

# PERCEPTIONS OF INCLUSIVE VALUES IN TEACHING MATHEMATICS IN MONTENEGRO

VESELIN MIĆANOVIĆ<sup>1</sup>

TATJANA NOVOVIĆ

BIJANA MASLOVARIĆ

NADA ŠAKOTIĆ

Faculty of Philosophy - Montenegro

**Abstract:** Recognition of inclusion, as one of the guiding principles of education, is based primarily on the positive attitude of teachers. Our study was conducted in three regions of Montenegro, with the intention to identify key issues in the field of inclusive teaching of mathematics in the lower grades of elementary schooling, and to define recommendations from the perspective of teachers. The sample consists of 420 respondents, and the instruments used were questionnaires and assessment scales. Criterion variables - the number of working years in teachers their experience and training determined teachers' views on particular issues, while regional affiliation had no significant influence on their beliefs. Recommendations - advancing initial education and continuing professional development in the field of inclusive education in the field of mathematics are much needed.

**Keywords:** inclusion, methodology of teaching mathematics, teacher, education, school

## INTRODUCTION:

Inclusion is a philosophy and a belief that every child/person has the right

---

1 E-mail: vele-nk@t-com.me  
Filozofski fakultet  
Ulica Danila Bojovića bb  
81400 Nikšić  
Crna Gora

and ability to participate in everyday life in its fullness, according to his or her dispositions, interests, family heritage and other dimensions of individuality.

Affirmation of inclusion, as one of the fundamental principles, must be grounded in the internal, substantial changes, both within the educational system, and society as a whole. Along with a more profound and fundamental scientific understanding and appreciation of developmental specificity of children/students in modern pedagogical and psychological theory and practice, certain tendencies in changing the perspective from which we deal with the problems of education in the broadest sense, tend to occur simultaneously:

- a tendency towards a holistic approach - shifting the focus from the difficulties that the child has to his or her personality in general: "Every child with a disability is seen as a particularly unique being, while organic and functional impairment are recognized to be the part the child 's personality as a whole" (Hrnjica , 2009);
- Tendency to appreciate diversity, i.e. accepting hardship as a natural diversity not as a problem;
- Tendency towards the ecological approach - shifting the focus of interest from the perception of the child as a problem to the overcoming of barriers that the child encounters in different spheres of life (family, educational institutions etc.) (Žikić, 2008);

The new inclusive paradigm requires changes in the understanding, application and work with children with special needs. Therefore, we are talking about the reconceptualization of special needs. In addition to this, we respect and take into consideration current social and economic conditions specific to a particular context: the terminology, philosophical beliefs, local traditions, legislation, and financial situation/resources.

The aim of this paper is to review the educational inclusive practices in our community in the field of teaching mathematics in the lower elementary grades. Therefore, we sought to examine how and to what extent the inclusive approach affects the teaching practice in this context and how teachers with different levels of experience from three regions in Montenegro are trained for work with children with special needs when working on the operational goals in the field of mathematics. With the intention of providing reliable and objective results, the research included a representative sample of respondents from all three regions of the country.

## **METHODICAL CONCEPT OF INCLUSIVE TEACHING OF MATHEMATICS IN LOWER ELEMENTARY SCHOOL GRADES**

Initial teaching of mathematics is an integral part of the current educational curriculum in Montenegro and a represents a set of specific topics and goals, developed in accordance with the capabilities of students in the first cycle of

primary schooling. Therefore, it is of special importance to pay attention to the method, procedure and efficiency of transferring the underlying objectives in this area to children/students. Since our students have different needs in the context of teaching, it is obvious how efficient methodical approach of teachers is important in the process of the interpretation of the program goals. Applying differentiated methodological procedures and individualized approach in working with students, teachers allow for the accessibility of content in mathematics to the whole students community, which includes those who need additional support.

Of course, adjusting and leveling mathematics for all students implies the differentiation of requirements within the existing curriculum, not the exclusion of children with special needs (children with physical, mental and sensory disabilities and children with combined disabilities) in a special group gathered around another program (Mićanović 2012). This also means that it is possible to layer and adapt current educational objectives and contents to the capabilities of different students, and create individual education plans, if necessary, even within a common national curriculum.

