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Examples from Visual Surroundings as an Incentive for Children with Mild Intellectual Disability to Express their Creativity in the Art Domain[1]

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Abstract

In getting to know the nature of children's creative expression, we talk ever less about teaching creativity and more about the ways of stimulating, and the conditions that ought to be provided for creativity to be manifested. The aim of this work is to determine the difference in creative abilities of children with mild intellectual disability (MID) before and after visual prompting in the process of creating an art drawing. Creativity was assessed on a sample of 69 subjects, using the Test for creative thinking measured by drawing, and a drawing on the topic of "Peculiar flower", designed specifically for the purpose of this research. After a detailed explanation, the children engaged in working on a drawing on the given topic, with no previous encouragement. After some time the children were prompted using various examples from their visual surroundings, after which they were told to make a drawing and be as creative as possible. Comparing the results obtained before and after prompting, we point out the importance of visual incentive for the expression of children's creativity on all aspects of the flower drawing (color, shape, proportion and spatial distribution), as well as on certain aspects of Urban-Jellen test (completion, humor, material manipulation and non-stereotypical use of elements). Based on the results obtained in this research, we stress the importance of forming sensibility towards characteristics of objects and traits of the environment that can be perceived by eyesight, which would account for a good postulation for encouraging creative expression in the visual domain.

***Key words**: art; children with mild intellectual disability; creativity; drawing.*

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Introduction

There is no comprehensive and generally accepted scientific definition of creativity. The majority of authors emphasize novelty and originality in creating new combinations or reorganizing those already existent, when defining the concept of creativity (Đorđević, 2010; Vigotski, 2005). Novelty, along with usefulness (appropriateness), is apparent in most researchers' definitions of creativity (Kampylis & Valtanen, 2010; Runco & Jaeger, 2012). New and original ideas are key terms both in personal definitions and understandings of creativity in implicit theories (Daskolia et al., 2012; Maksić & Pavlović, 2011).

Children also have the ability to do something new, opposite to what is known as mimicry, and the possibility of personal realization, no matter how modest. Children cannot be experts, but they can express their originality in drawing, singing, playing, and perceptive examination of the environment (Runco, 2007). Thus, when it comes to children's creativity, we should not ask or expect results of high artistic quality, but give importance to the very process of creating (Đorđević, 2010; Koludrović & Reić Ercegovac, 2010).

In children with mild intellectual disability (MID), as well as children from the typical population, creativity is assessed according to originality and peculiarity of the product that is characteristic of children's perception of the world (Koludrović & Reić Ercegovac, 2010). Arbutina (2011) stressed that children with MID have a creative potential that can and should be realized in its full scope. Contrary to the outdated opinion that creative abilities are a privilege of individuals who just happen to be gifted with a special talent, the fact is being adopted that creativity, as a general human potential and need, is present in every child (Beghetto & Kaufman, 2007; Jukić, 2011; Kamenov, 2008a).

The Test for Creative Thinking – Drawing Production, TCT-DP (Urban & Jellen, 1993) is one of the rare tests that assess creativity through individual production in the art domain (Maksić & Anđelković, 2011). The test is also singled out for the fact that factor analyses of the defined indicators of creativity, conducted on samples in different environments, confirm that it contains the fundamental trait of creativity – novelty (Cropley & Cropley, 2000; Maksić & Đurišić-Bojanović, 2003; Rudowicz, 2004). Still, in accordance with the curriculum for children with MID, in the process of education, students express their creativity mainly in art lessons. Filipović and Kamenov (2009) suggest that development of creativity in children's drawings and paintings is reflected in factors of divergent thinking – fluency, flexibility and originality. Kopas-Vukašinović (2005) adopts similar criteria in her research. She defines children's creativity as originality (uniqueness, peculiarity of expression and elements of surreal, imaginative) and elaboration of ideas (abundance in details) expressed in children's drawings.

Creativity of children with MID, as well as creativity of children from the typical population, should not be observed as an innate ability that will develop on its own. Organized incentives are needed for its successful development, i.e. the creative potential should be stimulated and guided in an appropriate manner (Kadum, 2011; Kangas,

2010). Programs stimulating child creativity are based on creative activity in language (Vass et al., 2008), music (Koutsoupidou & Hargreaves, 2009), movement (Cheung, 2010), drama (Karakelle, 2009; Lin, 2010), and drawing (Dziedziewicz et al., 2013). Some of these programs refer to polysensory stimulation, with a strong focus on creative artistic activity (Garaigordobil & Berrueco, 2011). The results of previous research, conducted in our milieu, suggest that appropriately chosen contents and methods of art lessons can affect development of creativity in art and creative thinking in students (Gagić, 2013; Karlavaris et al., 1988).

Learning by children with MID, as well as by typically developing children, is directly based on perception, i.e. sensory cognition (Dejić, 2007). That is why it is of great importance to insist on sensory experience in the curriculum. Visual, auditory and tactile perception are the activities through which children with MID form their first conceptual experiences and basis for mastering the curriculum of most subjects (Japundža-Milisavljević, 2009). For children's art expression, visual experience is particularly important, thanks to which they develop the ability to notice colors, shapes and spatial relations (Filipović & Kamenov, 2009). It is known that children with MID have a reduced ability of visual perception (Wuang et al., 2008). Therefore it is very important to stimulate visual perception and influence its development, in order to give the child the possibility for versatile articulation of performing activities and overall motor skills, which would make for the most adequate way of developing art skills in children with MID (Japundža-Milisavljević, 2009).

In art classes, through contact with works of art, photographs, products of national tradition and other objects and models, we affect, among other things, the development of eyesight sensitivity and enrichment of perceptual experiences, more independent and conscious perception of color, shape, and the relations between them. All of this encourages search for one's own ways of expressing emotions and ideas through visual media. Studying the importance of knowing a certain field for creative production, Čorko and Vranić (2007) point out the fact that creativity of an art product can be increased through previous (visual) prompting, i.e. exposure to works that already exist in that field of art. The authors emphasize that the subjects who were, prior to making a collage, acquainted with 95 works previously made in this field, managed to create something new and different. Ferjan (2012) stresses that studying and teaching with the help of pictures, posters and exhibition of student work in the study program allows for innovation and stimulation of students for new ideas. Similarly, Filipović (2011a) sees products of children's expression as strong encouragement for further development of creativity. In art, a child's drawing can occasionally act as inspiration for a different approach in art (Škorc, 2012).

Aim and Research Hypotheses

The aim of the study is to determine the difference in creative abilities of children with MID before and after visual prompting during the process of creating an art drawing.

The hypotheses of this research were based on the following premises:

H1: There is a significant difference in the quality of creative thinking by children with MID before and after visual prompting, where higher quality of creative thinking is expected after the visual prompting.

H2: There is a significant difference in creative expression through an art drawing by children with MID before and after visual prompting, where a higher level of creative expression is expected after the visual prompting.

