



# Early Intervention in Special Education and Rehabilitation



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## EFFECTIVENESS OF TEACHING ARTS IN RELATION TO STUDENT'S DISABILITY

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### SUMMARY

*Art culture as a subject in educational system is an integral part of compulsory primary education both in regular schools and special ones. Children with disabilities/developmental disorders represent a heterogeneous group characterized by a certain deviation that in greater or lesser extent, affects the process of their upbringing and education. The question is to what extent certain level of disabilities and disorders acts on teacher's ability to realize teaching of Art culture with these students? Therefore, the aim of our study is to examine effect of different conditions/disorders on effectiveness of teaching Art culture from the perspective of educators. The research was conducted on a sample of 28 participants who teach Art culture to children with disabilities. The research was conducted during the second semester of the school year 2014/2015, in May and June 2015, in five different primary schools, which are located on the territory of Belgrade. Collecting of information were carried out through in-depth non-standardized interview. The interview was carried out on the basis of a questionnaire drawn up for the purposes of the study. Each interview is in agreement with the participant and filmed entirely tonal. The results of our study states that there are difficulties in realization of a class of Art culture, they are unfortunately unavoidable companion of teaching process which is performed with disabled children. Regardless of the fact that it is known that the teaching of Art culture is one of those subjects in which disabled children achieve the best results, research has shown that its realization is imbued with numerous, smaller and larger difficulties, waiting their turn to be overcome. The biggest problems occur in education of multiple disabled children, whose condition exceeds limits of adjustments and requires conditions that participants fail to provide. The variety of conditions and disorders that can befall a child, requires a high degree of creativity and imagination of educators, so that they can in a new way overcome barriers in realization of education. The fact that a great number of disorders are considered as permanent conditions, indicates the difficulties with which educators are faced with during the realization of education with disabled children.*

Key words: art education, children with disabilities/developmental disorders, special educator

### INTRODUCTION

Art Culture represents a complex area, and this complexity is reflected in the variety of phenomena, its theory and practice. It is an integral part of work and production, visual communication, daily living, housing and clothing, leisure and entertainment, as well as a component of opera, ballet, films, plays, events, celebrations, etc. (Eminović,

2009). "Art culture as a school subject is an integral part of compulsory primary education that helps pupils to understand the structural relationships of the world, opening new horizons for viewing, creating basic preconditions for development of thinking, imagination, sensitivity and motor activity, and in the artistic activities focus on the social and cultural aspect which makes student become aware of his cultural context and social environment" (Kuščević et al., 2011, p. 216). Art is an important tool in improving communication and problem solving skills, as well as for the development of motor skills and encouraging self-expression and creativity. It can also be used as a tool in developing social and emotional skills (Kohl, 2011, by: Diment, 2012). First drawing experience a child acquires spontaneously by drawing lines with a pencil on a paper. It does not arise from the conscious intention to display a particular object, but from a sense of satisfaction that comes from their own kinesthetic activities (Cvetković, 2014). Throughout teaching of arts, by drawing and by artistic expression, children develop their skills, which is of particular importance when it comes to children with disabilities/developmental disorders.

### **Children with disabilities**

A child whose development is burdened by any deviation is not only less developed child than his healthy peers, but otherwise he is a differently developed child whose damage is projected to all aspects of his personality, perceived in his totality as a bio-psycho-sociological entity (Kovačević and Arsić, 2006). We live in an age when most of the world looks with favor on the integration of children with disabilities, trying to better understand their condition and improve their health status and thereby to provide them a life worthy of human beings. Effort to integrate disabled people into community, and that from the very beginning they are to be raised as equal members of society, proved to be the most correct one and therefore the standards of today aspire to this goal. In order to proclaim the world's recognized right of all children to education, UNESCO organized a series of international conferences on the issue of "Education for All" in Jomtien (1991), Salamanca (1994), Dakar (2000) and according to their principles and principles, inclusive education becomes an integral part of education laws and national frameworks of many countries (Jablan and Kovačević, 2008).

It is not easy to calculate the number of disabled children. By organizing the system of prevention, detection and rehabilitation, number of possible disorders is being minimized and in more effective way resulting disorders are being treated, while more subtle diagnosis "increase the number of" intellectually and emotionally disturbed children. Assessments of individual countries that have attempted to introduce a central register, range from 7% to 12% of the total population of children. The first assessment relates to difficulties in development in the narrow sense (sensory, physical and intellectual disability) and second assessment includes children with emotional disabilities and children who live in extremely unfavorable social conditions (families and communities burdened by prejudices) (Radojević, 2011). The Australian Bureau of Statistics, conducted in 2009 a study on disability, aging and welfare, which showed that 7.2% of children younger than 15 years is disabled, while 3.9% is severely disabled (Diment, 2012).