"The development and construction of individual training programs for each segment of teaching in which the child participates allows harmonious development of the child, according to his ability" (Ilić-Stošević 2011). Inclusion of children with special needs in the educational process is functional only if there exist respect and affirmation of their potentials (not inabilities!), and if they are integral part of the group/community.

So, in the regular initial teaching of mathematics, students follow regular or custom curriculum, and the role of teachers is to apply and vary appropriate methodological procedures, so that he or she could adjust the contents to the diversity of the classroom community. In such a classroom climate, students stay in the classroom with their peers all the time and the teacher assesses whether it is necessary and to what extent it is necessary to individualize requirements. In addition to professional competences involving - immediate expertise in mathematics for students in early school age, understanding and appreciation of their developmental principles, it is also important to master the "implicit pedagogy" and truly believe that it is, indeed, possible to work effectively in diverse communities. Students with special needs should be engaged in activities that can be executed smoothly by the same criteria as other students in the initial teaching of mathematics, of course as much as the type and degree of disability permits. However, in a situation where students cannot follow goals of the program and actively take part in a class activity, the teacher must individualize activities and differentiate the requirements in accordance with different possibilities in children. "It is extremely important that these children are placed in the correct position," and that one takes care of the regular and careful change in activities in order to have them concentrated on the work (Daniels-Stafford 2002).

In the process of a child-centered teaching, the individualized learning is

of the greatest importance, while teacher's thoughtful planning guarantees that each child can participate in regular activities (Rothschild-Daniels 2002).

Initial teaching of mathematics is characterized by a much larger interest of the students toward the mathematical content than in the higher grades. Therefore, the teacher, using certain educational measures and approaches, is in position to easily adjust, level and mediate between learning objectives and contents from this subject area for students of different capabilities and knowledge. When teaching mathematics at the initial level of schooling, the teacher sticks to the planned objectives in the first cycle of primary school, but differentiates them taking into account the standards to be achieved.

Teachers actively spend most of their time with the children in the class and therefore they can most realistically assess their capabilities and differences in terms of knowledge, needs and perspectives. They are the best to determine which mathematical contents suit their students and to what extent these contents may be adopted without problems. If the deviation in terms of capacity for acceptance and implementation of specific educational requirements in the field of mathematics in the first cycle of primary school is pronounced, the teacher must be careful, and in consultation with colleagues, professional associates, members of the mobile team (therapists with different profiles) and parents to measure the levels of achievement children, avoiding to exclude them from the peer community. Also, if necessary, it is desirable to plan some additional, individual supporting contents as compensatory processes that expand and add to requirements for better performance of these students in mathematics.

Therefore, the support to the progress of the child with special needs in the initial teaching of mathematics should be based on the willingness of teachers to:

- Accept and support a child with special needs in their classroom,
- Plan and implement individualized activities in the educational process in an appropriate manner, taking into account the needs and interests of each student to the extent possible,
- Continuously support students with special needs to develop their maximum potential,
- Continuously cooperate with parents and team for monitoring and support of students with special needs,
- Encourage the social affirmation of students with special needs in the classroom,
- Set clear and realistic goals derived from a common curriculum in the field of mathematics,
- Evaluate their contribution to the progress of students with special needs.

Surely, starting and ending point of adequate pedagogical approach to

teaching, based on the inclusive child/student centered paradigm is the implicit pedagogy of teacher, i.e. internalized attitude of a professional who believes that work in classrooms with different levels of prior knowledge, resources, interests is possible, natural and functional.

## **RESEARCH METHODOLOGY**

### ***RESEARCH SCOPE AND GOAL***

Our research is focused on the observation of the current inclusive concept in the initial teaching of mathematics significant from the point of its applicability and productivity for children with special needs. The main problem of our research in this paper was to determine the current situation regarding the appropriate application of inclusive principles in the initial teaching of mathematics in schools with children with special needs. For the purposes of this research, we chose to use the questionnaire with multiple choice and open-ended questions, and the scale of assessment in order to get a more objective idea of the actual situation regarding the problem. The aim of this study was to gather as much relevant information about the current state of the system in terms of professional and overall preparedness of teachers to work with children with special needs in the area of initial teaching in the field of mathematics. In addition, our goal is to collect and analyze proposals coming from teachers about possible ways to improve this field of education for the purpose of better and more effective inclusion of children with special needs in the community, peer learning and mastering the requirements of the problem area.