Method

Sample

The sample of this study consisted of 69 subjects, both genders, 55.1% male and 44.9% female. According to the results of the chi-squared test, the sample is uniform in terms of gender parameters ($\chi 2=0.710$, df=1, p=0.399). Criteria for the choice of subjects involved: mild intellectual disability (students' intelligence quotient ranged from 50 to 69, assessed by the WISC scale for estimation of intellectual abilities), calendar age between 8 and 16 (M=11.75, SD=2.124), school grade 1 to 7 and absence of neurological, psychiatric, sensory, severe emotional and multiple disorders.

Instruments

For the assessment of creativity in this research we applied the Test for Creative Thinking Drawing Production – TCT-DP (Urban & Jellen, 1993). The A form of the test was used, and the subjects had the task of finishing a drawing containing five elements within a large square (a semicircle, a right angle, a dot, a curve, a dashed line), and the sixth element (an unfinished square) out of the square. The drawing was assessed according to the following criteria: *continuation,* which refers to any use of the given figural fragments, *completion,* which comprises completion or addition achieved by using or extending the figural fragments. Then we have *new elements*, constituted by any new figure, symbol or element, *connecting made with lines*, referring to a drawn connection between two continuous fragments, *connecting that contributes to the theme.* The sixth indicator is *boundary breaking that is fragment-dependent* and includes the use of a small open square that lies beyond the closed square. The seventh indicator is *boundary-breaking being fragment-independent*. The eighth indicator is *perspective*, where points are given for using 3D space. When it comes to *humor*, affective, emotional and expressive power of the drawing was estimated. The remaining four factors that constitute the non-conventional involve: every material *manipulation*, the use of *surrealistic, fictional and abstract elements*, the use of *symbol-figure combinations* and *non-stereotypical use* of the given figural fragments. The test manual includes a comprehensive description of the procedure for evaluating drawings made by the subject. The test tries to recognize and estimate qualitative properties of a creative achievement. Every subject's result is quantitatively valued according to *a priori* given values, which are an integral part of the test. Theoretically speaking, the maximum number of points on the test is 72. The test is also adapted for children with developmental difficulties.

For the assessment of creative potentials of the students through their art expression, we also used **drawing on the topic of "Peculiar flower"**, designed specifically for the purpose of this research. The drawings were, as well as Urban-Jellen test, presented to a professor of art methodology and a defectologist, who evaluated them and graded from 1 (low level of creativity) to 5 (high level of creativity) on the following aspects: the use of color, proportion, shapes and spatial distribution. The dimensions that the appraisers evaluated when observing the *use of color* in this research were: the coloration of the flower, the coloration of the background, the harmony of colors, the expressiveness of colors, and the strikes made while coloring. Assessing the *shape* item, the peculiarity of shape was valued higher than stereotyped, template flower drawing. Further on, the complexity of shapes was assessed, and whether the used shapes were simple or abundant in detail, the number of shapes in the drawing, whether there were several instances of the same shape or all of them were different. The presence or absence of surreal elements, products of imagination, was analyzed. The drawings in which the children managed to draw a completely new shape which they personally designed, i.e. that was not shown to them previously, scored highest. When grading *spatial organization* of the drawing, the positioning of the flower in relation to the paper was analyzed (center, left, right, up, down), as well as whether the drawing was filled or not (paper used proportionally to its size or the existence of blanks), and whether perspective was used when depicting elements. Furthermore, we observed whether students used lines and shapes to show *proportion* of flowers and other drawn objects in their drawings. In other words, in order for a drawing to be graded as highly creative, it was necessary to observe in it the freedom in artistic expression of the child, peculiarity, multitude of unique ideas, unique symbolism, motives that transcendent reality, unusual perspective. It is important for a child to have their own personality, the ability to see things in different ways, and for the drawings to be special and well composed. Blank spaces in a drawing can sometimes be graded as creative, if playing with elements is observed, when the child imagines, explores, and presents their personal expression.

Procedure

The research was conducted during the 2010/2011 school year in four primary schools for students with intellectual disabilities in the city of Belgrade. Students were tested in the second semester and the test was performed in smaller groups (up to 5 students) in order to control the effect of social prompting.

First, the students solved the Urban-Jellen test for creative thinking measured by drawing. There was no time limit. Subsequently, students were given detailed explanations and given the assignment of creating a drawing with a given topic, with no previous prompting. The task was for students to draw a flower, as unusual as they can, which they were allowed to color to their desire using crayons. They were given a time limit of one school lesson.

After a while, students were visually prompted in accordance with the given topic. Students were shown pictures on the computer depicting peculiar flowers (60 images),

as well as 6 fresh flowers of different colors, texture, scent and shape (cactus, roses, gerbera, calla, chrysanthemum and gipsofila). Next to the fresh flowers, they were shown a bell shaped flower made of clay, and reproductions of famous painter Van Gogh ("Sunflowers", "Almond Blossoms", "Irises", "Wild Roses"), in whose paintings flowers are a common theme. Using the paintings with elements of still life (Van Gogh – "Vase with Flowers, Coffeepot and Fruit" and Gauguin – "Nature morte a L'Esperance") we tried to increase the students' awareness of relations and distribution of objects and flowers in the drawings.

After that the students resumed drawing on the given topic in the duration of one school lesson. The students were told to draw an even more unusual flower than the previous day. In the end, the students solved the Urban-Jellen test for creative thinking measured by drawing once again. Just like the previous time, there was no time limit.

The other data necessary for this research, regarding gender, level of intellectual functionality, calendar and school age, absence of neurological, psychiatric, sensory, emotional and multiple disorders, were obtained through standard analysis of pedagogical documentation.

Data Analysis

Concerning the parameters of descriptive statistics, arithmetic mean, standard deviation and standard error were used. For testing the statistical significance of mean differences, we used the t-test for paired samples.

Results

The results of the statistical analysis given in Table 1 show that the aspects of creativity on the TCT-DP test, for which statistically significant difference was determined before and after prompting, are completion (t=-2.957, p=0.004), humor (t=-2.290, p=0.025), material manipulation (t=-2.545, p=0.013) and non-stereotypical use of given figural fragments (t=-2.637, p=0.010). The table shows average scores for the items of the Urban-Jellen test for creativity before and after the prompting. The largest difference between the average scores before and after prompting was on the completion item, suggesting that the students advanced most on this indicator of creativity after visual encouraging.

From Table 2, we notice that the demonstration of the students' creativity through the making of the drawing "Peculiar flower", is increased after prompting. Using the dependent t-test we obtained a highly statistically significant result on all aspects of creativity of students' art drawing: color (t=-4.946, p=0.000), proportion (t= -3.692, p=0.000), shape (t=-6.785, p=0.000), spatial distribution (t=-2622, p=0.011). Observing arithmetic means before and after prompting, we notice that the importance of prompting was expressed most on the item shape, and least on the item spatial distribution.

