

# Evaluative research in the teaching process and the curricula objectives in the first grade of nine-year primary school

## The areas of research

The Bureau for Education Services initiated this research with the aim to analyze the first experiences in achieving the objectives of the new curricula and find out their good sides as well as possible impediments in order to use these findings in the process of permanent improving of teaching practice. With that purpose the following areas were analyzed:

- § team work of preschool teacher and primary school teacher
- § learning and teaching process
- § pupils' achievements
- § parents' attitudes

## The goals of the research

The following goals of the research are defined:

- § to collect the relevant data on teaching methods and learning processes in the first grade of primary school,
- § to identify whether the teaching and learning are organized in line with the objectives set forth in the new curricula,
- § to analyze the influence the team work of preschool and primary school teacher have on intellectual, social and emotional development of six-year olds,
- § to evaluate the basic achievements of six-year olds in Mother Tongue, Mathematics and Nature and Society,
- § to evaluate the parents' attitudes and the content with their children education,
- § to identify the examples of good practice in order to use them for permanent improvement of teaching practice,
- § to improve the methodology of future research.

## The sample, methodology and instruments

The sample represents the combination of deliberate and random samples.

The research encompassed 10 out of 20 primary schools in Montenegro that commenced the implementation of the new curricula in school year 2004/05.

MUNICIPALITY	SCHOOL
Podgorica	<i>Primary school »Vuk Karadžić«</i> <i>Primary school »Marko Miljanov«</i>
Nikšić	<i>Primary school »Braća Ribar«</i> <i>Primary school »Luka Simonović«</i>
Kotor	<i>Primary school »Narodni heroj Savo Ilić«</i>
Bar	<i>Primary school »Jugoslavija«</i>
Herceg Novi	<i>Primary school »Milan Vuković«</i>
Bijelo Polje	<i>Primary school »Marko Miljanov«</i>
Rožaje	<i>Primary school »Mustafa Pećanin«</i>
Pljevlja	<i>Primary school »Salko Aljković«</i>

- § 20 out of 32 classes were selected by random choice (all the classes are in the main school building).
- § the sample included all the teachers and preschool teachers who teach in reformed classes.
- § in these 20 classes from the chosen schools 180 pupils (9 from each classroom) were selected by random sampling (every  $n$ -th pupil from the form-register) .
- § in these 20 classes parents were selected randomly (every  $n$ -th pupil from the form-register) and there were 160 of them (5 from each classroom).

TARGET GROUPS	POPULATION	SAMPLE
schools	20	10
classes	74	20
primary school teachers	74	36
preschool teachers	55	30
pupils	1581	60 + 60 + 60
parents	about 3000	160

INSTRUMENTS
§ questionnaires (teacher, school director, parent)
§ protocols (to analyze the lesson preparation and for lesson observation)
§ semi-standardized interview for the teacher
§ test of achievements in Mother tongue
§ test of achievements in Mathematics
§ test of achievements in Nature and Society

## The basic findings of the research

### A. Team work of the preschool teacher and primary school teacher in the first grade

- Preschool teachers and primary school teachers are satisfied with the relationship established between them and their new roles in the learning and teaching process. Their joint work gives the possibility to share complement knowledge and skills and represents the “pillar” that supports intellectual, emotional and social development of the six-year olds.
- In most cases, the activities performed in the classroom are well planned, prepared and divided between the preschool and primary school teacher and represent the examples of good practice in teaching process.
- In a limited number of schools the organization of their joint work can result in formalizing the role and function of preschool teacher and there is a need to make a better structure of their roles – activities in preparing and delivering the lessons and in that sense encourage the participation of the preschool teacher in planning.
- Apart from the fact both preschool and primary school teacher are highly motivated for further training and there is a scope of different training programs offered to them, it is necessary to select their future training programs according the needs that come out from the every day practice in curriculum implementation.
- Defining the norm of working hours of preschool and primary school teacher can be the mode for improving the team work.

### B. Teaching and learning process

- The classroom equipment is in most cases adapted to the pupils` age and the learning environment is much better in comparison to the one in so called “classical classrooms”. Moreover, when compared to the equipment standards set forth in the revised curricula, the

conditions are not still in line with the defined standards, but at this phase of the reform implementation it couldn't be even expected. Anyway, there is a need to review these standards in some of the curricula.

- In all monitored schools, the teaching staff in the first grade and school management makes the obvious efforts to provide pleasant and supporting atmosphere for learning although it is notable that the classrooms are not evenly equipped especially with teaching aids and materials (for example, further readings, technical equipment etc.) and they are important stimulus to independent learning in the classroom and out of it.
- The creativity of the teachers who prepare the additional materials for the work in the classroom should be enriched by encouraging children to find the materials in nature that can stimulate their creativity, psychomotor and social abilities.
- Objective-based planning became the recognized practice in monitored schools which represents one more proof that new concepts are understood and accepted as functional ones for the education of six year olds.
- Although the use of diverse and intellectually supportive methods was identified during the lesson observation, it is necessary to pay attention to the optimal balance of different taxonomy levels which means to include more activities aimed to develop children's perspectives and skills (for example, the evaluation of what they have learned).
- More attention should be paid to perform differentiation more successfully, especially by introducing to teachers the individual education plans and making them capable of designing such plans, with the help of the expert team.
- The effective roles division between the preschool teacher and primary school teacher in the classroom when the school teacher is focused on achieving the curriculum goals and the preschool teacher on individual support to the pupils influences the social interactions which support the learning process as well as atmosphere for learning – children feel free and express the initiative.
- More feedback information should be given to the children at this age – not only at the end but also during the activities and enable them to evaluate their work by themselves in accordance to their abilities.