Although the ability of artistic expression and creation is inherent to all children, in fact to all people, it is possible and it occurs only as a result of individual work of art that represents individual perceptions, conceptions and ideas as well as finding and creating their own forms which these visions, perceptions and ideas express (Belamarić, 1986). The question is to what extent certain level of disabilities and disorders act on teacher's ability to conduct teaching of Art culture with these pupils? Therefore, the aim of our study is to examine the effect of different conditions/disorders on effectiveness of teaching of Art culture from the perspective of educators.

### METHODOLOGY OF REASEARCH

*Sample.* The research was conducted on a sample of 28 participants who teach art culture with disabled children. 27 participants by profession are special educators and rehabilitators (somathopedics, surdologs, speech therapists, typhlogues and oligophrenics), and one participant was a teacher who had a long lasting experience in working with disabled children. Four respondents were male and 24 were female.

*The time and place of research.* The research was conducted during the second semester of the school year 2014/2015, in May and June 2015, in five different primary schools, which are located on the territory of Belgrade.

*The survey instrument.* Collecting information were carried out in-depth non-standardized interview. The interview was carried out on the basis of a questionnaire which is designed for this research. The questionnaire was made up of open-ended questions. The questions referred to the difficulties faced by teachers, as well as the specific difficulties encountered by children with various disorders. In the interview participated educators who were directly interviewed.

*Data analysis.* Each interview is in agreement with the participant and filmed entirely tonal. This method of data collecting does not allow the loss of information, and sound recordings can later be analyzed in detail, taking into account even the manner of speech or emotions presented during the interview. Regarding the fact that the information was collected throughout interview, the answers contained a large number of less relevant and irrelevant information which requested selection. For each question of the interview, chosen answers of all participants were collected. Responses were analyzed, compared with each other, and then integrated into a concise whole.

The data were analyzed by qualitative method. Qualitative research place a participant into a role of an active participant in the study, who contributes to making final conclusions by making their own judgment.

### THE RESEARCH RESULTS WITH DISCUSSION

#### **Influence of different forms of damage to effectiveness of the work of art**

*Children with motor disorders.* Our participants point out that difficulties in teaching Art culture most often occur in children with disorders of upper extremity, when it comes to children with motoric disorders, when they use accessories and materials.

Due to the underdeveloped catches, involuntary movements or weakness of muscle of the hand, students with physical impairments often drop materials. Coordination is also one of problems which children with motoric disorders make unsuccessful. Some children have a pronounced muscular tonus which limits their fluency of movement. They strongly press during drawing lines, make sudden movements, and often drill paper and break pencils.

Participants further state that on the other side, children with muscle weakness of the upper extremities are characterized by low mobility arm. Movements are slow and uncertain. Pressure which a child creates is not enough, however, when using colored pencils and pencil on paper remains extremely faint trace or it is entirely absent. Teachers solve this problem by replacing crayons with markers. Teachers state that they are forced to glue the paper on which a child draws onto a table, because children can not abide it by hand during the activity. When it comes to sculpting techniques, these children do not have strong enough grip to soften plasticine. Teachers have to prepare it or to use softer "Play doh" plasticine or colored dough that requires minimal power fist. For realization of program of art culture pupils should have developed manipulative dexterity (the so-called developed technical skills). This first and basic precondition for artistic creativity in some physically disabled students (cerebral palsy, amputations, paresis) often is not satisfied to some extent or completely. That is why one of the main tasks of Art culture in working with cerebral paralyzed children is by practical work to enable development of their motor skills and to contribute to the reduction and prevention of deformities (Eminović, 2009).

Teachers consider that in working with these children using watercolors or tempera gives greater freedom of movements, and malfunctions are not clearly visible as at drawing techniques. Difficulties arise in preparation of artistic materials. Children have difficulty in measuring colours, water and in generally in assessing quantities of material required. Difficulties arise when these children perform a specific task for a longer time, given that even for the simplest tasks they need much more time than their peers of typical development. Then comes fatigue, physical and psychological, loss of motivation and attention, resulting in an interruption of activity.