Table 1

Analysis of the drawing obtained using the Test for Creative Thinking-Drawing Production before and after prompting

Item	M		SD		t	df	p
	Before	After	Before	After			
Continuation	2.80	2.90	1.558	1.673	-0.687	68	0.494
Completion	1.07	1.49	1.365	1.559	-2.957	68	0.004
New elements	1.43	1.43	1.685	1.761	0.000	68	1.000
Connecting made with lines	0.30	0.32	0.845	0.962	-0.134	68	0.894
Connecting that contributes to the theme	0.52	0.58	1.703	1.649	-.237	68	0.813
Boundary breaking that is fragment-dependent	0.39	0.39	1.447	1.447	0.000	68	1.000
Boundary-breaking being fragment-independent	0.22	0.30	1.069	1.167	-0.469	68	0.641
Humor	0.10	0.42	0.519	1.333	-2.290	68	0.025
Material manipulation	0.13	0.39	0.616	1.018	-2.545	68	0.013
Abstract elements	0.40	0.40	0.364	0.364	0.000	68	1.000
Symbol-figure combinations	0.30	0.22	0.912	0.783	0.705	68	0.484
Non-stereotypical use of given figural fragments	0.04	0.39	0.361	1.018	-2.637	68	0.010
Total score of creativity	7.39	8.88	5.394	6.021	-1.817	68	0.074

Note. Perspective was not tested because the values before and after the prompting equaled zero.

Table 2

Analysis of the drawing "Peculiar Flower", before and after prompting

Item	M		SD		t	df	p
	Before	After	Before	After			
Color	3.00	3.68	1.163	1.118	-4.946	68	0.000
Proportion	4.09	4.43	0.996	0.848	-3.692	68	0.000
Shape	2.90	3.80	0.942	1.079	-6.785	68	0.000
Spatial distribution	4.09	4.36	0.887	0.939	-2.622	68	0.011
Total	14.12	16.48	3.085	3.288	-7.578	68	0.000

Discussion

The examples of art reproductions, different photographs, fresh flowers and clay flowers, which were shown to students, prompted them with their visual content to perceive and experience, so that significant improvement was observed after the prompting on certain items of the Urban-Jellen creativity test. Those are: *completion, emotional and expressive power of the drawing (humor), material manipulation and non-stereotypical use of elements*.

Two indicators of creativity for which we observed significant improvement after prompting, *completion* and *non-stereotypical use of figural fragments,* saturate the factor named fluency when applying factor analysis of the Urban-Jellen test for the sample of students of primary schools in the Republic of Serbia (Maksić & Đurišić-Bojanović,

2003). Considering that art fluency depends greatly on different versions, skills and wealth of ideas (Herzog & Duh, 2011), we assume that the prompting realized not only for perceptive, but also for cognitive activities, resulted in advancing on the aforementioned items of the Urban-Jellen test. We consider that the maximum engagement of the subjects resulted in better, more sensible completion of the given figural fragments, as well as their non-stereotypical use. In modern works we see results of experiments that point to greater fluency on the figural (graphical) form of Torrance test of creative thinking after students had been stimulated by games (Garaigordobil & Berrueco, 2011), which, among others, provide different perceptive experiences for the students.

We also presume that the non-stereotypical use of elements on the Urban-Jellen test was indirectly affected by the presentation of a large number of different flowers, accompanied by a speech that stresses the differences among the flowers. It is known that the use of templates and stereotypes puts us further from the skill of thinking. From an early age, children should be encouraged to give up stereotypical representations by praising unique expression. Through prompting of creative abilities, children with MID, as well as children from the typical population, should be discouraged from using harmful and useless stereotypes, to prevent them from accepting stereotypical patterns of behavior (Huzjak, 2002; Japundža-Milisavljević, 2009).

By stimulating unique expression and by visual prompting of art expression in children we also affected the item *humor*. Namely, emotional development of a child is seen in the degree of their immersion in the art drawing (Filipović & Kamenov, 2009). Emotional engagement of the students in the process of drawing implies a more free and subjective expression. Contrary to that, in children whose thinking is characterized by rigidity and who have difficulties adapting, we observe frequent stereotypical repetitions. Adaptability to new situations requires flexibility in thinking, the absence of which point to emotional disturbances. In children's drawings those disturbances are expressed through repetition of one figure or detail, which suggests the tendency of the child to withdraw into a known world, avoiding new experiences (Filipović & Kamenov, 2009). The item *humor* is categorized as flexibility in a research conducted by Maksić and Đurišić-Bojanović (2003). Based on the obtained results, we emphasize the importance of encouraging flexibility in thinking, release of emotions and creativity, primarily through individualized classes in work with children with MID, because everyone has their own way of perceiving and representing, artistically expressing, certain elements of reality and their emotional experiences (Jovanović, 2002).

The subjects also showed more advanced manipulation with materials after the prompting (for instance, laterally positioned drawing or use of the other side of the paper) when solving the Urban-Jellen test. A similar result was noted in the results of previous authors. In a research conducted in Croatia (Čorko & Vranić, 2007), the authors state that those subjects who have had an opportunity to observe art works from a certain field, score higher on the creativity factor which includes new ways of using materials.

The most substantial progress after prompting was registered on the item of completion. Considering that the Urban-Jellen test assesses creative abilities in the visual domain, such data leads to the conclusion that when there is an unlimited number of possible solutions for completing figural fragments, perception, discernment, selection and retention in the awareness of certain visual data gives broadness and opens new paths. We presume that by the realized stimulation, in association with the topic Peculiar flower, we allowed students to have a creative approach to solving the creativity test, and to expressing their productive abilities while completing figural fragments.

Our research pointed to the possibility of prompting creativity in drawings of students with MID. We believe that the progress in depicting *colors, shapes, proportions and spatial relations* in the drawings can be attributed to the visual exposure of materials. We used the opportunity to draw students' attention to noticing simple and complex shapes and their parts, encouraged productivity by pointing out the richness in detail of the presented flowers. Then we stimulated the students to notice different types of shapes (regular – geometric, irregular – organic) and different quality of shapes (small and large, curvy and horny, open and closed). We tried to get them to notice small and big, convex and concave surfaces and their structures. We attempted to stir their imagination on the road to reaching various spatial solutions by stressing the connectedness of different shapes into a whole, and suggesting that they observe relations in their field of vision. On the examples of art reproductions we analyzed elements of the image and their spatial distribution (whether something in the picture was placed up or down, what is near and what is far, what is between, on something, etc.). We motivated students in the direction of noticing contrast of sizes and colors, quality of colors, warm and cold colors, colors of seasons. We demonstrated the ability of artists to use lines and shapes to express proportions, sizes and various textures.

In literature, when giving instructions for improving the art lessons curriculum, the emphasis lies on the necessity of developing the students' abilities for achieving ever more complex solutions in composition, from simple lining up of objects to moving, compressing and scattering all over the paper. It is necessary to prompt the students to depict different shapes (humans, animals, plants and objects) with more details and conspicuous characteristics: on the move, mutual relations of several figures, their positioning in various spaces and proportions, as well as expressing the emotional relation to them (Filipović, 2011b; Jovanović, 2001). Huzjak (2013) tested the influence of the analytical observation method on children's artistic expression at various ages (2 through 11.5 years of age), emphasizing the importance of art education. He came to the conclusion that due to a large number of visual problems, expressiveness increased in drawings as a result of intensive search for solutions. In works of art made by students from the test group, a multitude of details can be observed, variations in shape, foreshortening, etc. Through examples from the visual surroundings, children should have their sensitivity to color stimulated, for hues and intensities, the ability to notice color, the idea of expressing through color and surface, as well as the ability of

decorative use of color (Filipović, 2011b). Development of children's creativity is largely influenced by experience that children gain through watching and analyzing works of art (Buzaši Marganić, 2008). A visit to a museum, as an informal environment for studying, may contribute to an individual's education, enrichment of experiences and creation of new ideas (Brajčić et al., 2013). Hercog and Duh (2013) consider that works of modern artists can also be very interesting to students, and provocative for artistic and creative expression. Also, students should be guided into using school books, which can provide the development of perception and aesthetic experience as a factor that affects the creative process (Filipović & Karavelić, 2009).