### ***SAMPLE***

The sample included 420 elementary school teachers (first cycle) in three regions of Montenegro (140 persons per region - from southern, central and northern). This was a deliberately chosen and convenient sample. It was deliberate because it involved only lower grades teachers and it was appropriate because the research was conducted in institutions (schools) that we were available from all three regions, with subjects who were willing to give answers.

### ***INSTRUMENT***

For the purposes of the research, we used a questionnaire and estimate scale. The questionnaire was used to get, directly from the subject, important information about their professional status and work experience. Questions in it were defined in accordance with the given issue and included information about: the region in which they were employed, years of experience, level of

expertise, the modes of planning implementation of mathematical objectives, current problems in teaching practice and proposed measures to improve existing inclusive context in teaching mathematics. The scale for assessing the attitudes toward inclusive values in the field of integration of children with special needs in the teaching of mathematics in the lower elementary grades was designed by the authors of this study, with the main aim to assess the applicability of inclusive standards in the initial teaching of mathematics (i.e. adjusting the goals and activities, the creation of individual programs etc.). It is in the form of the summation Likert-type scale, and the respondents for each statement expresses the degree of agreement (5 - strongly agree, 4 - mostly agree, 3 - both agree and disagree, 2 - mostly disagree, 1 - strongly disagree). The discriminative power of each item of the scale was examined on the basis of correlation between item-total, with 16 separate items.

Reliability of the scale was determined using the Cronbach's alpha coefficient, obtained by identifying the internal consistency of the scale. The reliability of the scale is satisfactory, because the value of the said coefficient is 0.739.

### **ORGANIZATION OF RESEARCH**

All the authors of the paper were involved in organizing and conducting this research. Respondents were guaranteed anonymity of the data obtained from questionnaires and scales that would be filled. In this way, we reduced the possibility of receiving more "desirable" answers. Data were collected in the period from the beginning of February to the end of April 2013.

### **RESULTS OF THE RESEARCH**

In order to analyze the problem our sample subjects came from all three regions of Montenegro with different levels of experience and qualifications (140 persons per region).

**Table 1.** Level of education

<b>Level of education</b>	<b>Frequency</b>	<b>Percent</b>
College degree	81	19,3
University degree	339	80,7
Total	420	100

The sample covered 81 respondents with college degree, which represents 19.3% of the total sample, and 339 respondents with a university degree or 80.7% of the sample (Table 1). Teachers with college degree generally belong to the category of respondents with working experience ranging from 31-40 years,

although some of them belong to the category of 21-30 years. Heterogeneity of the sample, in terms of education, is important for the distribution of answers to the key questions of inclusion of children with special needs in the initial teaching of mathematics.

**Table 2.** Years of working experience

Years of working experience	Frequency	Valid Percent
0 – 10	60	14,3
11 – 20	166	39,5
21 – 30	114	27,1
31 – 40	80	19,0
Total	420	100

In addition to professional qualifications, the sample was also heterogeneous in terms of the years of employment (Table 2). So we have, without any intention, included 60 respondents whose length of service is in the range from 0 to 10 years, which makes 14.3% of the total sample, 166 respondents (39.5%) were in service from 11 to 20 years, 114 subjects (27.1%) had working experience from 21 to 30 years and 80 respondents or 19% of the sample had 31 to 40 years of working experience.

**Table 3.** Assessment of the quality of teacher education in terms of training to work with children with special needs in mathematics, by region