With a variety of disorders of muscles extremities, these children may also have eye muscle disorders. Disorders such as nystagmus or strabismus harden perceptual skills, eye-hand coordination and orientation on paper. "Usually perceptual damaged are proportional to the degree of physical damage, and damaged ability of observation leads to difficulties in identifying relationships and causal relationships between objects and observing the internal properties of the object" (Nikić, 2008, p. 161). Children with disorders of gross motor skills "never" will be able to achieve the proper balance of mobility and visual control that would advance to pre-schematic or schematic stage (Horvath, 2009). Significant delays are discovered in development of artistic expression of children with cerebral palsy compared with standard achievements of pupils of development order of the same age (Pacić et al., 2013). The motor disorders of cerebral palsy are often combined with disordered of senses, cognition, communication and behavior, as well as epilepsy and other neuromuscular disorders (Rosenbaum et al., 2007).



*Children with visual impairments.* Visually impaired children are difficult to distinguish colours, especially shades of similar colours. The experience of these children is poor, and their works are simple and with little detail. Due to bad experience they very hard connect similar terms. They have a problem with the use of artistic materials, especially one that requires precision. Visually impaired children with the ability to distinguish colors and shapes may participate in the work with the necessary adaptations. Most often they successfully use several main colours, while teachers as they themselves say are often forced to tolerate the problem with mixing colours and using inadequate ones. Knowing and understanding impact of visual impairment on development can contribute significantly to understanding of situation of children with slight disorders in vision in teaching process (Vučinić et al., 2012).

As a result of visual impairment, these children have poorer visual-motor control. An eye does not manage to follow movements of a hand. When using collage paper, teachers cut paper and cardboard so that children would not injure themselves when working with scissors. Due to complete visual impairment which is leading sense in art culture classes, totally blind children face insurmountable difficulties in realization of many techniques. These children do not have the ability to perceive light and can not successfully perform most art techniques. Blind children are mostly engaged in sculpting and thus they through tactile senses recognize shapes and sizes.

Refractive disorders when they are not properly adjusted, may also create difficulties in the classroom. These are disorders that lead to irregular refraction of light in cornea and an eye lens so that an image formed on retina does not match an real object (Kostovska et al., 2003). Objects are unclear and blurry, distorted and unrecognizable, so that teacher can notice that the child squints, looks at a picture of just one (healthy) eye or otherwise compensate their damage. Looking into distance, near or observation of small objects and details will create difficulties depending on a type of disorder that is present. Visually impaired child will require special lighting that will make his work easier, with the use of bright colours and bolded lines. Lack of an eye leads to lack of "stereo" vision, and these children have problems in recognizing the depth of the space. Children with visual impairment with difficulties will follow the demonstration of a certain movement, action or object, so that the method of working with visually impaired children, require adjustment.

*Children with hearing impairment.* According to participants, these children do not encounter great difficulties in artistic work. Art techniques do not require the presence of hearing. Deaf and hearing impaired children with difficulties follow information presented verbally in frontal type of work, and an introductory part of a lesson with an introduction of new material brings difficulties. By lips reading more experienced children can understand speech, and a teacher during the time of speaking has to be faced toward the child who does not listen to his words, but accepts them visually. Deaf and hard of hearing can hardly adapt to language system that is adopted in conjunction of sound and meaning. As a result many language deficits and difficulties are created, which leads to difficult and disabled communication and to a difficulty in acquiring knowledge (Isaković, 2013).

Level of intelligence plays an important role in a process of auditory perception and communication, so it is not strange if a child with a major hearing impairment but



with higher intelligence quotient is more successful in work than a less intelligent peer. Glossary of a child with hearing impairment is not developed as in children with typical development, and for more complicated terms but also often and for simple ones, a teacher must give an approach to the student.

*Children with speech disorders.* Speech disorders vary in the degree of damage and etiology. According to participants these disorders usually represent successors of more serious impairments, such as cerebral palsy, tumors or insufficient mental development. Teachers and children eventually develop some form of non-verbal communication, which allows them to easily communicate. These are usually simple signals that carry a particular meaning. For example, sticking their tongues out carries a disclaim, and nodding a head has an affirmatively meaning.

The problem with this kind of communication is that children can not express complicated requirements or questions, and they experience a certain degree of frustration. The teacher must therefore monitor work and reactions of a child, in order to recognize in time children's difficulties. Children have difficulties in communicating with each other, and work in teaching of Art culture is often only limited between teachers and pupils.