Considering ways of visual prompting of creativity in art lessons, we point out the attitude of many authors and researchers (Arbutina, 2011; Filipović, 2011a; Vigotski, 2005), that match our own, and refers to the fact about the importance of stimulation and conditions that ought to be provided for creative potential to be expressed.

Table 2 gives an overview of average scores of students on items that were estimated on the drawing of the flower. It can be noticed that this type of prompting had most effect on the item *shape*. After prompting, we noticed a larger number of details, as well as new and original shapes in the students' drawings. The given data could serve as proof that we drew the students' attention, using different examples from the visual environment and examples from photographs, to the existence of various types of shapes, qualities of shape, possibility of shape stylizing in art expression, which was reflected in the creativity of their drawings. On the examples of art reproductions of famous painters, very unusual flowers were presented, but also other objects of various shapes. During the prompting, we led the students to observe these reproductions and try to notice the characteristics of the shapes that the artists had painted. We gave them the freedom of naming the shapes the way they see and experience them.

The results obtained are in line with data from studies that suggest that children have less difficulty drawing objects that are close to their experience (Toomela, 2002). The given facts imply that presenting new, unusual shapes, as well as the very drawing is an ability that requires observation and prompting from the environment. Therefore, it is necessary to insist on strengthening of sensitivity to shape in the curriculum for children with MID, which is accomplished through contents such as quality of shapes, recognizing different materials that make up the shapes and their important feature determined by contrast values (Japundža-Milisavljević, 2009). For graphic representation of a large number of details and extraordinary and novel ideas, various game activities can be used as incentives as well (Garaigordobil & Berrueco, 2011).

Conclusion

The results of this study confirm the importance of visual prompting for expressing creative abilities of children with MID in the visual domain of expression.

Considering that children with MID are in the concrete operational stage (Đurić-Zdravković et al., 2011), adopting different knowledge should begin with observation

of concrete examples related to a specific term. A nurtured sensory perception is the foundation of creativity, which is, according to Kamenov (2008b), next to intelligence, very important for the development of understanding. It is also very important that a child experiences the world that surrounds it, as the child who, in its imagination and comprehension, relies on personal view and emotions, building from sensory and emotional material a powerful symbolic system, without which many phenomena would remain misunderstood. All that a child draws consists of visual concepts that result from visual experience (Arnhajm, 1985). Therefore, it is very important for children with MID, as well as children from the typical population, to master in their art education the technique of viewing (aesthetic) objects with regard to their directly visible qualities (Duh et al., 2012). This technique, which is a matter of learning and practice, needs to be flexible enough to adapt to different objects, paintings, art works and different personalities of the observers.

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Primjeri iz vizualnog okruženja kao poticaj kreativnih sposobnosti kod djece s blažim intelektualnim teškoćama u likovnom izražaju

Sažetak

S upoznavanjem prirode dječjeg kreativnog izražavanja sve se manje govori o podučavanju kreativnosti, a sve više o načinima poticanja i uvjetima koje treba osigurati da bi se ono izrazilo. Cilj je rada utvrditi razlike u kreativnim sposobnostima djece s blažim intelektualnim teškoćama (BIT) prije i nakon vizualnog poticanja pri izradi likovnog crteža.

Na uzorku od 69 ispitanika kreativnost je procijenjena Testom za kreativno mišljenje kojim se mjeri crtanje i crtež na temu „Neobičan cvijet", koji je oblikovan posebno za potrebe ovog istraživanja. Nakon detaljnog objašnjenja djeca su crtala likovni rad na zadanu temu bez prethodnog poticanja. Poslije određenog vremena djeca su poticana različitim primjerima iz vizualnog okruženja, nakon čega im je rečeno da nacrtaju što kreativniji crtež.

Usporedbom dobivenih rezultata prije i poslije poticanja, ukazuje se na značaj vizualnog poticanja za izražavanje kreativnosti djece na svim aspektima Urban-Jelenova testa (dopunjavanje, humor, manipulacija materijalom i nestereotipna upotreba elemenata).

Na osnovi dobivenih rezultata istraživanja ističemo važnost oblikovanja senzibiliteta prema osobinama predmeta i obilježjima okoline koji se mogu opažati osjetilom vida, što bi predstavljalo dobru pretpostavku za poticanje kreativnog izražavanja u vizualnom području.

Ključne riječi: *crtež; djeca s blažim intelektualnim teškoćama; kreativnost; likovna kultura.*

Uvod

Ne postoji sveobuhvatna i općenito priznata znanstvena definicija kreativnosti. Većina autora prilikom definiranja pojma kreativnosti naglašava *novinu* i *originalnost* u

stvaranju novih kombinacija ili reorganiziranje već postojećih (Đorđević, 2010, Vigotski, 2005). Novost, uz korisnost (prikladnost), očita je u većini istraživačkih definicija kreativnosti (Kampylis i Valtanen, 2010; Runco i Jeager, 2012). Nove i originalne ideje ključni su pojmovi u osobnim definicijama i shvaćanjima kreativnosti u implicitnim teorijama (Daskolia i sur., 2012; Maksić i Pavlović, 2011).

I djeca imaju sposobnost da naprave nešto novo, suprotno od onoga što se naziva podražavanjem, te podrazumijeva mogućnost osobnog ostvarivanja, koliko god da je ono skromno. Djeca ne mogu biti stručnjaci, ali svoju originalnost mogu izraziti u crtanju, pjevanju, igranju, perceptivnom ispitivanju okoline (Runco, 2007). Dakle, kada se radi o dječjem stvaralaštvu, ne treba tražiti ili očekivati rezultate tog stvaralaštva i radove visoke umjetničke kvalitete, već je važan sam proces stvaranja (Đorđević, 2010; Koludrović i Reić Ercegovac, 2010).

Kod djece s blažim intelektualnim teškoćama (BIT), kao i kod djece koja su dio tipične populacije, kreativnost se vrednuje na osnovi originalnosti i neobičnosti proizvoda koji je svojstven dječjem percipiranju svijeta (Koludrović i Reić Ercegovac, 2010). Arbutina (2011) naglašava da djeca s BIT posjeduju kreativni potencijal koji se može i treba ostvarivati u okviru njihovih mogućnosti. Za razliku od prijašnjih shvaćanja da su kreativne sposobnosti privilegija pojedinaca koji su igrom slučaja nagrađeni posebnim talentom, sve se više prihvaća činjenica da je kreativnost, kao općeljudski potencijal i potreba, prisutna u svakom djetetu (Beghetto i Kaufman, 2007; Jukić, 2011; Kamenov, 2008a).