Region	Assessment of the quality of the initial teacher education in the domain of inclusive education (mathematics)				Total
	Quality	Mostly quality	Mostly not quality	Not quality	
Northern	0	28	78	34	140
	0.0%	20.0%	55.7%	24.3%	100.0%
Central	0	11	95	34	140
	0.0%	7.9%	67.9%	24.3%	100.0%
Southern	0	39	57	44	140
	0.0%	27.9%	40.7%	31.4%	100.0%
Total	0	78	230	112	420
	0.0%	18.6%	54.8%	26.7 %	100.0%

$$\chi^2 = 26.546 \quad df = 4 \quad C. Coeff. = 0.244 \quad p = 0.001$$

Based on the obtained data, we can determine that when it comes to the assessment of the quality of teacher education for children with special needs in mathematics there is a tendency in the respondents from the southern region to rate their initial training as poor when compared to the responses of the colleagues from other regions (Table 3), while respondents from the central region dominantly hold the view that the initial education in this area is generally not well. Interestingly, none of the respondents was of the opinion that the initial teacher education is of high quality and sufficiently comprehensive, in terms of training to work with children with special needs in mathematics. The distribution

of responses by region (Table 3) shows a statistically significant difference ( $\chi^2 (4) = 26.546$ ; *C. Coeff.* = 0.244;  $p < .01$ ) regarding the attitude toward the quality of initial teacher education for working with children with special needs, in mathematics, in the lower elementary grades. The noted statistical significance in terms of different results in the field of assessing the quality of initial teacher education across regions leads us to the analysis of determining the reasons for such attitudes of the respondents. We have selected three key factors - teachers in different regions: a) have not undergone the same initial training, b) did not have an opportunity to experience the same degree of application of knowledge acquired in the initial education, c) have not undergone the same program of additional training in terms of work with children with special needs in the teaching of mathematics in order to perceive the lack of education on the same matter.

**Table 4.** Assessment of the quality of teacher education in terms of training to work with children with special needs in mathematics by years of experience

Years of working experience	Assessment of the quality of teacher education regarding their training to work with children with special needs				Total
	Quality	Mostly quality	Mostly not quality	Not quality	
0-10	0	19	27	14	60
	0.0%	31.7%	45.0%	23.3%	100.0%
11-20	0	45	97	24	166
	0.0%	27.1%	58.4%	14.5%	100.0%
21-30	0	14	77	23	114
	0.0%	12.3%	67.5%	20.2%	100.0%
31-40	0	5	24	51	80
	0.0%	6.3%	30.0%	63.7%	100.0%
Total	0	83	225	112	420
	0.0%	19.8%	53.5%	26.7 %	100.0%

$$\chi^2 = 91.786 \quad df = 6 \quad C. Coeff. = 0.423 \quad p = 0.001$$



Interestingly, none of the teachers, regardless of their experience, perceived initial teacher education as a quality one in terms of training to work with children with special needs (Table 4). Teachers with the longest working experience (63.7%) expressed their dissatisfaction to a much greater extent than their counterparts with less work experience when it comes to initial teacher education regarding the training for working with children with special needs in mathematics. Categories of respondents with work experience ranging from 21 to 30 years (67.5%) dominantly hold the view that initial teacher education is generally not well in terms of training to work with children with special needs in mathematics, while respondents with the least experience (31.7 %) estimate that the initial training of teachers of children with special needs is generally well (Table 4, with a marked statistically significant difference ( $\chi^2(6) = 91.786$ ; *C. Coeff.* = 0.423;  $p < .01$ ) in the attitudes of respondents by the category of experience). This can be explained by the fact that the initial training of teachers was in line with modern social developments and that state continuously innovated educational programs, and according to these changes, and it is understandable that teachers who received their education 30 or 40 years ago did not have sufficient training to work with children with special needs. Specifically, newly designed curricula on the study programs for teacher education, included activities in the domain of inclusion, and the entire educational/social context of the reform process affirms this principle, so it is understandable why teachers with the least number of years of employment have the best opinion about the quality of initial teacher education in the mentioned area.

**Table 5.** Assessment of the quality of the initial teacher education in terms of training to work with children with special needs in mathematics by qualifications