*Children with intellectual disabilities.* The American Association for Intellectual Disability (AAMR, 2002), this disorder defines as a disability that occurs before age 18, and which is characterized by significant limitations in intellectual functioning and in adaptive behavior, which cover most everyday social and practical functioning. Insufficient mental development can occur in a variety of shapes, from light, moderate and heavy towards deep. The reform of the education system one number of the "easier" disabled children integrated into classes of regular schools, in special schools there are children with much more difficult diagnoses that can attend these classes at IEP, they adopt teaching materials with more difficulties, and this is also in the case with teaching of Art culture. Intellectual disorders are often companions of serious neurological disorders that further complicate the functioning of children. In this section we will talk about the difficulties experienced by children with intellectual disability as leading disorder.

As with other disorders, difficulties vary depending on degree of impairment. So participants point out that intellectual disability creates difficulties in almost all segments of Art culture. All parts of a class and all forms of artistic activities are also affected and are more difficult by mental disabilities. Difficulties arise more in an introductory part of a class, when a teacher gradually introduces students to teaching of topics. The situation of these children requires multi-sensory approach to teaching. At the beginning of a class, when the teacher speak to all students, intellectually disabled children have a problem to understand tasks and operating instructions. They need a very specific form of communication, without the use of abstract concepts which they do not understand. Multiple orders must be broken down into individual and every following is given only when we see that a child has fulfilled a previous task. Depending on the disorder and possible follow-up intelligence disorders, depends and quality of communication.

Motor skills of these children, as teachers state, is also damaged which is very obvious through performing skills, because hand movements do not have precision and

cohesion. Mental disorders impair the proper conduction of cognitive components of movement initiation, navigation and catch, without which a successful movement is not possible. The lack of just one of these components damages entity of movement and it will lead to failure. In performing of art techniques, intelligence disorder will manifest itself in a very poor and unrealistic drawing without details, which is suitable to a child of much younger age. The work of these children is characterized by scribbling, imprecision in drawing lines and painting, and sculpture inability to form something meaningful. Failure also as one of factors negatively affects success of work. The vicious circle that begins with failure, leads to dissatisfaction and frustration that create new failures, and result in a loss of motivation.

Participants state that the biggest problem in working with children with intellectual disabilities is that they do not understand a task that is asked of them. It is necessary to simplify the task in order to involve a child into an activity. An educator is forced to simplify teaching material to very specific level, because children do not understand how such techniques operates, e.g. the use of watercolors or the use of seals for graphic techniques.

One of the participants stated an example of drawing a spring landscape, where a picture of a sunny day is often reduced to a drawing of the sun, and that is a circle which a child would try to paint yellow colour. Most often not even such an easy task can not be performed in a successful manner. Overshoe and Glumbić (2005) state that in these children there is often a problem of maintaining direction of a line, spatial organization, identifying spatial zones which is linked with the general issue of motor functioning that occurs in these children. Teachers from their own experience state that children with moderate intellectual disabilities know colour only through association (grass, sun, sky, etc.). Another participant gives the example of a girl who works at the intellectual level of a child of 8 months. Work with this little girl is not of educational character but of upbringing one.

Unlike hard disabled children, children with mild mental disabilities were able to participate in the work. By adapting the techniques, it is possible to develop the potential of children, graphomotoric, attention and coordination. By analyzing relationship between the levels of development of drawings and defined independent variables (age, gender, level of education, level of intelligence, family status, and socio-cultural deprivation) in people with intellectual disabilities, statistically significant relations to more parameters of drawings developments are set only in the realms of intellectual abilities and levels of education (Gligorović and Buha-Đurović, 2009).

Like all cognitive functions, perception of the senses is also disrupted in these children. Although it smoothly comes into the brain, sensory information is processed slowly and limitedly. Perception is also influenced by attention which is volatile and weak, so the pupils therefore have a problem with the detection of details and essential characteristics of objects and phenomena. All this affects the experience which is very poor, but the children who were able to acquire speech, are characterized with poor vocabulary.

*Children have different learning styles.* The research results made by Žulić and Žižek (2006) show that about 40% of students have dominant visual style, 30% have auditory and 30% kinaesthetic. A teacher needs to find an appropriate learning style that suits

a child with intellectual disability and to adapt teaching process in a way that suits appropriate learning style.

*Children with autistic spectrum disorders.* When it comes to children with autism spectrum disorders, teachers report that degree of disorder as well as success in the work will depend on the intelligence of a child and on developed communication. Because "Autism does not represent a single disorder, but rather a range of clinical manifestations with probably different mechanisms of cerebral dysfunction" (Glumbić et al., 2013, p. 105). Motoric is often preserved but conscious of a child is narrowed, autistic, so he is unable to participate actively in the work. He is only interested in his themes, which often have no connection with reality.

