

COMPARATIVE STUDY REGARDING THE METHODS USED IN PRIMARY SCHOOL (TRADITIONAL AND STEP BY STEP)

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Abstract: *The paper tries to underline the positive and constructive aspects of the use of specific methodologies based on the interactive and cooperation learning in primary school. The comparative research shows the changes resulted from the use of the interactive methods. It underlines the cognitive, attitudinal-behavioural and the inter-relational progresses of pupils from primary school integrated in the Romanian traditional educational and in the Step by Step systems.*

Keywords: *interactive methods, traditional methods, interactive pedagogy*

1. Introduction

Organisation is indispensable for the realization of the educational process – conscious, deliberate activity in order to obtain finalities. The most prevailing method of organization for the educational process, that has proven to be efficient in order to realize the instructive-educational objectives of the school, is represented by an organization into **classes and lessons**. During the 17th century, Copernicus set a basis for the instruction organizational system into **classes and lessons**, the system rapidly spread across Europe and later in the entire world, continuing to be the dominant modality of organizing the educational process.

The pupils' class represents the organizational frame represented by constant groups of pupils, relatively homogenous from the age point of view, from the school progress and the level of intellectual development points of view. *The class* represents a form of organization of the education process through which the common activity of teaching the pupils collective is realized under the teacher's guidance. Affirming the supremacy of the class as the main form of organization of the educational process, V. Anghelache offers a definition to the term “lesson”: “a form of organization for the education process”, “basic form”, “main form”, “dominant form”, “fundamental form”, “central form” (2011, p. 20, *online*).

Nowadays, in our country, an option for an alternative educational system, **Step by step**, has intensely manifested, the characteristics of which will be presented in the following rows.

The educational system Step by Step, represents the most prevailing system of alternative education in our country, being based on: *the importance of early education; the sustaining of underprivileged groups inclusion; education centred on children; learning organized in centres of activities; the family and the community implication in the children's education and the respect and appreciation of human*

diversity. The specific of the system highlights the following characteristics: education practices that take into consideration the child as a whole; the education process is centred on the child, the education is more individualized; parents participation in the child's education and teaching is centred on the child's needs.

The need to complete and to extend the educational process outside the classroom, associated with the need to conceive education in complex and attractive manners lead to the functioning of more exiting and flexible forms of organization (Cojocaru, 2008, pp. 93-94) as for example: *education outside the classroom* – practical-applicative workshops, didactic trips and visits and *education outside the school* – pupils roundtables, consulting, meditation, educational, artistic and sports competitions, trips and visits outside the school.

2. Methodological particularities of the Step by Step educational system

The Step by Step educational alternative offers to the pupil an educational environment that promotes the wellbeing of every child. A hospitable, safe, stimulating and inclusive educational environment is insured, which promotes children's exploring, education and independence. The teacher manifests respect towards the child, showing interest for his feelings, ideas and experiences. Children are asked to express themselves; each child is encouraged to develop attachment and inter-individual relations. The teacher incorporates different materials that are sufficient, accessible and adequate from the development point of view, that stimulate children to explore, to play and learn. Children participate in the planning, the organizing and the maintaining of the educational environment.

The teacher organizes the space at his hand into interest areas, defined by logics, with the purpose to sustain education and development. Thus:

- Learning is produced through individual discovery, accepting and encouraging personal manners of developing skills and knowledge;
- Learning is organized into activity Centres. A classroom must have a reading Centre, a writing Centre, a science Centre, a mathematics Centre, and arts centre and a constructions Centre; and other facultative Centres imagined by the teacher.

This organization modifies the teacher's place in the classroom, he no longer sits in face to face to children – a position considered to be unequal and of confrontation, but shoulder to shoulder – an equal, collaboration position.

The strategies used allow an active training for children in the development of knowledge and aptitudes, through (Tankersley, Brajkovic, Handzar, 2013):

- ✓ The use of strategies that address all development domains;
- ✓ The offering of activities that encourage experiment and creativity;
- ✓ The stimulating of thinking and solving problems;
- ✓ The facilitating of informal learning;
- ✓ The use of technologies adequate to the children's development level;
- ✓ The construction of positive, cooperation and reciprocal support relations;

✓ The valuing in teaching of children's anterior knowledge and experiences;

✓ The integration through learning experiences that allow a connection between educational concepts and day to day experiences.

