EDUCATOR AND HIS CAPACITY FOR IMPLEMENTATION OF THE INITIAL MATHEMATICAL EDUCATION

PhD Snezana Jovanova-Mitkovska
University"Goce Delcev", Faculty of education
Stip, R. Macedonia

Abstract

The system of organized pre-school education for children from preschool arises from long ago and is part of the whole educational-education system in most countries in the world. Organized pre-school education and training provides education to children for successful adaptation and inclusion in the process of teaching. In pre-schools, children are introduced and taught how to learn and process knowledge to pleasant experiences, joy and special interest. In all this helps, teach, the most important model for identifying, preschool teacher. Namely, the earliest age a child learns to take care of what teacher's say, of what he would do, what teachers considered important, that information will required, what should be paid attention. In this paper we will try to shed light role and importance of teachers especially in terms of his role which has the initial implementation of mathematical education.

Educationalists must be proactive, especially when introducing children to mathematical concepts, methods and vocabulary "
(Clements)

The system of organized pre-school education for children from preschool arises from long ago and is part of the whole educational-education system in most countries in the world. Occurs as a consequence of accelerated socio-economic development, the development of industrialization, urbanization, and as a consequence of all mass inclusion of women, the role holder educator of children in the family, participating in organized social life and production.

Preschool education thus appears as a supplement to what family means education in the sense planned, systematic and organized action of physical and psychological development of each individual, or to create equal conditions for optimum development of children from preschool aged.

Through her curiosity, research spirit, activity, children quickly exhaust the possibilities and what it offers family environment. Despite the enormous desire of parents for the upgrading of children's experience, their efforts, however, can not meet the needs and interests of the child's intellectual upgrade, their work is not enough width, is not organized, do not place the system.

Within the global educational and education systems in most countries, education and preschool education has raised the level of national priority. This stems from the fact that early access to preschool education and education leaves its mark on the whole further education of every individual, its building in a positive, creative and active person who would have faith in you, respect you and others around her. Preschool education and education also provides vertical mobility of generations in the educational system and efforts to achieve lifelong learning. Many scientific studies show that students who attended kindergarten show greater success in the further education.

That hence arises the need to prepare for the departure of children in school. Actual departure of the children in the school the child presumed to possess a certain quantum of knowledge, some level of developed abilities, developed emotional volitional features, such assumption and condition for successful learning. Of course, all this family education can not provide child. All this provides the existence of an organized system of preschool education.

On departure in school child should have developed perceived skills, perceive deliberately and memory. Should to some extent to have developed skills of analysis, synthesis, and perform generalize conclusions? So, the child must possess skills that are necessary for the acquisition of knowledge and further learning. Intellectual level and involves a range of ideas about nature and the environment in which the child lives, which will rely knowledge that the child will acquire in school. These are presented and the notion of human life and activities, the products of human work, for some seasons and natural phenomena, for animal and plant life, natural performances and notions of space and time for batch relations and cause - consequence links.

Children need at the end of the preschool period and to reach a certain level of voice culture. Pronunciation should be correct and clear, grammatical sentences structured and complete, and current should be sufficiently large for mutual understanding and attending classes. Besides the basic knowledge and concepts presented, children's readiness for departure to school means the specific skills for reading, writing and mathematics which are dexterity movement of the hand and the coordination of hand and eye, observed of forms, understanding of size, quantitative relations and symbols.

Preparation for school sets specific requirements and social development of preschool children. In this period developed socio-moral feelings and emotions such as emotional attachment the parents group in which the child is bring, the feeling of camaraderie, and cooperation with others. Preschool institution develops habits of social behavior such as decency, respect for elders, gratitude for the service-made, persistence, discipline and more. These habits are the basis for life in the community and the acceptance of obligations that the child posed by the school.

The process of preparing a child for school starts from the moment of his arrival in preschool institution. Preschool institutions contribute to preparing children for school with its structural pedagogical work that is accomplished with a variety of content and specific methods and forms of work.

Organized pre-school education and training provides education to children for successful adaptation and inclusion in the process of teaching. In pre-schools, children are introduced and taught how to learn and process knowledge to pleasant experiences, joy and special interest.