Test za kreativno mišljenje koji se mjeri crtanjem (Test for Creative Thinking-Drawing Production, TCT-DP)(Urban i Jellen, 1993) predstavlja jedan od rijetkih testova kojima se procjenjuje kreativnost posredstvom individualne produkcije u likovnom izražaju (Maksić , Anđelković, 2011). Test je izdvojen i zbog činjenice da faktorske analize definiranih pokazatelja kreativnosti, provedene na uzorcima u različitim sredinama, potvrđuju da on sadrži suštinsku odliku kreativnosti – novinu (Cropley i Cropley, 2000; Maksić i Đurišić-Bojanović, 2003; Rudowicz, 2004). Ipak, u skladu s planom i programom za djecu s BIT, učenici u procesu edukacuje svoju kreativnost najčešće izražavaju kroz crtež na satima likovne kulture. Filipović i Kamenov (2009) sugeriraju da se razvoj kreativnosti u dječjim crtežima i slikama ogleda kroz faktore divergentnog mišljenja – fluentnost, fleksibilnost i originalnost. I Kopas-Vukašinović (2005) u svom istraživanju ima slične kriterije. Ona dječju kreativnost definira kao originalnost (neponovljivost, neobičnost izraza i elemente nestvarnog, imaginativnog) i elaboraciju ideja (brojnost i bogatstvo detalja) koji su izraženi na dječjim crtežima.

Kreativnost djece s BIT, kao i kreativnost djece tipične populacije, ne treba gledati kao urođenu osobinu koja će se razvijati sama od sebe. Neophodni su organizirani poticaji njezina uspješnog razvoja, tj. kreativni potencijal na odgovarajući način treba stimulirati i usmjeravati (Kadum; 2011, Kangas, 2010). Programi koji potiču dječju kreativnost temelje se na kreativnim aktivnostima u jeziku (Vass i sur., 2008), glazbi (Koutsoupidou i Hargreaves, 2009), pokretu (Cheung, 2010), drami (Karakelle, 2009; Lin, 2010), kao i crtanju (Dziedziewicz i sur., 2013). Neki od tih programa odnose se na polisenzornu stimulaciju, s jakim usmjeravanjem na kreativnu umjetničku aktivnost

(Garaigordobil i Berrueco, 2011). Rezultati prethodnih istraživanja provedenih u našoj sredini ukazuju na to da se adekvatno izabranim sadržajima i metodama likovne kulture može utjecati na razvoj likovne kreativnosti i kreativnog mišljenja kod učenika (Gagić, 2013; Karlavaris i sur., 1998).

Spoznaja se kod djece s BIT, kao i kod djece koja imaju tipični razvoj, temelji neposredno na opažanju, odnosno na osjetilnoj spoznaji (Dejić, 2007). Zbog toga je u nastavnom procesu od iznimne važnosti inzistirati na osjetilnom iskustvu. Vizualno, auditativno i taktilno opažanje predstavljaju aktivnosti kojima djeca s BIT oblikuju prva pojmovna iskustva i konceptualnu osnovu za savladavanje nastave iz mnogih predmeta (Japundža-Milisavljević, 2009). Za dječji likovni izraz osobito je važno vizualno iskustvo, zahvaljujući kojem se razvija sposobnost uočavanja boja, obilika i prostornih odnosa (Filipović i Kamenov, 2009). Poznato je da djeca s BIT imaju smanjenu sposobnost vizualne percepije (Wuang i sur., 2008). Stoga je veoma važno da se kod učenika utječe na razvoj i stimuliranje vizualne percepcije, kako bi se djetetu pružila mogućnost za svestrano artikuliranje izvođačke aktivnosti i cjelokupne motorike, što bi predstavljalo najadekvatniji put razvoja likovne sposobnosti razvoja djece s BIT (Japundža-Milisavljević, 2009).

U nastavi likovne kulture se putem kontakta učenika s likovnim djelima, fotografijama, proizvodima narodne tradicije, kao i drugim predmetima i modelima, između ostalog, utječe i na razvoj osjetljivosti vida i bogaćenje perceptivnog iskustva, samostalnije i svjesnije uočavanje boja, oblika, njihovih odnosa. Sve to potiče na traganje za vlastitim načinima izražavanje osjećaja i ideja posredstvom likovnih medija. Čorko i Vranić (2007), ispitujući važnost poznavanja određenog područja za kreativnu proizvodnju, ukazuju na činjenicu da se kreativnost likovnog stvaralaštva može povećati prethodnim (vizualnim) poticajem, odnosno izlaganjem djelima koja u tom području likovne umjetnosti već postoje. Navedeni istraživači naglašavaju da su ispitanici koji su prije izrade kolaža bili upoznati s 95 radova nastalih u tom području uspjeli napraviti nešto novo i drugačije. Ferjan (2012) ističe da učenje i poučavanje s pomoću slika, postera i izložbe učeničkih radova u nastavnom procesu omogućuje inovativnost učenika i stimulaciju za nove ideje. Slično tome i Filipović (2011a) proizvode likovnog izražavanja vidi kao snažne poticaje za daljnji razvoj stvaralaštva. U likovnim umjetnostima dječji se crtež povremeno može iskoristiti kao inspiracija za drugačiji pristup u umjetničkom radu (Škorc, 2012).

Cilj i hipoteze istraživanja

Cilj je rada utvrđivanje razlika u kreativnim sposobnostima djece s BIT prije i nakon vizualnog poticanja pri izradi likovnog crteža.

Hipoteze ovog istraživanja su:

H1: Postoji značajna razlika u kvaliteti kreativnog mišlljenja kod djece s BIT prije i nakon vizualnog poticanja, pri čemu se očekuje viša kvaliteta kreativnog mišljenja nakon vizualnog poticanja.

H2: Postoji značajna razlika između kreativnog izražavanja kroz likovni crtež kod djece s BIT prije i nakon vizualnog poticanja, pri čemu se očekuje viša razina kreativnog izražavanja nakon vizualnog poticanja.

Metodologija istraživanja

Uzorak

Uzorak učenika ovog istraživanja čini 69 ispitanika oba spola. Muški spol činilo je 55,1% ispitanika, a 44,9% učenika bilo je ženskog spola. Prema rezultatima hi-kvadrat testa uzorak je ujednačen prema parametrima spola ($\chi 2=0,710$, df=1, p=0,399). Kriteriji za izbor ispitanika su podrazumijevali: blaže intelektualne teškoće (količnik intelegencije učenika kretao se u okvirima od 50 do 69, procijenjen WISC skalom za procjenu intelektualnih sposobnosti), kronološke dobi od 8 do 16 godina (AS=11,75, SD=2,124), školske dobi od I. do VIII. razreda i odsutnost neuroloških, psihijatrijskih, senzornih, izraženih emocionalnih i višestrukih smetnji.