The main methods used are the ones that encourage the development of an active and critical spirit. The activating of teaching-learning supposes the use of methods, techniques and procedures that implicate the individual in the learning process, following the development of thinking, the stimulating of creativity, the development of an interest for learning, in order to build him as an active participant to the education process. From this perspective, the methods for an active learning may be classified in:

a. *Methods that favour the understanding of concepts and ideas*, the value the pupils' experiences develop communication and relation skills, of deliberation on a mental plan and aim at the formation of an active attitude: discussion, debate, role play, brainstorming and Phillips 6-6;

b. *Methods that stimulate thinking and creativity*, determine pupils to seek and to develop solutions for different problems, to build critical reflections *and* valuable judgements, to compare and to analyse the situations given: heuristic conversation, case study, problem solving, didactic games, exercise and brainstorming;

c. *Methods through which pupils are learns to work productively* with others and to develop collaboration and reciprocal help abilities: mosaic, coffee shop, small groups' projects and the cube.

The active participative methods may be classified according to the **historical criterion** (that of reporting methods to the exigencies of periods during which the didactic process takes place), in:

a. *Traditional methods*: Algorithmic methods, Conversation, Demonstration, Exercise, Role play, Questioning and the Study of the handbook;

b. *Modern methods*: Brainstorming, Learning assisted by computers, Framing method, Bunch method, Cube method, Focus group method, I know-I want to know-I have learnt method etc.

3. The research design

As the paper title suggested, the research has started from the idea that the instructive process must be organized from the perspective and from the position of the most recent achievements of the interactive learning theories. This implies the application of some interactive didactic methodologies, of modern conception and of increase efficiency.

3.1. The general hypothesis that is to be verified is: *The frequent use of interactive methods in the didactic activity will lead to the optimization of the teaching-learning activity with pupils from primary school.*

The analysis regards the methodological aspects of traditional and SBS educational systems (involving the use of the some methods as: heuristic conversation, case study, problem solving, ideas assault, project, the cube etc.).

The sample consisted of 120 subjects – 100 pupils from primary level (preparatory school, first, second, third and fourth grades) and 20 teachers (teachers

from primary and preschool levels), from the traditional system build on classes and lessons, and from the Step by Step educational alternative.

3.2. The research methodology. The research realized has an ascertaining character that proposes the obtaining of information “regarding pedagogical phenomena investigated and the verifying of relations and correlations between the aspects analysed. The research methods used on most occasions are the questionnaire and the interview and other methods like observation, focus-group etc.” (Antonesei, Labăr, 2009, p. 21).

The research objective has required the use of a set of methods of data collection, process and presentation (Table 1). From the field of the psycho pedagogical research methods, there has been chosen two methods that fulfil the requirements of an ascertaining or observation research: *the method of investigation based on the written questionnaire* and *the pedagogical test*. The statistical-mathematical data process required the next: *tables of synthetically results, the determination of the central tendency and correlation determination*.

The method of investigation based on the written questionnaire. Didactic staff, teachers from primary and preschool levels are competent and experienced persons, capable to appreciate not only their pupils changings and progresses (cognitive, attitudinal-behavioural) as individuals, but also as groups, gained after the participation to didactic activities (organized in the traditional and SBS class). The questionnaire items identified the cognitive progress and the attitudinal-behavioural progress obtain by pupils.

Methods of data collection	Methods of statistical-mathematical data process	
The investigation based on questionnaire	The determination of the central tendency	
	The correlation	Bravais-Pearson correlation
	Tables of synthetic results	Frequency
Media		
The pedagogical test		
The observation		

Table 1. The research methodology

The pedagogical test. In order to identify the level of knowledge obtained by pupils during the educational process, a pedagogical test was applied. The pedagogical test used is a non-standard test, elaborated in order to appreciate the level of the cognitive achievements obtained. The items investigated the next indicators: the achievement of new information, creative-reflexive thinking, the ability of interpretation, the deepened understanding, the selective analyse of ideas, the systematization of knowledge.

