NEW STRATEGIES AND METHODS IN THE INITIAL MATHEMATICS EDUCATION

PhD Snezana Jovanova-Mitkovska

Faculty of education, University "Goce Delcev, Shtip, R. Macedonia

Abstract - The last few years have all night to try transforming the traditional teaching in the modern teaching with different structure of its elements: psychological theoretical paradigms, goals, plan and program of work, the role of teachers and students, forms and methods of work, ways of attendance and assessment, content, organization, methods of learning and teaching. This is also refers to the area of mathematics that in today's more and more developed. Modern mathematics implies that education does not aim to complete the child to information, definitions, formulas, but contrary to the use of mathematical structure to develop child intellect, brisk of mind, the development of intelligence as a coherent system. In this sense, in this paper we set the following questions: when to start to work on the initial formation of mathematical concepts, how learn mathematics preschool child? Which strategies are applies from teacher/tutor in the implementation of the initial contents of mathematical education? What to order in the field of developing new and new strategies in this area? We hope that the theoretical consideration and research results may to give a significant contribution to the enrichment and advancement of educational theory and practices.

Key words: methods, new educational strategies, initial mathematics education, children

We live in a time of intense rapid development of science, engineering, information technology. This intense development reflects and intensifies the changes in all spheres of human life. It is not gone or educational sphere. Changes in educational processes and outcomes include the transformation of the educational system as a whole, and its subsystems, their internal transformation, changes at school level, changes relating to the educational outcomes of students. Changes in levels of school mean and refer to changes in the organization and structure of the school, changes in beliefs and values, changes in materials for teaching and learning, changes in behavior, style of teaching of teachers, changes in education - emphasizing the need for permanent improvement, changes in the position and role of the student's educational process, all to become a

school principal organizational cell to be characterized by a very good organization and implementation of teaching.

In learning problems but no one ideal approach, but there are various models, methods, forms which show different performance in different condition. Therefore, origin and attempts to transform traditional teaching in modern education in its different set of structural components: psychological and theoretical paradigms, objectives, plans and programs, the role of the teacher, the role of the student, forms and methods of educational work, how monitoring and evaluation, content, organization, methods of learning and teaching.

The last few years, specifically from 1994 onwards, and as a result of the need for the before mentioned changes, the territory of the Republic Macedonia has implemented several models of educational work with children of preschool age and school age children, including a particularly important place to the "Active teaching, interactive learning" model and "Step by Step" model. These models include the application of numerous contemporary strategies in planning, organization and conduct of the educational-training process, which means the active participation of both active entities in the process. Contemporary strategies apply to all the educational and training areas, teaching subjects.

It is not passed any area of mathematics. Although it is an old scientific discipline, older than 2000 years, mathematics, and today continues to grow.

Mathematics and entered the field of social sciences. This is due to the tendency to what happens in the natural; the social environment is what gets as a result of scientific research, to express, will present the exact values, quantitative, numerical values. To be able to use these findings child, student, man must be trained to acquire the appropriate mathematical culture and adopt a methodology for their application.

Trends in this area go towards the creation of a new modern and educational/teaching work in mathematics which will monitor trends in the development of mathematics as a science, but complies to the interests, abilities and needs of preschool and school age children.

For new and advanced mathematics that goes into all pores of human life, whose pace of development and degree of implementation is increasing, one must be prepared since preschool. Namely, with numerous mathematical concepts meets the child from his earliest age. Often examples where the mother in daily communication with your child - infant of 1-12 months, when feeding, clothing, dancing, singing with children, using mathematical concepts. Example: Have

another scoop: Lift up, and spread, to give the manikin a toy and so on. The process of formation of mathematical concepts was more severe in pre-school institutions, where the targeted activities of the educational and educational area-math and across different types of games organized way run this process. Weekly number of classes of subject matter in elementary school math class instruction stream, or 20% of the general structure of the program comes to elementary school math program, is another fact which speaks of the importance of this subject.

When it comes to mathematical education, inevitably the question of what mathematics as a science can be singled out, shaped, integrated into the curriculum in mathematics. Teaching style foundations of mathematics can be found in mathematics as a science, it is taken from the selected content, the same didactic-methodical transform, and their intensity and broadness adapt the intellectual abilities of children / students.