Qualification	Assessment of the quality of the initial teacher education in terms of training to work with children with special needs in mathematics by qualifications				Total
	quality	Mostly quality	Mostly not quality	Not quality	
College degree	0	5	39	37	81
	0.0%	6.2%	48.1%	45.7%	100.0%
University degree	0	74	190	75	339
	0.0%	21.8%	56.0%	22.1%	100.0%
Total	0	79	229	112	420
	0.0%	18.8%	54.5%	26.7 %	100.0%

$$\chi^2 = 24.177 \quad df = 2 \quad C. Coeff. = 0.223 \quad p = 0.001$$

On the sample differentiated by qualification (Table 5) in two categories

(college and university degrees) we get significant differences in attitudes about the quality of teacher education in terms of training to work with children with special needs in teaching mathematics. Much higher percentage of respondents with a college degree (45.7%) believes that initial teacher education is not well in terms of preparation for working with children with special needs in the area of mathematics at an early school age compared to the responses from those with a university degree (26.7%), while respondents with a university degree, estimate that initial teacher education generally is not well in this domain. It is also interesting that much higher percentage of respondents with a university degree (21.8%) is of the opinion that the initial teacher education is generally well compared to that holding college degree (6.2%). From the statistical point of view of the observed significant differences in the attitudes of the respondents ( $\chi^2 (2) = 24.177$ ; *C. Coeff.* = 0.223;  $p < .01$ ). While respondents from both categories hold fairly critical stance when it comes to the quality of initial teacher education in terms of the level of preparation for working with children with special needs in the school, particularly in mathematics, we can see that teachers with university education express a much higher level of satisfaction with the quality of higher education in preparing future teachers to deal with the focused problem, since in the course of their schooling they had a chance to get some basic knowledge in the field of inclusive education, and especially in the field of methodology of mathematics.

**Table 6.** Evaluation of the expertise of teachers to work with children with special needs in mathematics by years of working experience

Years of working experience	Evaluation of the expertise of teachers to work with children with special needs in mathematics				Total
	Fully trained	Mostly trained	Mostly not trained	Not trained at all	
0-10	0	31	19	10	60
	0.0%	51.7%	31.7%	16.7%	100.0%
11-20	0	76	31	59	166
	0.0%	45.8%	18.7%	35.5%	100.0%
21-30	0	39	25	50	114
	0.0%	34.2%	21.9%	43.9%	100.0%
31-40	0	23	14	43	80
	0.0%	28.8%	17.5%	53.8%	100.0%
Total	0	169	89	162	420
	0.0%	40.2%	21.2%	38.6 %	100.0%

$$\chi^2 = 21.511 \quad df = 6 \quad C. Coeff. = 0.221 \quad p = 0.001$$

In terms of teachers' expertise to work with children in the field of mathematics, we noticed the most significant difference in the number of years of service, while in the category of regions and qualifications we have not noticed any significant difference (Table 6). It should be noted that the categories of respondents with work experience up to 10 years (51.7%) and 11-20 years (45.8%) dominantly hold the attitude that they are generally qualified to work with children with special needs, in the subject of mathematics. Unlike them, respondents with more work experience i.e. 21-30 years (43.9%) and 31-40 years (53.8%) of work in schools were of the opinion that in general they are not qualified to work with children with special needs, when teaching mathematics (determined

statistical significance in the analysis of responses was  $(\chi^2(6) = 21.551; C. Coeff. = 0.0221; p < .01)$ . Such attitudes of the respondents point to the need for proper organization of retraining and professional development of teachers in the field of working with children with special needs. It is interesting that none of the respondents felt fully competent and qualified to work with children who need to have customized program and methods of work in the process of instruction in the field of mathematics in the first cycle of primary school. Therefore, a logical consequence is a need for planning and realization of extensive teacher training in all schools in all regions of Montenegro.

In order to measure the feasibility of inclusive values in teaching mathematics we used a total of 16 items, and each item was assessed with 5 degrees assessment scale (5 - strongly agree, 4 - mostly agree, 3 - both I agree and disagree, 2 - mostly disagree, 1 - completely disagree).

**Table 7.** Mean values of items that measure feasibility of inclusive values in teaching of mathematics

	N	Arithmetic mean	Standard deviation
Children with special needs are actively involved in the teaching of mathematics	420	2,34	,782
Differentiation of mathematical content is present in teaching of mathematics on the principle of inclusive education	420	3,74	,634
The school is willing to provide the conditions for the inclusion of children with special needs in the teaching of mathematics	420	3,56	,621
Teachers of mathematics are willing to take into account the individual characteristics of children with special needs	420	4,32	,521

(Cont.)

(Cont.)