The new findings of Pedagogical-psychological thought in this direction, emphasize the fateful importance of preschool education and its further development, because in that period the child has the opportunity for maximum development of intellectual abilities, coming into contact with the phenomena and events in the immediate environment that affect the development of curiosity, interest in gaining the basic concepts presented, enriching experiences and knowledge, forming the basic cultural and hygienic habits, and setting the foundations for the socialization of the child.

Existing modern plans and programs to work in preschool education, i.e. kindergarten enabling just such a child prepare for departure at the school, which is the basis and prerequisite for further education and education. And according to a new national program for development of education, preschool education and education receives equal treatment and importance of other subsystems. The range of children in preschool education are much more concrete in large scale group before departure to school will be a condition for raising the quality and vertical mobility of generations in the educational system, a successful start in primary school.

In this regard, education and preschool education has great significance and role in the establishment of foundations and foundations that build performances, concepts, knowledge, skills and habits, and development of creative abilities of children.

So, in the preschool period created the basis for proper and versatile education and education of children, and therefore the demands for increasing coverage of children in the system of preschool education.

The purpose of preschool education is not in accordance with scientific and pedagogical achievement and general purpose of education and education to ensure the normal physical, intellectual, social, moral and aesthetic development, as a basis for further education and education in the school.

The main task that arises from this way concept goal action of the general strengthening of children's bodies and create conditions for normal physical and mental development of the individual, especially this time of life when his biological child development is fastest, and thus comprehension of the middle child in this period of development is greater than ever in development.

Many educators and psychologists suggest that the development of the child, their notices of the world, and the development of individual skills in children is largely dependent on adults who are in their proximity (parents, family, educationalists, and teachers). Besides the parent most influential person of the child, the most important model for identifying a schoolmaster. Namely, the earliest age a child learns to take care of what teachers say, of what he would do, what teachers considered important that information is required, what should be paid attention?

Teacher / educator, he is a child who is identified, a person with the same authority, such as the child who has formed his character. In that direction are important and general human nature which should have teachers / teacher as patience, self-criticism, emotional wealth (emotional maturity to be a person who is able to establish positive, close, warm relationship with children and youth, to consider signs of emotional, social, intellectual disabilities); respect, moral traits: humanity, justice (fairness, tact and stimulate; With these qualities their teachers / educationalists allow the establishment of cooperation, enabling the optimal conditions for the development of individual and collective, and the life of educator / teacher becomes more productive and happy); solidarity honesty, as well: professional features: master of his craft (the person developed general organizational logic and pedagogic skills; person with their social political, ethical, cultural aesthetic and ideological positions. teachers / educationalists the nature of their profession directly participate in the socio-political, ideological, ethical, cultural and aesthetic life of the community, society), creative, cultured and culture, animation and enthusiastic; social interaction: communicative (communicative Openness and inspiring optimality. These qualities enable the teacher to successfully achieve voluntarily chosen activity and stimulating work); Cooperative (openness to new experiences of other teachers / teachers and professionals dealing with the issues of teachers / educationalists); consider opinion of others; Coordinator;

Innovative new hit to be carried out within the primary and preschool education and education in the Republic, change predict the position and role of educator / teacher, especially in terms of its activities and cooperation with all stakeholders in the educational process. Especially we are interested in the empowerment of teachers / educationalists, particularly in terms of their willingness to bring mathematics to children / students.

Educationalists / teachers are the ones most influential in the alignment of mathematics to children / students. Those tutors / teachers who understand and love mathematics generally produced positive experiences for their pupils. Exactly, there is the necessity of possession of certain attributes such as curiosity, creativity, and flexibility.

In order to see what the situation on the ground, i.e. how much and how qualified teachers / educationalists to work on the initial mathematical education conducted this small, micro research.

With him came to know under which identify strategies applied by teachers and educationalists class I in medium and large groups in three successive stages of educational process including: planning, implementation and evaluation of the initial mathematical education. Talks with subjects are conducted during the 2008/2009 year. The sample includes teachers from two elementary schools as follows: Primary school "Vanco Prke" - and "Dimitar Vlahov", municipality of Stip and teachers from the three institutions and the children "Vera Ciri Viri Trena,","Astibo" clone "flower" and Astibo "clone" Sunflowers ", also from the municipality of Stip.