Through education and teaching mathematics child / student should be recognized, identified (for a set term, element of the set), to define certain mathematical concepts, relationships and patterns. The child from earliest years to the eve of certain concepts such as number of years, fingers of hands, feet, but they expressed concepts is no mathematical dimension. That is therefore the essence of mathematical education is to expand the fund of concepts and relationships as well as training for their expression in mathematical symbols. Child / student must be placed in a situation to understand, understand mathematical concepts, not to reproduce and memorization. Bearing in mind broadness and abstractness of mathematical concepts, it persists in modern mathematical education, first to move towards an understanding of mathematical concepts through the use of concrete objects, and later adoption of abstract concepts, application of inductance approach - which allows the child / student not only to determine conditions, but also reveals some cause and effect relationships, to comprehend the elements of the so-called mathematical causality, lets respect the principle of gradual approach, i.e. going from concrete to abstract; development of logical thinking, a way that provides lasting quality and learning with understanding.

Modern mathematics education implies that there will be no order the child be given ready-made definitions, theorems, formulas, but to the contrary by means of mathematical structures develop mental powers of the child, agility of mind, development of intelligence as a coherent system.

Inevitably in that direction is the issue of when to start work on forming the initial concepts of mathematics or what level of psychological development is allowing a child to work on the initial formation of mathematical concepts? How preschool children learn mathematics and school age of

the child? What strategies are applied educator / teacher organization of the initial content of mathematical education in the various models of training / educational work?

The answer to these and other closely related questions will be the subject of theoretical discussion and research by this paper. We hope that the research and theoretical discussion will give a significant contribution to the enrichment and promotion of pedagogic theory and practice, particularly in the field refers to the strategies applied in primary maths education.

When to start work on forming the initial mathematical concept?

Modern understanding of elementary mathematics are based on contemporary understanding of psychological, primarily cognitive development of a child, but also to contemporary theories of learning and teaching. Cognitive development of children is best treated and given the representatives of Moscow and Geneva school. Particularly significant in this regard are the findings of Pijazhe, Vigotski, Brunner, Djui, Galjperin, Talizina, which indicate the directions of stimulation / acceleration of cognitive development, and amplification / expansion, enhancement of the dominant features of cognitive development.

In all these theories, particularly stresses the meaning of internal processes: knowledge / cognition as a rational way of coming to truth, motivation, organization and memory-sensory, short and long term.

Recognition of mathematical concepts should follow the intellectual development of the child / student who is developing quite fast, continuous, intense, but regular development. Hence, the task of mathematical education is the development of the child / student to quantify the specific objects and phenomena, to identify their proportions and relations, to find their mathematical dimension.

Namely, the child of preschool age learn by playing the game and learning Through play children acquire ideas about the world of objects and their meaning, comes to knowledge about themselves and their capabilities, their abilities. Spontaneous learning allows the child to distinguish between reality and fantasy, learning to cooperate with others and refer to socially acceptable way to develop their creative and aesthetic abilities. In the game the child is motivated and emotionally engaged.

In preschool period but requires an organized system work will enable the optimal development of children of this age. That work includes targeted and free activities for children. Here the teachers planned to organize children's activities, working to expand the children's experiences, acquiring new knowledge about the world, adopting the skills and habits, the development of physical, intellectual skills. These activities are a form of organized learning, which bends the game, but it gradually varies in their purpose, internal structure, flow and results. There are more types of children's games that are shared on the basis on several criteria. From the aspect of mathematics in particular the major role and importance have games with rules, construction within the games which include: design, construction, stacking. The children work with various materials which allow perceiving the characteristics and a property of the material, but perceiving the characteristics of various geometric shapes to be.

Greater role and significance are teaching games that are attractive and acceptable form of activity and which are accomplished certain tasks in educational preschool educational organization. The didactic games allow children to find themselves in research, creation, analysis, comparison, allowing familiarization with space and spatial relations are activated intellectual processes: analysis, synthesis, comparison, generalization, contribute to the formation of perception (color, shape, size), developing skills of observation, creative imagination and other intellectual abilities, contributing to accuracy in expression and voice, enrichment a dictionary, contribute to the development of self-control, discipline, socialization, the positive traits of character, independence.

Besides the free activities in preschools great role and importance and have directed activities. These activities are designed and implemented with children of all ages to preschool. Through the mandatory activities children: acquire knowledge, form the concepts in the field of social and natural environment, mother's language, music, visual arts education, mathematics. While these still have a basic knowledge of certain scientific credibility. A targeted activity in the mathematical area is realized by mathematical content, which include activities in practice, in the form of training in certain materials and didactic play and the like.