Mjerni instrumenti

Za procjenu kreativnosti u istraživanju je primijenjen **Test za kreativno mišljenje koje se mjeri crtanjem** (Urban i Jellen, 1993). Korištena je A forma testa, a zadatak je bio dovršiti započeti crtež koji sadrži pet elemenata u velikom kvadratu (polukrug, pravi kut, točku, krivu liniju, isprekidanu liniju), s tim da je šesti element (nedovršeni kvadrat) izvan kvadrata. Crtež se procjenjuje na temelju sljedećih kriterija: *nastavljanje* koje se odnosi na bilo kakvu upotrebu figuralnih fragmenata, *popunjavanje* koje obuhvaća dovršavanjem ili dopunu korištenim, nastavljenim ili produženim figurativnim fragmentima. Slijede *novi elementi* koje čini bilo koja nova figura, simbol ili element, *povezivanje s pomoću linija* odnosi se na nacrtanu vezu imeđu dva kontinuirana fragmenta, *povezivanje koje doprinosi temi*. Šesti je pokazatelj *prekidanje granica koje ovisi o fragmentima* i uključuje upotrebu malog otvorenog kvadrata koji je izvan zatvorenog okvira. Sedmi je pokazatelj *prekidanje granica koje ne ovise o fragmentima*. Osmi je pokazatelj *perspektiva* kod koje se boduje prelaženje u trodimenzionalni prostor. Kod *humora* se bvrednuje afektivna, emocionalna i ekspresivna moć crteža. Preostala četiri pokazatelja koji čine *nekonvecionalno* obuhvaćaju: svaku *manipulaciju* materijalom, upotrebu *nadrealističkih, fikcijskih i apstraktnih elemenata*, upotrebu *simbol-figura kombinacije i neperspektivnu upotrebu* danih figuralnih fragmenata. Priručnik testa uključuje opsežan opis procedure evaulacije crteža ispitanika. Test pokušava prepoznati i vrednovati kvalitativna svojstva kreativnog dostignuća. Svaki rezultat ispitanika kvantitativno se ocjenjuje po unaprijed danim vrijednostima koje su sastavni dio testa. Teorijski govoreći, maksimalan broj bodova na testu je 72. Test je prilagođen djeci s teškoćama u razvoju.

Za procjenu kreativnih potencijala učenika u okviru likovnog izražavanja koristio se i **crtež na temu „Neobičan cvijet"**, oblikovan posebno za potrebe ovog istraživanja. Crteži su, kao i Urban-Jelenov test, dani na uvid i procjenu profesoru metodike nastave likovne kulture i defektologu, koji su na skali od 1 (nisko izražena kreativnost) do 5

(visoko izražena kreativnost) vrednovali sljedeće aspekte: upotrebu boje, proporciju, oblike i prostorni raspored. Dimenzije koje su procjenjivači vrednovali kod upotrebe *boje* u našem istraživanju su: obojenost cvijeta, obojenost pozadine crteža, skladnost upotrebe boja, izražajnost upotrebe boja, potezi prilikom bojanja. Prilikom procjene kod čestice *oblik* neobičnost je oblika kompleksnost oblika, jesu li oblici jednostavni ili s mnoštvom detalja, koliki je broj oblika na crtežu, ima li više istih oblika ili su svi različiti. Analizirano je ima li elemenata nestvarnog, odnosno imaginarnog. Najviše su ocijenjeni oni radovi u kojima su djeca uspjela nacrtati potpuno nov oblik, koji su sami osmislili, odnosno koji im prethodno nije pokazan. Prilikom bodovanja *prostorne organizacije* crteža analizirala se postavljenost cvijeta u odnosu na papir (središnje, lijevo, desno, gore, dolje), je li crtež popunjen ili nije (papir je iskorišten u razmjeru s veličinom ili ima praznina), je li korištena perspektiva prilikom prikaza elemenata crteža. Zatim je procjenjivano izražavaju li učenici na crtežima linijama ili oblicima *proporciju* cvjetova i ostalih nacrtanih objekata. Drugim riječima, da bi rad bio ocijenjen kao visokokreativan, bilo je neophodna da se zapazi sloboda u likovnom izrazu djeteta, neobičnost, mnoštvo neponovljenih ideja, jedinstvena simbolika, nadilaženje stvarnosti, neobična perspektiva. Bilo je bitno da dijete ima svoju osobnost, sposobnost da vidi stvari na različite načine, da su crteži posebni, kompozicijski dobro postavljeni. Čak je i bjelinu na crtežu moguće vrednovati kao kreativnu ako se dijete igra elementima, zamišlja, istražuje i prezentira svoj osobni izraz.

Postupak ispitivanja

Istraživanje je obavljeno u toku školske godine 2010./2011. u četiri osnovne škole za djecu s teškoćama u intelektualnom razvoju na teritoriju Beograda. Djeca su ispitivana u drugom polugodištu i ispitivanje je provedeno u manjim grupama (do 5 učenika) kako bi se kontrolirao efekt socijalnog poticanja.

Učenici su najprije rješavali Urban-Jelenov test kreativnog mišljenja koje se mjeri crtanjem. Vrijeme rada nije bilo ograničeno. Učenici su nakon detaljnog objašnjenja crtali likovni rad na zadanu temu bez prethodnog poticanja. Zadatak je bio da učenici nacrtaju što neobičniji cvijet, koji su po želji mogli obojiti drvenim bojicama. Predviđeno vrijeme za završetak crteža bio je jedan školski sat.

Poslije izvjesnog vremena učenici su vizualno poticani u skladu sa zadanom temom. Djeci su na računalu bile prikazane slike neobičnih cvjetova (60 slika), kao i 6 svježih cvjetova različitih boja, teksture, mirisa, oblika (kaktus, ruža, gerber, kala, krizantema i gipsofila). Osim svježeg cvijeća pokazan je i cvijet napravljen od gline zvonastog oblika. Pokazane su i reprodukcije poznatog slikara Van Gogha („Suncokreti", „Badem u cvatu", „Irisi", „Divlje ruže"), na čijim je slikama cvijeće čest motiv. Slikama s elementima mrtve prirode (Van Gogh – „Vaza s cvijećem, vrčem za kavu i voćem" i Gauguin – „Mrtva priroda") djeci smo pokušali povećati svjesnost o odnosu i rasporedu predmeta i cvjetova na slikama.

Nakon toga djeca su opet crtala na zadanu temu, i za to je bio predviđen jedan školski sat. Djeci je rečeno da nacrtaju još neobičniji cvijet nego prethodnog dana. Na kraju

su učenici ponovno rješavali Urban-Jelenov test za kreativno mišljenje koje se mjeri crtanjem. Kao i prvi put, vrijeme nije bilo ograničeno.

Ostale podatke koji su potrebni za ovo istraživanje, a koji se odnose na spol, razinu intelektualnog funkcioniranja, kalendarski i školski uzrast, odsustvo neuruoloških, psihijatrijskih, senzornih, izraženih emocionalnih i višestrukih smetnji, dobiveni su standardnom analizom pedagoške dokumentacije.

Analiza podataka

Od parametara deskriptivne stastistike korištene su: aritmetička sredina, standardna devijacija i standardna greška. Za testiranje stastističke značajnosti razlika srednjih vrijednosti korišten je t-test za zavisne uzorke.