Children with special needs show interest in mathematical content	420	2,56	,869
Children with special needs show their maximum in the understanding and adoption of the mathematical content	420	1.87	,886
Children with special needs participate in the math study groups and workshops	420	1,21	,891
Children with special needs co-operate with other children through extra-curricular activities in practicing mathematics	420	2,13	,693
When it comes to children with special needs, teachers of mathematics often apply frontal form of teaching	420	2.86	,688
When it comes to children with special needs, teachers of mathematics often apply work in pairs as a form of teaching	420	3,34	,693
When it comes to children with special needs, teachers of mathematics commonly use group work	420	3,87	,674
When it comes to children with special needs, teachers of mathematics apply individualized form of teaching	420	3,43	,655
When planning the realization of goals in mathematics teachers depart from the children's abilities	420	4,45	,798
School sufficiently provides training seminars for teachers to work with children with special needs in mathematics	420	2,31	,928
Teachers of mathematics have enough experience in working with children with special needs	420	2,75	,838
Depending on the type of the needs of children with special needs, they have enough support in teaching of mathematics	420	3,66	,657

From the given display of the mean values (Table 7) of the realized inclusive values in the teaching of mathematics, we should consider the highest and lowest values. The highest mean values can be seen on items, which state that "When planning the realization of goals in mathematics teachers depart from the children's abilities." (4.45) and "Teachers of mathematics are willing to take into account the individual characteristics of children with special needs." (4.32) while opposed to them, the lowest average values are reported on the items

such as "Children with special needs participate in the math study groups and workshops." (1.21) and "Children with special needs show their maximum in the understanding and adoption of the mathematical content." (1.87).

As for the open questions in the questionnaire - to highlight what represents the biggest problem in working with children with special needs, in mathematics, and what they propose as measures to improve the situation, teachers predominantly highlighted the following problems: the lack of basic knowledge in working with these children, the lack of support to the work and the unwillingness of the relevant institutions to reduce the number of children in classed with children with special needs. Proposed measures for the improvement of inclusive teaching in mathematics were: improving the program and the initial training of teachers to work with children with special needs in education in general, including the teaching of mathematics, providing ongoing professional assistance to schools, reducing the number of students in classrooms in order to individualize and differentiate instruction.

## **DISCUSSION ABOUT THE RESULTS OF THE RESEARCH AND RECOMMENDATIONS**

This research revealed that initial teacher education follows modern social trends and purposes of teaching in the current moment, so it is understandable that the categories of teachers who have completed their education some time ago there was no training in the field of inclusion. That is why we analyzed the current state of training of teachers to work with children with special needs when teaching initial mathematics and at the same time considered the concept of professional development, which as a rule, should continually expand teachers' competences. Since the contemporary education system in Montenegro positions the principles of inclusion, democratization, individualization on a high level, it would be realistic to expect additional future investing in the education of teachers to plan operational objectives in inclusive teaching, active involvement of children of different levels of knowledge and capabilities in the process of the teaching of mathematics. In order to effectively plan and implement the adoption of mathematical concepts in students of different predispositions in inclusive teaching, it is essential to have immediate expertise in the field of mathematics, but it is of great importance to possess the knowledge of key assumptions of inclusive paradigm. It is therefore essential to have teachers comprehensively introduced to the concept of inclusive education, but also to gain some practical knowledge, working in the classrooms of educational institutions and adopting concrete tools for the successful implementation of planned goals.

If our goal is to organize the teaching of mathematics so that all students, in accordance with their own resources, prior knowledge and learning styles, adopt

appropriate corpus of terms and concepts that will form the basis for further learning and expanding knowledge in this field, then it is indeed necessarily to provide conditions for it. Our micro-research indicates the need for systematic training of teaching staff as a part of the initial preparation of teaching personnel but it also indicates the need for training while working in the field of inclusive education, with the emphasis on the area of early mathematics education. Based on the results of the research we could give several proposals for measures to improve the overall educational situation regarding the inclusion of students with special needs in regular classes of initial teaching of mathematics:

If our goal is to organize the teaching of mathematics so that all students, in accordance with their own resources, prior knowledge and learning styles, adopt appropriate corpus of terms and concepts that will form the basis for further learning and expanding knowledge in this field, then it is indeed necessarily to provide conditions for it. Our micro-research indicates the need for systematic training of teaching staff as a part of the initial preparation of teaching personnel but it also indicates the need for training while working in the field of inclusive education, with the emphasis on the area of early mathematics education. Based on the results of the research we could give several proposals for measures to improve the overall educational situation regarding the inclusion of students with special needs in regular classes of initial teaching of mathematics:

- Teachers in the initial education should be provided with more specific professional information about children with special needs, their preserved potential, and possible directions to improve skills in the academic curricula.
- Preschool and lower elementary grades teachers who are preparing themselves for this profession should be provided with methodological training in working with children with special needs in the field of mathematics.
- Didactic-methodological and pedagogical-psychological knowledge in this field should be re-affirmed at the university level and introduced to the curricula in all academic programs that focus on the training of future teachers.
- It is necessary to enhance and intensify student training of future teachers through their continuous direct involvement in mainstream institutions and resource centers.
- Intercultural dimension of education of teachers during the initial education and during further work in the institutions of the system should be re-affirmed.
- It is necessary to create a more efficient system of continuous professional development of teachers;
- It is important to develop a system of monitoring and evaluation of teaching and practical work of professionals in the field of inclusive education in all subject areas, and naturally in the field of mathematics.

## REFERENCES:

- Daniels, R. E., Staford, K. (2002). *Uključivanje djece sa posebnim potrebama u redovni vaspitno-obrazovni proces (Inclusion of children with special needs into the regular upbringing and education process)*. Podgorica: Pedagoški centar Crne Gore.
- Ilić-Stošević, D. (2011). *Teorija vaspitanja i obrazovanja osoba sa motoričkim poremećajima (The theory of education of persons with physical disabilities)*. Beograd: Fakultet za specijalnu edukaciju i rehabilitaciju.
- Markov, Z. (2008). *Inkluzija u vaspitno-obrazovnoj praksi (Inclusion in the upbringing and education practice)*. Beograd: Socijalna misao, br. 3.
- Mićanović, V. (2012). *Implementacija inkluzivnog obrazovanja u predškolsstvu u Crnoj Gori (Implementing Inclusive Education in Montenegrin Preschool Education)*. Podgorica: CANU
- Milić, S. (2002). *Individualizovani pristup u vaspitno-obrazovnom procesu (Individualized approach in educational process)*. Podgorica: Pedagoški centar Crne Gore.
- Novović, T. (2010). *Položaj i perspektive djece sa smetnjama/teškoćama u razvoju u redovnom obrazovnom sistemu (The position and perspectives of children with disabilities/special needs in the regular education system)*. Crna Gora u XXI stoljeću – u eri kompetitivnosti, obrazovanje, Podgorica: Crnogorska akademija nauka i umjetnosti, br. 73/10.
- Rothschild, J., Daniels, E. R. (2002). *Materijali i aktivnosti za rad u učionicama u kojima dijete ima centralnu ulogu (Materials and activities in the child-centered classroom)*. Podgorica: Pedagoški centar Crne Gore.
- Hrnjica, S. (2009). *Inkluzija kao pedagoški i humanitarni izazov (Inclusion as an educational and humanitarian challenge)*. Beograd: Zbornik Filozofskog fakulteta.
- Slunjski, E. (2006). *Stvaranje predškolskog kurikulumu u vrtiću-organizaciji koja uči (Creating a preschool curriculum in kindergartens as learning organizations)*. Zagreb: Mali profesor. Čakovac: Visoka učiteljska škola u Čakovcu.
- Šakotić, N. (2009). *Efekte inkluzivne prakse u osnovnim školama u Crnoj Gori (Effects of inclusive practice in primary schools in Montenegro)*. Nikšić: Montenegro CHESS.
- Zakon o vaspitanju i obrazovanju djece sa posebnim potrebama (Law on Education of Children with Special Needs)*. Podgorica, Službeni list Republike Crne Gore, br. 80, 2004.
- Zakon o vaspitanju i obrazovanju djece sa posebnim potrebama (Law on Education of Children with Special Needs)*. Podgorica: Službeni list Republike Crne Gore, br. 45, 2010.
- Žikić, M. (2008) *Vodić kroz razvojne smetnje (A guide through the developmental disabilities)*. Niš: Projekat Drugačiji zajedno.