As for the psychological development of children from the first cycle of education, the characteristic is that the attention of children is short, fall 20-25 minutes, which must be in consideration for the implementation of the contents of the subjects and seeks pm be filled with activities that will keep children's interest and will stimulate his curiosity. The opinion of children is still a particular level, which means that no elements of abstractness, but is only a transitional phase towards abstract thinking (characteristic of students of Class I and II, Class III for the show called sinkretical opinion that covering the concrete and abstract thinking). Children react very

emotionally turbulent, admire, but their enthusiasm quickly decreases. Fantasy is very alive and reproduction to later be called motives creative imagination.

Characteristic of their social nature that there is a tendency for clustering, first tandem, and small groups according to sex, to later in the V, VI class are grouped and resign as members of the class (regardless of sex).

The school is necessary to create conditions for intense cognitive, conation, emotional, social, ethical, business development of the student. Educational activities in primary education, and in its institutional form, the school, are realized through instruction as a procedural activity that drives the teacher, which is aimed at achieving the objectives set down in the curriculum and program review, acquisition of knowledge, skills and habits (the task of teaching material)., development of students as individuals (formal assignment) and their education (educational task).

How preschool and school age children learn mathematics?

Child learn math better through activities that enable you to:

- explains;
- Thinking about what is explained;
- solve problems using information and data to which comes alone;
- explains how self comes to solving the task.

Children learn math more easily established when the contact between what is provided for learning, set rules about it with their own previous experience. Using tasks that involve household items (such as measurement of fluid in the cups, handling in the kitchen or observation of everyday events (weather conditions through Sunday), they can see that mathematical ideas are all around them.

A very important part of learning mathematics is learning how to solve problems. In this sense, children are placed before the problem situations that encourage their curiosity and exploring spirit, affect use research to applied learning through trial and error in developing their capacity for reasoning and learning how to go further in solving problems. They learn that there may be more than one way of solving the problem and more than one answer. Also learn how to clearly express them in explaining their decisions.

Preschool and school period is very important period for educational growth, positive, successful experience with mathematics in this period is crucial. All students can be significant progress in mathematics, if encouraged and supported environment for mathematics and, if

applicable instructional, assessment strategies and approaches that will lead them to develop meaningful and effective methods for multiplication and enrichment of their knowledge of the type: game explanation, direct instruction, research in a stimulating environment, individual and group activities, activities adapted to their different learning styles (visual, auditory). With the use of processed natural and shaped for the needs of teaching materials such as models, paintings, drawings, etc.., Simplifies the way for finding new knowledge.

Given the fact that the species in the traditional teaching of mathematics is fostered in psychology teaching mathematics are trained capacity and capability for storage and reproduction, it led to a situation to create fear and abhorrence towards mathematics, mathematics is the Market: Unknown, "it is not every can grasp and understand. Therefore it is necessary to establish the child's positive attitude and positive emotional orientation toward mathematical concepts that are available and comprehensible for anyone who would show interest in them.

It is huge and the role of teachers especially in the training of students for private study, self-tuition and enabling students to establish effective strategies for learning such as effective use of picture content and mentally-imaginary thinking (applying the technique, "directed fantasy"); use of memory and repeat the strategy because it has not developed effective strategies for the elaboration of content - connection with the previous knowledge of the present study, using the strategy Wed-UP-SP, Paraphrase, finding analogies, examples, introspection, structuring and organization of knowledge and meaning supervising the work (setting the goal and tasks in the process of learning).

As we understand the notion of teaching / instruction strategies?

The term strategy derives from the Greek language has a meaning of wisdom, craft, skills, mastery of the conduct of any process, action or activity. Original meaning refers to the military skills for conducting battles and sophistry the proceedings. According Vujaklija science indicates strategy for maintaining the military skill of warfare, a book about the skill of warfare. Same root and meaning has the term strategist, which is defined as a connoisseur of the art of warfare, military commander.

Notions strategist and pedagogical strategy in terms denote the identification of the activity (a system of procedures and selection methods) to those who are leading cognitive process, or teacher. This is the direct meaning of the term strategy. In this indirect sense interpretation concerning the activities of other entities in the process i.e. child / student. Physiognomy, design, scope and quality of cognitive activities and indirectly depend on the type of strategy that promotes teacher.