Although preserved hearing and speech, many children from these group of children are not able to intellectually work out given tasks and therefore require special assistance in work, which is followed by a demonstration. Speech therapist draw a picture, and a child paint it and so on.

Mental absence of pupils with autism prevents them from taking participation in work. In most cases, after failure in cooperation, teachers are forced to leave autistic child to his activities. During an interview with one of the participants, one of the pupils with autism was all the time circling around examiners constantly repeating a few unintelligible sentences from a favourite cartoon. The examiner was trying in various ways to start the communication in any form, but it was completely unsuccessful. His speech was autistic, egocentric and did not serve communication. Some time later, when he got thirsty, he came to his teacher very energetically and asked her to fetch him some water. With the environment he communicated only when it was necessary to satisfy some physiological needs of his own. This example is given, because the majority of those who have in their classes pupils with autism, usually intellectually handicapped, said that they have similar cases. Art work is at best reduced to a drawing that is not connected with the theme or the work of other children.

*Children with emotional and mental disorders.* These children are characterized by inappropriate behavior and outpouring of emotion that is not appropriate for the environment and the context in which they are. According to teachers, these children are irritable and very easy start a conflict with other children. Emotionally unstable. Dissatisfaction can occur for no apparent reason, probably caused by personal frustration with situation in which they find themselves, pain or failure. Considering the fact that the problem is very expressed, it is transferred to learning process. The child is prone to self-harming, throws his or other pupils' accessories, torn paper, destroys his own or someone else's work, and sometimes physically attack some of the other pupils. Restlessness is then in chain reaction extended throughout the whole class and breaks the former harmony.

Participants believe that when a child is intellectually and motorically preserved it is possible to establish cooperation, although others note that such a child is able to provoke a greater mess. Attention of these children is generally poor, and motivation for work is impaired by emotional fixation on a particular person, event or object. Pupils who have experienced trauma, often lack a sense of success in school. They often have the wrong diagnosis of hyperkinetic syndrome, and a therapy that they receive further reduces their presence (Johnson, 2013). Art work will allow them to express

their emotions, release repressed aggression, sadness or discontent and thus overcome difficulties.

Došen (2005) in his study states that in children with moderate mental retardation (IQ 35 - 50) externalized problems are present. He states that such children and adults can show signs of motoric restlessness, stereotypes, can be impulsive and aggressive and stubborn, negative and focused on seeking somebody else's attention. In children with mild intellectual disorders may occur internalized aspects of problems in behavior that usually occur in the form of excessive worry, anxiety, sadness and aspirations towards social isolation (Gligorović and Buha, 2013). A job of a teacher is to calm a child and to try to involve him in work of art, which will channel a part of his unrest.

*Children with chronic illnesses.* These children have difficulties which burdened a child's functioning and therefore affect the performance of his work at school, although not necessarily directly affect artistic skills. Teachers point out that the child gets tired quickly, break class to take therapy or often is absent due to hospitalization. Children with chronic diseases are often sensitive, overprotected, of low immunity and therefore susceptible to new infections. According to participants, often absence breaks continuity in work, creates difficulties in mastering art techniques.

Epilepsy is a chronic disease often present in children with cerebral palsy. Attacks are usually petit mal, small and short with a duration of a few seconds, pass unnoticed because they are not followed by more serious symptoms. According to participants a child for a moment, looks like taking a break and after a few seconds once again regain consciousness. Teachers most easily observe them during work or walk when interrupting of an activity is obvious. Such attacks do not affect significantly performance of teaching, but these children have difficulty with attention and focus.

Many children with chronic illnesses are meteoropats so that beside all the difficulties mentioned they badly tolerate sudden changes in weather conditions. There may appear pain, fatigue, insomnia, nervousness or irritability that lasts for days and totally exhaust children. Special education teachers must observe these difficulties and adapt the work for the child's current condition or completely relieved him from duties. A particular problem is teaching in a hospital setting. "Children in the hospital room are of different ages and number. Therefore, you should first talk to a doctor about any child, contraindications and possible modes of approach" (Eminović et al., 2011, p. 68).

*The children with hyperkinetic syndrome.* These students very easily change topic, and educators have a big problem in keeping their attention. The teachers state they are forced to constantly attract attention of children. Children are continuously on the move, often even when sitting moving in one place. They do not stand still neither in the desks, as if they were "on pins and needles". Because of these mentioned characteristics, they rarely deeper involve in work. One participant states that her pupil has great difficulties when working at a desk, on paper, but when she allows him to work on the blackboard or on a large "flip chart", he shows a lot more interest and achieves greater success.