The observation. In the present research, the use of the systematic (structured) observation was used. It was realized by an observation guide, which offered a pattern of systematization and hierachization of the primary data. As a way of creating the observation guide, an observation technique without a measurement scale was used (because the observation data will be analysed from a qualitative point of view). In

order for all aspects of the research to be recorded and gathered, analyses units were formulated in antithetical terms.

3.3. The interpretation of the analysis, the processing and the results interpretation consists in the comparison of results between the traditional and SBS classes.

From the level of **the cognitive development**, it was observed that the results of the pedagogical test are better in SBS classes than in traditional classes, tests showed significant differences for all the aspects evaluated.

Regarding **the attitudinal-behavioural changes**, it was observed that significant differences were registered for all the investigated attitudinal- behavioural indicators in the SBS class. The values presented above lead to the conclusion of a successful use of interactive methods, confirmed by the correlation existence, a connection of the post-test between the variables of the present research.

The analysis **of inter-relational progresses** revealed that the differences are significant between traditional and SBS classes.

Medium values for the progresses due to the interactive methods			
	Cognitive achievements	Attitudinal – behavioural changes	Inter-relational progresses
TRADITIONAL	3,47	3,55	4,20
	3,8	4,23	4,55
STEP BY STEP			
The results of the inferential processing for the STEP BY STEP CLASS			
	Cognitive achievements	Attitudinal – behavioural changes	Inter-relational progresses
R	0, 892 strong connection	0, 957 determinist connection	0, 996 determinist connection

Table 2. Changes resulted due to the use of the interactive methods

The values presented above conclude towards a successful didactic methodology in SBS class, fact confirmed by the value of the correlation index, between the frequency of the interactive methods and the progresses observed.

Table 3 shows the differences between the pre-test step and the post-test one, from the point of view of the behavioural manifestation registered by the method of observation in the experimental group:

TRADITIONAL CLASS	SBS CLASS
passive behaviour, lack of involvement in the activity	active and interactive involvement in the task
formal atmosphere, closed	informal and relaxed atmosphere

unsupportive environment, neutral	supportive environment
little discussions	many discussions focused on the task
communication and superficial relations between partners	communication and profound relations with partners
unconstructive criticism	predominant constructive criticism
inflexible and misfit opinion	flexible and adapted opinions
individual problems' approach	group solving problems
affirming individual experience in the same time with learning form the others experience	learning from the others experience
negative attitudes and behaviours	positive attitudes and behaviours

Table 3. The observation results

The accent is put on the development of some social skills by exerting special didactic activities in order to help in building these skills. The objective is to create a climate based on collaboration and equilibrium at the entire group level.

4. Conclusions

From the comparative analysis of the results obtained from traditional and SBS classes, it can be observed that the level of the cognitive achievements in the interactive mode is definitely superior. The attitudinal-behavioural changes are significantly positive for the participants that have taken part to the activities that involved interactive methods. The level of interrelations is highly maintained in the SBS class, the activities realized have become an opportunity to solve the group problem (the perspective of the interactive pedagogy).

In conclusion, the frequent use in the didactic activity of interactive methods will lead to the optimization of the teaching-learning activity with pupils from primary school. The general hypothesis of the paper has been verified and validated.

Thus, we militate for an interactive pedagogy, which “promotes a model of reflexive-interactive training that encourages an interior reflection – individual and collective – and the debating of different problems, the direct experimenting of objectives, phenomena and reality processes, as pertinent preparation for a social integration. Moreover, democratic school is a school of diversity is a school of diversity, of confrontations and of agreeing to the offer and demand from the educational system, a school that builds curriculum (constructivist), pedagogical devices, pupils' educational evolution, through interactions with other persons (parents, colleagues etc.) and other institutions (schools, local administration, economic agents, local and areal community etc.) - (Bocoş, 2013, p. 51-52).

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