In the literature found various definitions of the term strategy. Stevanovic, M. gives the following definition of the term learning strategies: teaching strategies represent unity and interaction of personalized and interactive non personal media relations at the teacher and student in different numeric structures, procedures (methods) in teaching situations that allow a high degree of cooperation, organization, performance and evaluation of creative educational process. They include the media, sociological forms of educational work, teaching methods, teacher and student, place (space) and time of realization innovative teaching methods.

Every mental operation used consciously or unconsciously, to assist in the learning strategy is called. The strategy is directed towards the goal, the initiative to learn, to solve a problem, to understand and comprehend something.

However, our commitment is acceptable according to which teaching strategies will represent the unity and interaction of personalized and interactive non personal media relations at the teacher and student in different numeric formations.

Teaching strategies enable the development of learning needs and creativity of students. Application of various research activities initiated by the teacher / educator, affect the encouragement of so-called intrinsic motivation among students, which in turn provides an incentive to internal challenge to succeed, to track traffic something new, it is critically reviewed, accepted, to assume the new position to execute the appropriate conclusions.

Teaching strategies enable the acquisition and so methodological knowledge or as it is also called knowledge for knowledge, to know how to investigate, create, to create, to works. Application of various forms of social work: individual, pair work, group to allow so-called cooperative learning, facilitate collaboration, continuous communication, interaction, but simultaneously strengthens and sense of responsibility towards themselves and towards other participants in the group / unit.

In teaching / education activities using a variety of strategies: strategies of learning and teaching; strategy experience and expression of the experienced and the strategy of research and creation, strategy for cooperative learning, critical thinking strategy, description explanation strategy; demonstrational strategy conception (mindset); strategy simulation, strategy group discussion ..

The goal of teaching strategies is the preparation and training of subjects for self-study samopoduchuvanje, permanent education, creativity and active interpersonal communication between subjective factors - teacher-student and among students themselves.

Which strategies are applies from teacher/tutor of the initial contents of mathematical education?

To answer this question which strategies are applies from teacher/tutor in the implementation of the initial contents f mathematical education we realize one little research in several municipalities in R. Macedonia. It is the empiric research conducted in several municipalities Štip, Berovo, Sv. Nicholas, Vinica, bearing in mind that the possibilities of researchers and cooperation with the institution in this part of Macedonia. Sample was accidental. We realize interview with 15 teachers in the preschool and elementary school institutions of the above municipalities. Calls are run flow month of March, April, May 2009. Talk is implemented in the premises for the rest of teachers and is implemented entirely free, and with use the recorder. The purpose of this research was to obtain qualitative knowledge of the application of various strategies which are applies from teachers/tutor for the adoption of mathematical concepts by children / students.; to obtain qualitative data on the activities of students (type, size, diversity), interest, motivation, level of autonomy, to come to the knowledge of how students learn, and adopt perceive initial mathematical concepts;

In this way, we came up closer information on how planning strategies taking used, implementation and evaluation of training / education activities of the initial mathematical education.

Interview with teachers and educationalists we start with some general information about them such as what school they have, how much is their experience, whether as educators / teachers participated in the implementation of specific projects and that, by that model work in the general ward work , educational group, whether the same pattern of work had training on how to work, how to inform and gain knowledge about different strategies that can be applied in various stages of training / educational process

The interview is to begin with some general information for them such as how their work experience, what are their initial education, why choose this call, whether their theoretical and practical knowledge gain during their initial education is sufficient for successful work with children in their employment, whether they were need necessary training and other seminars for their successful involvement in the work with children and in the collective, and to be able to successfully do their work and so on.

From the obtained data from interviews can be found the following:

- work experience teachers is 10-15 years, which means that they are relatively young, but still with solid work experience;
- their initial education at the Teachers Academy department for Educators. Many of them extend their education in the academic studies for educators or primary department, which suggests that the desire for education and permanent professional training at present the majority of them;
- that they chose this call, because like many children, "Children are the greatest wealth in this light," say some of them, This was evident from their response and expression of people and non verbal reaction;
- During his initial education, they acquire general and professional knowledge and skills that would enable them more easily into the work with children of preschool age but that the support and help that they have of their older / experienced colleague of many of the great importance for the success of which they have for work with children of preschool age;

The next topic of conversation was about planning in general and more specifically to the planning of teaching / education activities in primary maths education, which have shed light on how the issues of planning, it all plans that are fundamental questions that whilst set?