During an individual work, a child often without having a real need walks around a classroom, spills colours, starts working on one side of a paper and than ask for another etc. As one teacher noted, they usually include in an activity when they see that all

other pupils are working, because they like to be involved in activities of a group and to become a part of it.

Regardless of their hyperactivity, researches confirm that there are no significant differences in expression of children's creativity in children with hyperkinetic syndrome and compared to typical children population (Kojić and Markov, 2008), and the main task of special education teachers is to keep under control children's behavior and attention in order to use these potentials in more useful way. Considering the fact that attention is one of the most important disorders in these children, and that it is also one of the conditions of success in performance in the classroom, teachers must commit themselves to its maintenance. One way is to remove the excess stimuli from the environment that would deter attention. So participants as a recommendation point out that on the table in front of a child should be placed only what is necessary and that classroom should not be noisy.

However, in special schools there are mainly children with hyperactivity which is only following disorder, and it do not cause real major problems in learning process, while children diagnosed with "only" hyperkinetic syndrome, are educated in regular schools.

*Children from socially, culturally and materially non-stimulating environments.* According to participants, the largest number of these children is characterized with poor experience. Knowledge of general terms and the environment is scarce. Poor upbringing, lack of family atmosphere and "the warmth of home", make these children emotionally unstable, passive and dependent. Difficult conditions of life and upbringing hinder their successful schooling. Poor financial conditions further contribute to poor success in school. Children usually do not have tools for art work. They are indifferent to work, because they do not understand the importance of art education nor its value or application in life. Emotional difficulties accompany most of these mentioned children, but very easy they can remain unnoticed, hidden in laughter and outcries. Drawings only sometimes imply the emptiness that many children carry within them. Traces of a traumatic childhood, are pushed deeply into the unconscious, and only sometimes through art can be emerged onto the surface. Their works are poor, with no details, drawn only in one color, usually black.

In the environment in which they grow up art is mainly not appreciated and children do not have developed sense of beauty. They are growing up in an environment which do not encourage development of their potential, but only meet the basic needs of these children, and we can often encounter children with pseudo mentally retarded symptoms, which to an inexperienced educator may look like a mentally retarded, although they are not. However, research shows that various biological factors may adversely affect intelligence and lead to a higher incidence of mental retardation in children who had been exposed to these factors: malnutrition, inadequate nutrition, exposure during intrauterine period specific toxins such as lead, alcohol, drugs or pesticides (Biro et al., 2006). Vujačić (2006), states that the development of Vygotsky's theory emphasizes decisive influence of social factors on development of a child because, according to him, there are more and more mental functions of social origin: thinking, written and oral speech, emotions and willing attention. All the above information tells us that children from non-stimulating environments have very serious problems, which are not stopped

on difficulties in emotional and educational plan, but they already claim intelligence, thinking, speaking and other important functions.

*Children with multiple disorders.* Working with multi-handicapped children can be considered as the most difficult form of education. Almost all children diagnosed with cerebral palsy, in classes of participants were with multiple disorder, and the main difficulties that teachers face in their work with these students will be stated. All participants stated that in working with multi-handicapped children have great difficulty because application of any artistic technique involves their assistance. More serious forms of mental disability associated with immobility and sensory disorders represent a major challenge in work.

Participants state that if you imagine a blind, intellectually handicapped student, with quadriplegia, or a pupil with Down syndrome impaired with cerebral palsy and sensory impairments, who spends most of the time in the "fetal position" on the floor, we wonder ourselves whether the school system can be adapted to needs of these children. Various cases of combination of defects do not represent sum of two or three defects, but are qualitatively new phenomena which therefore requires special elaboration and specific methods of work in practice (Rapačić and Nedović, 2007).

Children with multiple disabilities, regardless of combination of disorder have difficulties in all aspects of art education. Cognitive functioning may or may not be directly affected, but due to combined disturbances it will be compromised. Cognitive functions are related and conditioned, and a problem in only one segment can in chain reaction affect the others. Thus, difficulties in attention, memory or perception will make art work for these children difficult. Regardless of whether motor skills, sensory organs and intellect are damaged, motor functioning of multi-disabled children will be disturbed. Movement performance within the fine motor skills, which is one of the most delicate forms of motoric functioning, will be difficult and will disable proper adoption of art techniques.

However, as participants mention activities of multiply disabled children on a class of Art culture do not differ much from those on classes of Serbian language or Mathematics, on which they also fail to adopt and write letters or numbers. Educational requirements are therefore reduced to a minimum, and although basic, tasks are usually transmitted from one year to another because a child is unfortunately not able to fulfil it.