Talking with interviewed 15 teachers / tutors had previously agreed, so were familiar with its purpose, and themes around which it was conducted. The talks, which were realized in the premises for rest of the teachers / educationalists, takes about forty minutes, are free and watched the anchor used recorder. In this way, we came up closer information on how planning strategies taking used, implementation and evaluation of teaching / educational work of the initial mathematical education. Interview with teachers and educationalists to begin with some general information about them such as what school they have, how much is their experience, whether as teachers / teachers participated in the implementation of specific projects and that, by that model of job work in general ward , 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.

According to their responses to question teacher's tutors who have long experience, after 15-20 years, so it comes to experienced teachers / tutors. Their teacher education have gained at pedagogical faculties-section of teachers where he acquired the basic preparation and implementation of educational activities, educational area mathematics. It means a lot to conduct such activities by mathematical area but as a major source of knowledge of mathematical concepts are emphasized: the exchange of experiences with colleagues from the actual kindergarten, collaboration with colleagues from other gardens and visit the small number of seminars organized by the Bureau development of education and co-coordinator for the model with Step by Step "at the kindergartens.

J.CH. (preparatory schoolmaster in "Astibo" clone "Sun Flower"): My knowledge of the existence of different models of working with children large group got through the exchange of experiences with colleagues not only in our municipality and beyond. Co-coordinator for the model with "Step by step, helped me a lot in the realization of the educational content of different education areas. It also helps me a lot of different information sources, primarily the ability of the Internet to take some data concerning the various strategies they use to achieve different content. As for seminars, training personally think that you need more organizing them, because the realization of certain contents, particularly in the mathematical area, encounter a difficulty, so we need assistance from appropriate professionals.

J.K. (teacher at first class from school "Vanco Prke): participated in several training sessions that addressed the" active teaching-learning interactive. I think training is very important; important is our personal commitment during organized workshops, so we then new learned to successfully implement the work with our children in our classroom. However, new learned to adjust the conditions and opportunities that we have in our environment. I think it needed more training. Also collaborate successfully with colleagues in our school, colleagues from schools and the wider community, share experiences, ideas are what mean the improvement of work in our classroom.

The next topic of conversation was about planning in general and more specifically to the planning of teaching / educational work in the initial mathematical education, which shed light on questions about how the planning that all plans that are fundamental questions that whilst set?

They work in team. They make the annual global and weekly operational plans. Creating so-called thematic curriculum which has a central place educational-area educational nature and society. Then 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."

The next topic of discussion concerned the stage of implementation, more specifically, that the actions of the teacher / educator that activities of children / students in mathematics?

J.CH. (preparatory schoolmaster in “Astibo"clone "Flower"):As to conduct, more specifically, that my actions are 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, observed similarities and differences, marking, observing, measuring, counting…

The next question concerned the manner in which the valuation is performed on children from educational group, students from the department?

A.N. (teacher at school "Dimitar Vlahov"): Evaluation performing consistently. Often they observe, but it and perform tests, competitions, solving learning papers and follow them. Most students have an attended kindergarten, so to have a great progress in their mathematical development. Continued follow. Earlier I plan on it that will follow, and how to follow that action will follow. Individual records are prepare for each student, assessing my descriptive facilitate this work. Need to know what specifically to look for.

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 the initial mathematical education.

J.CH. (preparatory schoolmaster in Astibo clone"Flower"): Our seminars are necessary. They learn new things, but we also have the opportunity to meet colleagues from other cities to exchange experiences, to learn something new.

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

S.SH. (schoolmaster average group "Vera Vera Trena Ciri): 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 observe, more literature, collaboration with higher institutions.

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.

What should have teachers / teacher who will teach children mathematics?

- Be a good connoisseur of mathematics, to know the mathematics they teach and why does it;
- Sound to know the psychological and pedagogic science and finds ways to make the material accessible to students. This means assessing and adapting the material, planning, listening, interpreting and designing the various ways in which students can respond.