S.I. (educator in the preschool -Vinica): When planning to follow the preparatory year program issued by the Bureau for Educational Development. Planning team. Make annual global and operational plan. We meet weekly at the end of the week usually on Friday and discuss what will work over the next week. But this does not mean that the contact and exchange ideas on a daily basis. Creating so-called thematic curriculum which has a central place child-area educational nature and society. Then we think that content from other areas can be integrated in this area. Educational-area educational math a little more difficult to integrate with other areas, but the application of different teaching methods and materials of our work facilitates integration. We then plan goal and objectives of the working day or they can be implemented in several days. What is new in this model of work is now planning and activities. Frequently discuss what and when you work i.e. which activities to realize we as educators, children, and together we have children and examples of proposed activities in our program are the basis for finding the strategies through which the easier way to interpret these content and make them more interesting for children. Also plan and which methods to apply Moreover, the forms of work will use the time and during the cognitive process. Also predict different strategies in phases of the action items, and predict possible products of the activities of children. Also the plan and the manner of implementation of

the activity having regard to the type articulation stage of activity for the adoption of mathematical concepts, which by way of detailed description to highlight the activities of educators in the opening, the central and final part, and the activities of the child in all three parts of the activity.

The next topic of discussion concerned the stage of implementation, specifically that the activities of teacher educators, the activities which the children / students in various models of training / educational work in mathematics?

J.CH. (teacher in primary school-Sv.Nikole): As to conduct, specifically that my actions were that of children? I think that in this most strategic stage: direct, encourages cooperation, I ask, remind, suggest, advice, discuss, explain, motivate, and demonstrate. Students: listen carefully, work independently, collaborate, discuss the group, draw, compare, classify, we notice similarities and differences, recorded, monitored, measured, weighted.

With the formation of notion for spatial orientation, the formation of the notion of set, the number of potential, the formation of the basic concepts of arithmetic operations, using various strategies such as demonstratively strategy, strategy simulation, descriptive strategy, a strategy for research and creation, but mostly attaching strategy game.

Bearing in mind that the process of forming concepts children should begin with observation and manipulation of concrete objects and to proceed with the formation of perceptions and performances that are the foundation for building concepts for later moving to thinking - abstractions, generalizations.

M.H. (preschool teacher, Berovo) - the application of various strategies appears as a necessity due to the fact that typical for children / students of this age is specifically-inductance approach in overcoming the mathematical content, respecting the principle of evidently and the need for greater activity and role the teacher educator, specifically teaching strategy. Experience and expression of the same experienced so characteristic of children / students of this age who more emotionally perceive and be entered in any content, so in that sense and mathematical. Great is our role in terms to provide the children an active approach, gradual entry into the world of entertainment and interesting mathematics. Use various forms of educational work, apply a variety of methods-is most dominant method of solving problems and method of play, as well as contemporary educational technology, with appropriate ICT software. Dominant activities which are carried through the contents of the initial mathematical education games of various types.

The next question concerned the way they performed the valuation of children by educational group, students from the department?

J.K. (teacher in I class in primary school, Stip): As for valuation, I am a supporter of permanent, continuous monitoring of students who spend using different strategies such as observation, questions, tests, portfolios, assignments, quizzes and the like. Descriptive assessment which started being implemented in primary education in some way makes me monitoring, specifically the instructions that we received for descriptive assessment, exchange of experiences with colleagues. Because the children came with enormous knowledge of the preparatory year, I was relieved and the access and means of implementation of the contents of the initial field of mathematical education. Always follow the children. Everyday setting who will follow, that the activities of student-perceived, compare, count, collect, use mathematical vocabulary, which will follow, observe, ask questions, and speak.

S.SH. (preschool teacher, Berovo): Valuing enforcement everyday. Always follow the children, their progress in all areas. I am very connected with them, more of them I'm from a small experimental group. Follow their mathematical development and helping where there need be. Special addressing attention to the application of mathematical terminology, recognition, comparing the children, series, manner of performance of classification, counting the children, spatial performances. No pre-determined who will follow that day, but try to make progress on each child in terms of its mathematical development to be recorded in a separate file which is the development of each child.

The last question was about the opinions and proposals for improvement of the initial work in mathematical education?