### **C. Pupils` achievements**

- The review of achievements (testing of the pupils) in order to find out the levels of achievement of the most representative objectives in three subject curricula (Mother tongue, Mathematics, Nature and Society) showed that children gained the significant amount of knowledge and skills anticipated in the standards for the mentioned curricula.
- The most expressive achievements in Mother tongue are in the field of recognition of the sounds in the word (95%), which indicates that children are able to analyze the basic language structures and that are prepared to learn writing systematically in the next grade. The successful recognition of the main characters and their characteristics in the literature text adjusted to the pupils` age by listening an artistic text is more than 80%. The lower percentage of the success is achieved in dialogue communication; children had better skills in using long sentence forms in introducing themselves to others (63%) than in using the phrases to express thanks and nice manners rules in everyday communication (15%).
- The achievements in Mathematics are more visible in learning the basic mathematical operations and orientation in space than in application of that knowledge in unknown situations. 93% of children can count to twenty; 80% of them can do adding to twenty and 70% can subtract, but they are less successful in applying these operations in items for understanding and checking. Testing the skill of orientation in space shows that the large percentage of children knows the difference between “ahead – behind” (96, 7%), “right– left” in the picture (78, 3%), and “right – left” in the real situation. More than 87% of children can make difference between things and beings. Although most of them can recognize the basic solids (68, 3%), the percentage of success is even less when they are asked to eliminate from the chain the forms – things which do not have the asked form. (56, 7%).  
It is obvious that most pupils obtained the basic standards of knowledge in Mathematics but they are less successful when it comes to their ability to apply the knowledge they gained.

- The research in achievement of selected objectives in the curriculum of Nature and Science indicates that children are good at naming and recognizing the persons, school ambience, making difference between past and present, defining the seasons of the year, and understanding the basic traffic rules (73 – 97%). The pupils are more successful in solving the problems like naming the days of the week (“today” and “yesterday”) than in specifying the day within the week. One of the indicative results is the one that shows that only the half of the children can say the greeting phrases in communication with adults in different times of the day which matches with similar findings in research of Mother tongue. The effectiveness in solving the problems that request the application of the knowledge acquired varies from 56 to 72%.

#### **D. Parents` attitude towards their children education**

- The parents of the first six-year olds who are being educated according the new curricula were highly motivated to participate in this research and more than 80% of parents, mostly mothers, answered to the questionnaire. Almost every other parent wrote the additional comment at the end of the questionnaire.
- Only 4% of parents think that they are partially informed about changes in education and do not feel competent to give their judgments on it. Most parents who consider themselves as well informed got this information in the direct contact with the school staff (61, 9%) and from *The Info Bulletin on nine-year primary school* (28, 6%) and just a small amount of them were provided in media and in private contacts.
- Giving opinion on various aspects of school attended by their children, 80 % of parents see the school in a very positive way. That refers to the overall results the school accomplishes in the educational process. Parents would like the school to offer more out of teaching process activities and find out the additional methods to involve the parents in the school work and organization in general.
- The method of getting the information about the children behavior and learning that prevails is the immediate contact with the teacher or preschool teacher. Only 3% of parents think that they are not sufficiently informed, 5 % cannot judge the information obtained especially about the “strong sides”. Regular meetings with parents are the rarest form of getting the information.
- Approximately 95% of parents are satisfied with the instructing and the teaching methods used in the first grade. They also think that the new curriculum is free from unnecessary contents and adjusted to the children’s age which offers them a lot of time for playing. The parents are very content with the relationships established among children and with teachers, with the independence the children show in performing the school duties, as well as with types and amount of the homework.
- Just few parents criticize the new methods of education considering the enrollment of six-year olds as too early which takes them one year that is supposed to be the year just for playing. On the other hand, they think that the curriculum is too “relaxed” and children will understand them as a “form of playing”. So, they express the fear that the children won’t develop the habit to work regularly or they won’t be able to learn as fast as the seven-year olds.
- About 97% of parents are pleased with the overall performance of their children and especially with the improvement they show in the communication with adults and other children and in learning the new skills in general.
- Above all, the parents were satisfied with the communication they have with teachers and their open attitude towards all suggestions.
- Giving opinion on safety conditions at school, most parents think that their children are completely safe at school. Individual comments point out that in some schools more attention should be paid to hygiene and equipment. There are also some suggestions that the meals and school uniforms should be provided in order to reduce the undesirable social differences among children.