Rezultati istraživanja

Rezultati statističke analize prikazani u tablici 1 pokazuju da aspekti kreativnosti na TCT-DP testu kod kojih je utvrđena statistički značajna razlika prije i poslije poticanja su popunjavanje (t=-2,957, p=0,004), humor (t=-2,290, p=0,025), manipulacija materijalom (t=-2,545, p=0,013) i nestereotipna upotreba danih figuralnih fragmenata (t=-2,637,p=0,010). U tablici je dan prikaz prosječnih rezultata na česticama Urban-Jelenova testa kreativnosti prije i nakon poticanja. Primjećuje se da je najveća razlika između prosječnih rezultata prije i poslije poticanja na čestici popunjavanje, što znači da su djeca na tom pokazatelju kreativnosti najviše napredovala nakon vizualnog poticanja.

Tablica 1.

Iz tablica 2 uočavamo da je izražavanje kreativnosti učenika izradom likovnog crteža „Neobičan cvijet", veće nakon poticanja. Primjenom t-testa za zavisne uzorke dobiven je visoko statistički značajan rezultat na svim aspektima kreativnosti likovnog crteža djece – boja (t=-4,946, p=0,000), proporcija (t=-3,692, p=0,000), oblik (t=-6,785, p=0,000), prostorni raspored (t=-2,622, p=0,011). Promatrajući aritmetičke sredine prije i poslije poticanja, uočava se da se važnost poticanja najviše pokazala na čestici oblik, a najmanje na čestici prostorni raspored.

Tablica 2.

Rasprava

Primjeri umjetničkih reprodukcija, različitih fotografija, svježih cvjetova i cvijeta od gline, koje smo pokazivali djeci, svojim su vizualnim sadržajem poticale učenike na opažanje i doživljaj, tako da se značajan napredak nakon poticanja pokazao na pojedinim česticama Urban-Jelenova testa kreativnosti. To su *popunjavanje, emocionalna i ekspresivna moć crteža (humor), manipulacija materijalom i nestereotipna upotreba elemenata.*

Dva pokazatelja kreativnosti na kojima ja primijećen značajan napredak nakon poticanja, popunjavanje i nestereotipna upotreba figuralnih fragmenata, zasićuju

faktor nazvan fluentnost prilikom faktorske analize Urban-Jelenova testa za uzorak učenika osnovne škole u Republici Srbiji (Maksić i Đurišić-Bojanović, 2003). Budući da umjetnička fluentnost puno ovisi o različitim sposobnostima, vještinama i bogatstvu ideja (Herzog i Duh, 2011), pretpostavljamo da je realizirano poticanje, ne samo perceptivnih nego i misaonih aktivnosti učenika, za posljedicu imalo napredovanje na navedenim česticama Urban-Jelenova testa. Smatramo da je maksimalna angažiranost ispitanika rezultirala boljim, smislenijim dovršavanjem danih figuralnih fragmenata, kao i njihovom nestereotipnom upotrebom. U suvremenim radovima iznose se rezultati istraživanja koji ukazuju na veću fluentnost na figuralnoj (grafičkoj) formi Toransova testa kreativnog mišljenja nakon što su djeca stimulirana igrama (Garaigordobil i Berrueco, 2011) koje, između ostalog, osiguravaju i različita perceptivna iskustva učesnicima.

Također, pretpostavka je da smo na nestereotipno korištenje elemenata Urban-Jelenova testa posredno utjecali pokazivanjem velikog broja različitih cvjetova, uz priču koja naglašava međusobnu različitost cvjetova. Poznato je da upotreba šablona, stereotipa, odvaja vještine razmišljanja. Od najranijeg uzrasta djecu treba ohrabrivati na odustajanje od šablonskog prikaza pohvaljivanjem jedinstvenog izraza. Poticanjem kreativnih sposobnosti djecu s BIT, kao i djecu tipične populacije, treba udaljiti od štetnih i beskorisnih stereotipa, kako oni ne bi doveli i do stereotipnih obrazaca u ponašanju (Huzjak, 2002; Japundža-Milisavljević, 2009).

Stimuliranjem jedinstvenog izraza i vizualnim poticanjem likovnog izražavanja djeteta utjecali smo i na napredak na čestici humor. Naime, emocionalni razvoj djeteta ogleda se u stupnju njegova unošenja sebe u likovni crtež (Filipović & Kamenov, 2009). Emocionalna angažiranost učenika u procesu crtanja podrazumijeva slobodniji i subjektivniji izraz. Nasuprot tome, kod djece čije mišljenje karakterizira rigidnost, i koja se teško prilagođuju, zapažaju se česta stereotipna ponavljanja. Prilagodljivost novim situacijama zahtijeva fleksibilnost u mišljenju, čiji nedostatak ukazuje na emocionalne smetnje. U dječjim se crtežima te smetnje izražavaju putem stalnog ponavljanja jedne te iste figure ili detalja, što govori o težnji djeteta da se povuče u njemu dobro poznat svijet, izbjegavajući nova iskustva (Filipović i Kamenov, 2009). Čestica humor kategorizirana je kao fleksibilnost u istraživanju koje su provele Maksić i Đurišić-Bojanović (2003). Na temelju dobivenih podataka ističemo potrebu poticanja fleksibilnosti u mišljenju, oslobađanja mišljenja i kreativnosti, prije svega posredstvom izvođenja individualizirane nastave u radu s djecom s BIT, jer svako na svoj način opaža, a zatim i predstavlja, likovno izražava, određene elemente stvarnosti i svoja emocionalna iskustva i doživljaje (Jovanović, 2002).

Ispitanici su nakon poticanja pokazali i napredniju manipulaciju materijalom (na primjer, bočno postavljen crtež ili korištenje druge strane lista), prilikom rješavanja Urban-Jelenova testa. Sličan je rezultat dobiven i u rezultatima prethodnih autora. U istraživanju realiziranom u Hrvatskoj (Čorko i Vranić, 2007) autori navode da bolje rezultate postižu ispitanici koji su imali priliku promatrati likovne radove iz određenih područja u faktoru kreativnosti u koji se ubraja i nov način upotrebe materijala.

Najveći napredak nakon poticanja registriran je na česticu popunjavanje. Budući da Urban-Jelenov test procjenjuje kreativne sposobnosti u vizualnoj domeni, takvi nas podaci navode na zaključak da postojanje neograničenog broja mogućih rješenja za dopunu figuralnih fragmenata, opažanje, razlikovanje, odabiranje i zadržavanje u svijesti određenih vizualnih podataka daje širinu i otvara nove puteve. Pretpostavljamo da smo ostvarenim stimuliranjem, vezanim uz temu Neobičan cvijet, omogućili djeci da stvaralački pristupe i rješavanju testa kreativnosti, kao i da izraze svoje stvaralačke sposobnosti prilikom dovršavanja figuralnih fragmenata.