All tutors and teachers made a proposal to organize a new seminar by the Bureau of Educational Development, experts for the implementation of new strategies in primary maths education. The seminars help teachers to understand and understand the application of various strategies, new methods and approaches that improve the quality of teaching, achieve better results from students. According to their expression provide "basic and clear guidelines for future work. Think that seminars are the primary drives in teaching, to help its modernization, modernization, intermediaries for access to new information, to innovations in teaching job, make it possible to exchange ideas and experiences among peers. Therefore is an interesting idea, expressed by one of respondents' successful educator, successful accomplisher.

Were also unanimous about equipping with modern technical devices, new didactic material.

S.SH. (preschool teacher, Vinica): The work in this educational area can be enhanced only with teamwork, with the provision of modern technical devices, the supply of audiovisual assets

will increase evidently, more literature, collaboration with faculties, universities. And there was unanimity on the need to make a new more contemporary program for primary education which will facilitate the path to gaining new knowledge.

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After analyzing the results of the interview can conclude the following:
- Planning is an important stage for learning education activities in mathematics, which is proceeding in line with the Program for School / educational work complies with the needs, interests of children / students, under particular conditions and capabilities of the environment in which will continue to be realized. Novelty in planning and planning activities to implement the teachers / educationalists and activities for children / students and their joint activities. See applicable: annual, monthly, weekly and theme planning. Plans are generally chosen with certain exceptions, depending on the position of educator / teacher and his collaboration with colleagues from the collective (permanent conflicts older, younger teachers / tutors).

The second-phase implementation generally refers to the activities of teacher educators in terms: demonstrate, explain, describe, compare, ask, painting, play, discuss, directs, and gives directions, helps. And activities for children / students: Next, listen, respond, drawing, counting, playing, writing, prescribed, classified, individual work. There are several approaches for the implementation of activities- ascertainment and algorithmic.

Third-stage valuation covers a wide range of activities for monitoring and evaluation of students achievements in this area realize that teacher educators who conducted daily as interviews, discussions, quiz, test questions, observations, job preparation and homework, the student products, portfolios that include: the use of mathematical terminology, identification, comparing children / students, series, manner of performance of classification, counting, the wealth of mathematical vocabulary, ability to formulate, presenting solutions to specific problems set. Valuation of all its peculiarities and characteristics is present in and class in preschool education, which have a major role conducted seminars and made to describe the assessment, prepared materials, individual records for children / students by the Bureau for education Development.

Cooperation, mutual communication, teamwork, organization of various ways of permanent improvement and the need activity rings are the most important for success in primary maths education.

Recommendations for teachers and other professionals working in school

• Strengthening the children's natural interest in mathematics and the use of their predisposition to mathematics;

• Building children's experience, taking into consideration his family, linguistic, cultural and social environment, their individual properties for their informal learning and knowledge;

• Founding of Mathematics curriculum and teaching practices on knowledge of children's cognitive, linguistic, physical and social-emotional development;

• When preparing the curriculum and continuous learning in practice to have in mind to undertake the activities in which the emphasis will be placed on problem solving and developing critical thinking through the constant presentation, communication with all parties;

• ensuring that curriculum is coherent and compatible with the mathematical science;

• Downloading the children are deeper and more sustainable interaction with key mathematical ideas;

• Integrate mathematics with other activities and other activities with mathematics;

• Provide time, materials and teacher support for children in their commitment to play, in which they explain and manipulate mathematical ideas with great smartness and great interest;

• Inclusion of children in everyday activities that involve math - in bargaining, measuring products, stacking plates and cutlery;

• Playing games that involve math-down in terms of direction, classification or calculation;

• Regularly solve mathematical problems;

• Supporting children's learning through constant evaluation of children's mathematical knowledge, skills and strategies;

• Creating a more effective teacher preparation and to allow extension of their professional development;

• to apply collaboration teamwork in developing a well-built system of additional high quality standards, curriculum and evaluation system;

• Providing the resources necessary for overcoming the barriers to children's mathematical progress in the classroom, community, institutions and within the wider system;

Acceptance of these recommendations and suggestions useful for our child-education system that is increasingly leaving the thesis that mathematics is understood, not taught, but on the contrary worth love to work with children, expertise, application of new strategies facilitates the way to

overcome the mathematical barrier and makes mathematics interesting, grasp, entertainment, mathematics without tears. "

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