## **CONCLUSION AND IMPLICATIONS FOR PEDAGOGIC PRACTICE**

The results of our study suggest that there are difficulties in the realization of a class of Art culture, which are unfortunately inevitable companion of teaching that is performed with disabled children. Although a profession of a special educator was created as a response to inability of education of children with developmental disorders and difficulties under supervision of teachers in regular schools, and its presence significantly facilitated the problem by developing specific methods and principles of special education and rehabilitation, problems in teaching did not come to an end.

Regardless to the known fact that that the teaching of Art culture is one of those subjects in which disabled children achieve the best results, research has shown that its implementation imbued with numerous, smaller and larger difficulties, waiting their turn to be overcome. The biggest problems occur when educating of multiple disabled children, whose condition exceeds the limits which require adjustments and conditions, and none of the participants failed to provide these. Participants who realize class with these children, encountered insurmountable difficulties, and noted that their work on a class of Art culture does not differ from activities on a class of any other subject.

Simplified tasks and work on a class, usually have no characteristics of a class of Art culture. Non-existing paradox of Achilles and the tortoise, we can replace by the current who protagonists are multiply disabled children and teaching process of Art culture. A reduced class will with any new change include less characteristics of art culture, and we can freely say that many children will never participate in Art culture classes because they will fail to “catch up” it because with every new change its essence is getting “further”.

The variety of conditions and disorders that can befall a child, requires a high degree of creativity and imagination of educators, so that they can in a new way manage to overcome the barrier in teaching. The fact is that a large number of disorders are considered permanent conditions, points out the difficulties that educators are faced with in working with children with disabilities. The presence of disorder in learning process requires a multidimensional approach, which multiple resources can compensate numerous difficulties. Our participants also believe that the presence of difficulties does not necessarily have a negative sign because their presence indicates that there is a watchful eye of science that finds and defines them with only one goal, to get them to successful solution. Human health needs problems, Jung would say, and it seems that the “health” of science and the development of the same depends on the obstacles placed on its path.

Therefore, the views and conclusions of the participants in this study can be considered relevant and justifiable, taking into consideration the academic education and experience that characterizes them, which was one of the reasons why we have chosen qualitative data processing. Our results and conclusions can serve all educators who deal with children with disabilities, whether it is about regular or special school. Also, the results of this study are intended to affect other researchers to deal with this or similar topics to deepen and complement the knowledge in this field and thus collect data that would certainly be of crucial importance to special educators, teachers, parents and all professionals who work with children with disabilities.

## REFERENCES

1. American Association on Mental Retardation (AAMR) (2002). *Mental retardation: Definition, classification and systems of support*, 10th edn. Washington, DC: AAMR.
2. Biro, M., Novović, Z., & Tovilović, S. (2006). Kognitivno funkcionisanje edukativno zapuštene dece predškolskog uzrasta. *Psihologija*, 39(2), 183-204.
3. Cvetković, A. (2014). Osobnosti dinamičkog crteža kod dece predškolskog i mlađeg školskog uzrasta. *Specijalna edukacija i rehabilitacija*, 13(3), 259-273.



