

Comparing these results with those obtained by the same groups in ascertaining phase, we obtain the following results, listed in Table 6.:

Table 6. Presentation of comparative media and experimental /certifying stage

Phase Grup	Aecertainty Phase (et .c.)	Experimental Phase (et. ex.)			
Control Test (gr. c.)	MT _{0c}	MT _{1c}	MT _{2c}	MT _{3c}	MT _{4c}
Experimental (gr.	6,84 MT _{0ex}	6,64 MT _{1ex}	6,89 MT _{2ex}	6,72 MT _{3ex}	6,78 MT _{4ex}
ex.)	6,72	6,56	6,98	7,15	7,30

Gr. c. – Control group;

Gr. ex. – Experimental group;

Et. c. – Ascertainty phase;

Et. ex. – Experimental phase;

MT0c - control group arithmetic mean(eş.c.) certifying stage (et. c.);

MT0ex - average experimental group (es. ex.) Certifying stage (et. c.);

MT1c, MT2c, MT3c, MT4c - control group arithmetic mean(es. v) evaluation tests (four) format in the experimental stage (et. ex.)

MT1ex, MT2ex, MT3ex, MT4ex - average rating tests for experimental group (four) format in the experimental stage (et. ex.).

We note that for the control group, the recorded values in the experimental stage oscillate around the one obtained in the certifying stage, but on a regressive line all results obtained in the experimental stage along the four formative assessment tests are not as good as those obtained during the certifying stage (Figure 4)

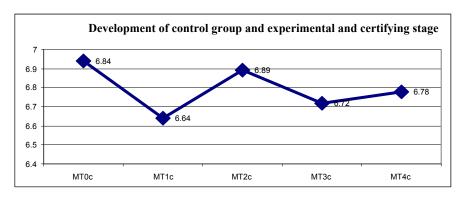


Fig. 4. - Development of control group and experimental and certifying stage

However, for the experimental group, we see an upward trajectory (less than average obtained at the first evaluation test, which is lower than the average for the same sample obtained in the certifying step). The reason we believe that the results of the first test of formative assessment was less (than the performance of a pretest) is the immediate and effective neadaptării students to new types of requirements, the new style of teaching, learning. Subsequent evolution, however, shows that students were able to meet the new school demands and get better results than those acquired in the initial moments (chart. 5.).

Comparing the development (the experimental group and the control) in the experimental stage, we note that, while the control group recorded average cusp, near the value of certifying stage, the experimental group constantly increases until around of 7.30, recorded in the last test of formative assessment.

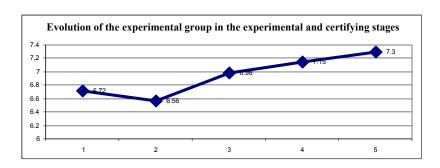


Fig. 5. Evolution of the experimental group in the experimental and certifying stages

j) **The results** obtained during **re-test** and **post-test** stage for experimental classes in comparison with the control, provide the true value of the fundamental assumption: promoting active and interactive learning on constructivist background can lead to overcoming the difficulties of learning encountered by students and influences significantly the school performance. This is confirmed by the results of test z, for each of the three dimensions followed by us while teaching Romanian language and literature: reading, writing and oral expression

Conclusions

Therefore we conclude that that the implementation of the constructivist educational practices based on differentiated instruction, cooperation, collaboration and active/interactive learning are the prerequisites necessary to achieve superior results, configuring bases for qualitative education.

We estimate that stimulating linguistic intelligence by promoting active and interactive learning is an opportunity to reduce the frequency of manifestation of learning difficulties. At the same time, however, linguistic intelligence is bound by the other types of intelligence described by Gardner, namely emotional intelligence subsequently defined by Goleman.

A pupil with educational achievement is implicitly a student with a medium or high emotional intelligence. Emotional intelligence interferes with other psychosocial structures: motivation, metacognition, affectivity, attitudes, will, temperament, etc. May be adversely affected by nervous or emotional disorders. They may be periodic or permanent: bulimia, nervous anorexia, complex disorders and panic attacks, stress, insomnia, chronic fatigue, anxiety, depression, elective introversion.

Thus learning and success depend on the level of emotional intelligence development. This is related to the extent to which the student fails to adequately monitor feelings, his emotions against themselves, others or a particular situation involving.

Learning difficulties frequency decreases considerably compared to the increase of emotional intelligence, expressed by sets of skills: communication, adaptation, decision making, problem solving, conflicting situations, blood pressure, the self, self-management.

REFERENCE

- *** http://en.wikipedia.org/wiki/Emotional_intelligence#Origins_of_the_concept [Online, 2009, 21 jan,].
- *** http://en.wikipedia.org/wiki/Social intelligence [Online, 2009, 21 jan,].
- Armstrong, T. (1987). Describing strengths in children identified as "learning-disables" using Howard Gardner's theory of multiple intelligences as an organized framerwork.

 Ann Abor: VMI Dissertation Abstracts
- Chabot, M., Chabot, D. (2006). *Emotional Pedagogy*. Trafford Publishing (July 6, 2006)
- Dreyfus, C. & Mangino, M. (2001, April). *Developing emotional intelligence competencies*.

 Paper presented at the meeting of the Consortium for Research on Emotional Intelligence in Organizations, Cambridge, MA
- Gardner H. (1996). Les intelligences multiples. Paris: Retz
- Goleman, D. (1995). *Emotional Inteligence: Why It Can Matter More Than IQ*. Ney York: Bantam Books
- Goleman, D. (1998). «L'intelligence émotionnelle. Accepter ses émotions pour développer une intelligence nouvelle». Paris: J'ai lu
- Goleman, D. (1999). «L'intelligence émotionnelle No 2. Cultiver ses émotions pour s'épanouir dans son travail». Paris: Laffont
- Goleman, D. (2001). Inteligența emoțională. București: Editura Curtea Veche
- Leblanc, R. (1997). *Une difficulté d'apprentissage: sous la lentille du modèle des intelligences multiples*. In Les difficultés d'apprentissage, Volume XXV N° 2, automne-hiver [Online, 2008, 21 jan,]. Disponibil: http://www.acelf.ca/c/revue/revuehtml/25-2/r252-02.html