- To be able to implement effective interventions educationalists / teachers should be aware that: All children / students can learn mathematics, that have a natural inclination to be stimulated and upgraded;
- To create, appropriate environment that will allow easier access to mathematics;
- To build on previous experiences;
- Can identify children's needs and that base to create appropriate mathematical situations;
- Create action plans;
- To participate in their professional development;
- To collaborate with parents in different ways and to find strategies to up their cooperation;

Effective teaching involves a mathematical understanding of what is needed for children / students to learn, and connected with the provision of appropriate challenges and support in their learning.

What should make good effective educator / teacher of mathematics?

- To understand the child that mathematics is important and entertaining;
- daily math work with children;
- Inclusion of children in everyday activities that involve math - the bargaining, the measurement of products, arranging plates and cutlery;
- Playing games that involve math-down in terms of direction, classification or calculation;
- When the child solves certain problems to ask what he thinks, why arrange puzzle such as, how does that in which direction, how puzzle needs and others.
- suggest the commitment of certain problems in solving a larger problem;
- To enable students to learn key mathematical concepts;
- To work effectively with other children / students;
- To evaluate and organize a variety of sources and materials will be available and necessary for children / students;
- To support the downloading of risks participate to work with children / students
- To support the communication of several relations;
- To facilitate cooperative and individual work will eve;
- To focus on building a desire for unity, trust, sharing;
- Capacity for evaluation of children's mathematical thinking.

Acceptance of these recommendations and suggestions useful for our educational-training system that is increasingly leaving the thesis that mathematics is understood, not taught, but on the contrary to love to work with children, expertise, application of new strategies facilitates the way in overcoming the barriers and mathematics makes mathematics interesting, grasp, entertainment, mathematics without tears."

Educationalists / teachers need to work permanently in their professional development and education. Educator / teacher should always new, unique, contemporary, creative, and flexible. Must be a mastermind, creator, host and interlocutor, and less one of the most important and inviolable information sources and influences. Quality and responsible educational-training staff has a strong belief in continuous improvement of its work, willingness to accept risk and change, constantly study and acceptance of new methods that have proven successful in practice, teamwork, openness and exiting meet the needs of children / students, openness to cooperation with all factors, openness to closer and wider community and which will contribute to the improvement of educational work.

Educator / teacher should be more to become a planner, designer, guide, counselor who encourages students to learn, independently come to certain conclusions. Educator / teacher

relationship with his associates to students will be more open to their problems, show a more active attitude towards the introduction of their individuality, creative approach to their status in the educational process, more creative approach in the direction of their systematic learning.

Cooperation, mutual communication, teamwork, organization of different ways to permanent vocational training and the need proactive rings are best for initial success in mathematical education.

Literature:

1. Адамческа, С., (1996), *Активна настава*, Скопје: Легис
2. Адамческа, С., (1991), *Тандемската работа на учениците,* Скопје: Редакција на списанието Просветно дело
3. *Активна настава-интерактивно учење,* (1998), акциско истражување, Скопје: Педагошки завод на Македонија
4. Ангелоска-Галевска, Н., (1998), *Квалитативните истражувања во воспитанирто и образованието,* Битола: Киро Дандаро
5. Арнаудова, В., (1992), Развивање на способностите за согледување на проблеми со примена на брејнсторминг, Скопје: *Зборник во редакција на Н.Петров*, Просветно дело
6. Арнаудова,В., (1990), Улогата на наставникот во стимулирање на оригиналноста како компонента на творечкото мислење, Струга: З*борник на трудови*
7. Баковлев, (1982), *Мисаона активизација ученика у настави*, Београд: Просвета
8. Bežen, A.,Jelavič,F.,Kujundzič,N., Pletenac,V., (1991), *Osnove didaktike,* Zagreb:Školske novine
9. Bognar, L., Matijevič, M., (1993), *Didaktika*, Zagreb: Školska knjiga
10. Витанова, н., и колектив (1992), Активноста на детето в детската градина,
11. *Воспитно-образовна методологија "Чекор по чекор",(1994) за деца до 3 години*, Скопје: ИОО
12. Вујаклија, М., (1980), *Лексикон страних речи и израз*а, Београд: Просвета
13. Дамјановски, А., (1990), *Покарактеристични тенденции во осовременувањето на основното образование кај нас и во светот,* Скопје: Просветно дело