4. Došen, A. (2005). Mentalno zdravlje djece s mentalnom retardacijom. *Medicina*, 42(41), 101-106.
5. Diment, L. E. (2012). A Virtual Art Program to Physically Engage Children with Severe Impairments (Doctoral dissertation, Flinders University–Adelaide, Australia).
6. Eminović, F. (2009). Motoričke sposobnosti učenika sa cerebralnom paralizom kao determinanta u usvajanju programskih sadržaja nastave veština (doktorska disertacija). Defektološki fakultet Univerziteta u Beogradu.
7. Eminović, F., Čanović, D., & Nikić, R. (2011). *Fizička kultura 1 – fizičko vaspitanje dece ometene u razvoju*. Beogradu: Fakultet za specijalnu edukaciju i rehabilitaciju.
8. Gligorović, M., & Buha-Đurović, N. (2009). Osobnosti crteža kod osoba sa intelektualnom ometenošću, u Radovanović D. (Ur). *Istraživanja u specijalnoj edukaciji i rehabilitaciji* (str. 221-241). Beograd: Fakultet za specijalnu edukaciju i rehabilitaciju.
9. Gligorović, M., & Buha, N. (2013). Inhibitorna kontrola kao činilac problema u ponašanju kod dece sa lakom intelektualnom ometenošću. *Specijalna edukacija i rehabilitacija*, 12(2).
10. Glumbić, N., Brojčin, B., & Đorđević, M. (2013). Rana intervencija kod dece s poremećajima autističkog spektra. *Specijalna edukacija i rehabilitacija*, 12(1), 103-118.
11. Horvath, J. (2009). Some Thoughts about Visual Education in the kindergarten of cerebral palsied children. *Practice and Theory in Systems of Education*, 4(2), 79-98.
12. Исаковић, Љ. (2013). Аналогни облици изражавања у специфичном језичком функционисању глувих и наглувих (докторска дисертација). Факултет за специјалну едукацију и рехабилитацију Универзитета у Београду.
13. Jablan, B., & Kovačević, J. (2008). Obrazovanje u redovnim školama I školama za decu ometenu u razvoju: zajedno ili paralelno. *Nastava i vaspitanje*, 57(1), 43-55.
14. Johnson, S. L. (2013). Emotional Intelligence Through Art: Strategies for Children with Emotional Behavioral Disturbances. In C.M. Malley (Eds.), *Exemplary Programs and Approaches „2013 VSA Intersections: Arts and Special Education“* (pp. 87-102). Washington: The John F. Kennedy Center.
15. Kaljača, S., & Glumbić, N. (2005). Karakteristike crteža dece sa umerenom mentalnom retardacijom. *Beogradska defektološka škola*, (1), 117-127.
16. Kovachević, J., & Arsić, P. (2006). *Ученици ометени у развоју у редовној школи*. Београд: Друштво дефектолога Србије.
17. Kojić, M., & Markov, Z. (2008). Kreativnost u likovnom izrazu hiperkinetičke djece. U S. Divljan (Ur.), *Zbornik radova Međunarodnog naučnog skupa „Umetnost u metodikama nastave“* (str. 43-55). Jagodina: Pedagoški fakultet u Jagodini.
18. Kostovska, V., Stanković-Babić, G., Zlatanović, G., Veselinović, D., Jovanović, P., & Otašević, Lj. (2003). Refrakcione anomalije ambliopne dece bez i sa strabizmom. *Acta Medica Medianae*, 42, 41-47.
19. Kušćević, D., Dobrota, S., & Burazer, M. (2011). Stavovi učenika četvrtih razreda osnovne škole o likovnoj kulturi i ocjenjivanju u nastavnom predmetu likovna kultura. *Godišnjak TITIUS: godišnjak za interdisciplinarna istraživanja porječja Krke*, 3(3), 215-227.
20. Nikić, R. (2008). *Metodika razredne nastave sa telesno invalidnim licima I*. Beograd: Fakultet za specijalnu edukaciju i rehabilitaciju.
21. Pacić, S., Potić, S., Miličević, M., Eminović, F. & Nikić, R. (2013). Determination of the Developmental Level of Artistic Expression in Children with Cerebral Palsy. *Croatian Journal of Education-Hrvatski časopis za odgoj i obrazovanje*, 15(4), 1069-1098.
22. Radojević, B. (2011). Razvoj deteta. U: Mitić, M. (ur). *Deca sa smetnjama u razvoju, potrebe i podrška* (str. 13-23). Beograd: FAMILIA.
23. Rapačić, D., & Nedović, G. (2007). *Re-habilitacija višestruke ometenosti. Edukativni seminar višestruka ometenost*, (str. 26-32). Novi Sad: Medicinski fakultet, Novi Sad:

Centar za kontinuiranu edukaciju u zdravstvu i Veternik: Dom za decu i omladinu ometenu u razvoju.

24. Rosenbaum, P., Paneth, N., Leviton, A., Goldstein, M., Bax, M., Damiano, D.,... & Jacobsson, B. (2007). A report: the definition and classification of cerebral palsy April 2006. *Dev Med Child Neurol Suppl*, 109(suppl 109), 8-14.
25. Žulić, D. & Žižek, T. (2006). Dominantni stil učenja – Edukacijske smjernice u radu sa učenicima s mentalnom retardacijom. U V. Đurek (Ur.), *Zbornik radova 6. Međunarodnog seminara „Živjeti zajedno“* (str. 99–108). Zagreb : Savez defektologa Hrvatske.
26. Vučinić, V., Gligorović, M., Jablan, B., & Eškirović, B. (2012). Razvojne sposobnosti dece sa lakšim smetnjama vida. *Specijalna edukacija i rehabilitacija*, 11(4), 585-602.
27. Vujačić, M. (2006). Problems and perspectives of children with special needs. *Zbornik Instituta za pedagoška istraživanja*, 38(1), 190-204.