Našim istraživanjima ukazuje se na mogućnost poticanja kreativnosti crteža djece s BIT. Mišljenja smo da se napredak u prikazivanju *boja, oblika, proporcija i prostornih odnosa* na crtežu može pripisati izlaganju materijala vizualnim putem. Tom smo prilikom usmjeravali dječju pažnju na uočavanje jednostavnih i složenih oblika i njihovih dijelova, poticali smo produktivnost djece ukazivanjem na bogatstvo detalja pri prikazanim cvjetovima. Zatim smo djecu stimulirali na to da uoče različite vrste oblika (pravilni – geometrijski, nepravilni – organski) i različite kvalitete oblika (mali i veliki, obli i rogljasti, otvoreni i zatvoreni). Trudili smo se da primijete male i velike, udubljene i ispupčene površine, njihove strukture. Pokušali smo pokrenuti dječju maštu prema postizanju različitih prostornih rješenja isticanjem povezanosti različitih oblika u cjelinu, sugeriranjem da opažaju odnose u vidnom polju. Na primjerima umjetničkih reprodukcija analizirali smo elemente slike i njihov raspored u prostoru (je li i što na slici postavljeno gore ili dolje, što je blizu i što daleko, što se nalazi između, na nečemu i sl.). Motivirali smo djecu u pravcu uočavanja kontrasta veličina i boja, kvalitete boja, toplih i hladnih boja, boja godišnjih doba. Demonstrirali smo sposobnost umjetnika da linijom i oblicima izraze proporcije, veličine i različite teksture.

U literaturi, u davanju smjernica za poboljšanje nastave likovne kulture, naglašava se nužnost razvoja sposobnosti kod učenika za postizanje sve složenijih kompozicijskih rješenja, od jednostavnog sortiranja oblika do kretanja, skupljanja i raspršivanja po cijelom papiru. Potrebno je poticati učenike da predstavljaju razne oblike (ljudske figure, životinje, biljke i objekte) s više detalja i izraženih karakteristika: u pokretu, međusobni odnos više figura, njihovo postavljanje u različite prostore i srazmjere, kao i izražavanje emocionalnog odnosa prema njima (Filipović, 2011b; Jovanović, 2001). Ističući važnost likovne edukacije, Huzjak (2013) je ispitao utjecaj metode analitičkog promatranja na dječji likovni izraz kod različitih uzrasta (od 2 do 11,5 godina). Došao je do zaključka da je zbog velikog broja vizualnih problema, porasla ekspresivnost kao rezultat intenzivne potrage za rješenjima. Na radovima djece iz eksperimentalne skupine uočavaju se mnoštvo detalja, varijacije u obliku, perspektivna skraćenja i slično. Kroz primjere iz vizualnog okruženja kod djece treba stimulirati osjetljivost za boje, njihove nijanse i intenzitet, sposobnost uočavanja boja, smisao izražavanja bojom i površinom, kao i sposobnost dekorativne upotrebe boja (Filipović, 2011b). Na razvoj dječje kreativnosti značajno utječe iskustvo koje djeca stječu gledanjem i analizom umjetničkih djela (Buzaši Marganić, 2008). Posjet muzeju, kao neformalnom okruženju

za učenje, može doprinijeti obrazovanju pojedinca, bogaćenju iskustva i kreiranju novih ideja (Brajčić i sur., 2013). Hercog i Duh (2013) smatraju da i djela suvremenih umjetnika mogu biti vrlo zanimljiva učenicima, provokativna za umjetničko i kreativno izražavanje. Također, učenike treba uputiti i na korištenje knjige koje mogu osigurati razvoj percepcije i estetski doživljaj kao čimbenici koji utječu na kreativan proces (Filipović i Karavelić, 2009).

Razmatrajući načine vizualnog poticanja kreativnosti u nastavi likovne kulture, ističemo stav mnogih autora i istraživača (Arbutina, 2011; Filipović, 2011a; Vigotski, 2005), koji se poklapa s našim, a odnosi se na činjenicu o važnosti stimuliranja i uvjetima koje treba osigurati kako bi se izrazio kreativni potencijal.

U tablici 2 dan je prikaz prosječnih rezultata učenika na česticama bodovanima na crtežu cvijeta. Primjećuje se da se značaj poticanja najviše pokazao na čestici *oblik*. Na dječjim crtežima je nakon poticanja primijećen veći broj detalja, kao i originalni i novi oblici. Navedeni podaci mogli bi biti dokaz da smo učenicima posredstvom različitih primjera iz vizualnog okruženja i primjera s fotografija ukazali na postojanje različitih vrsta oblika različitih kvaliteta oblika, mogućnosti stilizacije oblika u likovnom izražavanju, što se odrazilo na kreativnost njihovih crteža. Na primjerima umjetničkih reprodukcija poznatih slikara prikazani su veoma neobični cvjetovi, ali i drugi predmeti različitih oblika. Tijekom poticanja naveli smo učenike na to da promatraju te reprodukcije i da pokušaju uočiti osobine oblika koje su umjetnici naslikali. Dali smo im slobodu da sami imenuju oblike kako ih vide i doživljavaju.

Dobiveni podaci u skladu su s podacima istraživanja koja ukazuju na to da dijete lakše precrtava oblike koji su bliski njegovu iskustvu (Toomela, 2002). Navedene činjenice nas navode na zaključak da je predstvljanje novih, neobičnih oblika, kao i samo crtanje, sposobnost za koju je neophodno promatranje i poticanje iz sredine. Stoga je neophodno inzistirati na jačanju osjetljivosti za oblik u nastavnom procesu kod djece s BIT, što se ostvaruje posredstvom sadržaja kao što su kvaliteta oblika, prepoznavanje različitih materijala od kojih su oblici napravljeni i njihovo bitno određenje preko kontrastnih vrijednosti (Japundža-Milisavljević, 2009). Za grafičko predstavljanje velikog broja detalja i neobičnih ideja kao poticaj mogu da posluže različite igre (Garaigordobil i Berrueco, 2011).

Zaključak

Rezultati ovoga istraživanja potvrđuju značaj vizualnog poticanja za izražavanje kreativnih sposobnosti kod djece s BIT u vizualnom području istraživanja.

Budući da su djeca s BIT na razini konkretnih operacija (Đurić-Zdravković i sur., 2011), stjecanje različitih spoznaja trebala bi započeti promatranjem konkretnih primjera vezanih uz određeni pojam. Odnjegovano osjetilno zapažanje temelj je kreativnosti, koja je prema navodima Kamenova (2008b), uz intelegenciju, vrlo značajna za razvoj razumijevanja, ali i doživljavanje svijeta koji okružuje dijete koje se u svom zamišljanju i shvaćanju oslanja na osobno viđenje i emocije, gradeći od osjetilnog i emocionalnog

materijala moćan simbolički sustav, bez kojega bi mu mnoge pojave ostale neshvaćene. Sve ono što dijete crta sastoji se od vizualnih pojmova koji proistječu iz vizualnog iskustva (Arnhajm, 1985). Prema tome, veoma je važno da djeca s BIT, kao i djeca tipične populacije, u likovnom odgoju dobiju tehniku opažanja objekata s obzirom na njihove vidne kvalitete (Duh i sur., 2012). Ta tehnika, koja je stvar učenja i vježbe, mora biti dovoljno elastična kako bi se mogla prilagoditi različitim predmetima, slikama, umjetničkim proizvodima i različitim osobama promatrača.