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## CONTEMPORARY FORMS OF VISUAL AND AUDIO MEDIA IN THE FUNCTION OF THE SIMULTANEOUS EXPERIENCE OF ART AND MUSIC

### SUVREMENI NOSAČI SLIKE I ZVUKA U FUNKCIJI ISTOVREMENOG DOŽIVLJAVANJA LIKOVNIH I GLAZBENIH UMJETNIČKIH DJELA

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#### *Abstract*

The article presents some possibilities of connections between artistic music and art information's experiences by pupils at the elementary level of education. The emphasis was on active reception of chosen art and music works from the art treasury and experienced creative reactions to them. In the music field there, are set out emotions, which arise by listening to music over music elements and structures, in the art field, the emotions are connected with impressions of harmony and expressions of art elements. The purpose of our research was to establish the ability of children to connect art and music field, and to investigate experiencing and reactions to presenting art and music works. Our theoretical hypothesis was verified in practice on the sample of elementary pupils aged 6 and 11. By connecting simultaneous experiences of art and music works observed, by most chosen examples, statistically important differences in artistic experiences of younger and older categories of pupils were established.

#### *Sažetak*

Obrađuju se mogućnosti povezivanja doživljavanja glazbenih i likovnih umjetničkih poruka, posredstvom suvremenih kvalitetnih nosača zvuka i slike, kod učenika nižih razreda osnovne škole. Posebna pozornost usmjerena je aktivnom prihvaćanju izabranih umjetničkih djela iz područja svjetske likovne i glazbene baštine, te stvaralačkoj reakciji koja treba uslijediti nakon doživljaja. Na području glazbe nastaju osjećaji koji su potaknuti glazbenim elementima i strukturama, dok na području likovne kulture nastaju osjećaji povezani s doživljavanjem skladnosti i izražajnosti likovnih elemenata. Cilj empirijskog istraživanja bio je ustanoviti sposobnost učenika za povezivanje likovnog i glazbenog područja, proučavanje doživljaja i reakcije kvalitetno prezentiranih glazbenih i likovnih djela. Praktična provjera teoretskih pretpostavki bila je izvedena na uzorku učenika razredne nastave osnovne škole u dobi između 6 i 11 godina. Prilikom povezivanja istovremenog doživljavanja glazbenih i likovnih djela u većem je broju primjera uočena statistički značajna razlika doživljavanja između mlađih i starijih učenika.

#### **1. Introduction**

Art and music education are subjects where students learn to perceive and receive works of art. This process works in conjunction with the students' inherent creative and expressive abilities. Artwork can be perceived and analyzed through the senses, but we have to see the entirety of an individual artwork. For visual and music artwork, students' attention has to be directed towards concrete elements in the structure of the compositions /1/. Some aspects of an artwork are easy to introduce to the students while others are harder, some should be dealt with earlier and some later, but never all at the same time. It is important to consider the age of

students and their experience in the field of art and music.

For the student, encountering artwork in the field of visual arts is most efficiently done in museums, galleries and exhibition spaces, whereas musical compositions attain the best effect on the students when experienced in the concert hall. In spite of the ideal conditions which the galleries and concert halls offer, the majority of art and music classes are still held in the classroom.

To get the highest quality of visual and audio information, teachers use different types of media. Modern teaching technology has enabled teachers to introduce artwork and music at a much higher quality, therefore intensifying the viewer's feelings

and reactions while experiencing them. Quality visual and audio information, presented via modern ETO, can arouse a high intensity of visual and audio impulses. Modern multimedia devices enable us to experience visual and audio information simultaneously.

In the research we paid special attention to the selection of media. The artworks were scanned at a high resolution and projected onto a LCD projector. The music chosen was played from digital discs using high quality audio equipment.

## 2 Definition of terminology and the basic characteristics of art and music appreciation

In the research we paid special attention to the active reception and inner creative reaction to works of art that were selected from our world treasury of art and music. We chose to refer to the students' common perceptive-receptive abilities as art and music *appreciation abilities*.

Over the past years several authors have been searching for specific terminology to describe the process that takes place during the evaluation of visual and musical compositions /2/. The word reflection, used quite rationally, was often described as contemplation about a piece of art or music. Today this word has a different meaning. Of course we can reflect on a piece of art and take it into consideration, but to contemplate it would involve a level of cognitive activity that is inadequate to be represented by the word reflection. Sedlmayr wrote: "Interpretation cannot be achieved only by contemplating a work of art, it demands one's complete personality – mind, soul and body – a human, and is best defined as the imitation of seeing /3/. As a synthesis of these three observing methods, Trümper introduced a new term, "*perspection*", which he thought to be more suitable than analyses or reflection.

To refer to the students' common artistic perceptive-receptive abilities, we used the term *artistic-appreciation abilities*. This refers to the complexity of observing and experiencing artwork. "To me, the term *artistic observation* involves too much passive esthetic judgment and is too intellectual to use in reference to children in primary school. As well, the formal term *artistic evaluation* sounds pretentious, even though no one actually expects children to evaluate artwork. At this point in their education, they are only just being introduced to the "idea of evaluation" /4/. Similarly, with an emphasis on the age level of 6 year old children, Vrlič also emphasizes: "Art evaluation is in the field of art education, where children are introduced to

works of art and their significance in our society" /5/. He continues by emphasizing that art evaluation cannot be just passive observation, but an active process of establishing a relationship between a work of art and a child. Art appreciation is based on emotions which are connected with experiencing and receiving a harmony with and expressiveness to artistic elements.

Similarly, music can also be talked about in terms of musical elements and structures which release the listener's emotions. Therefore, active listening and the reception of music will be referred to as *music appreciation*. "Listening to music is much more than the perception of sound impulses with a hearing organ. It is a creative process which includes the perception of sound impulses which create an emotional reaction, thus giving meaning to the sound perceived. It also includes the creative anticipation of the continuation of the musical structure". /6/ According to Bamberger's words, it is a conversation between the music and the listener that gives it meaning /7/. In musical terminology we often encounter the term holistic or integrated listening. The word holism, according to Capra, means "understanding something as being made up of parts of a complete whole, wherein it is impossible to understand its essence by focusing on the peculiar aspects of its smaller parts". /8/ When listening to music, it is important to visualize the entire composition as being meaningfully composed from smaller and bigger parts, where musical phenomena interconnect and depend on each other. The musical structure unveils itself as a logical process that includes important relations and integrations of the smaller parts that make up its entirety. Besides thinking, listening also includes emotions and feelings. A listener can respond to the music emotionally, unconsciously, irrationally or intellectually. There are also non-musical responses, such as physiological, psychological, emotionally affective and mentally associative points of view. Rajneesh emphasizes a need for listening with one's entire personality, what he calls "existential listening" /9/. Experiencing music as an art form not only utilizes the cognitive and affective components of listening, but also the evaluation of what is heard. Sensual, non-conceptual comprehension, as well as a cognitive understanding of music have an effect on an individual's evaluation of music and its placement in the system of individually shaped values. /10/

For the music we used the same terminology as we did for art: the word *appreciation* was chosen to refer to the students' perceptive-receptive abilities.

In developing appreciation it is important to question the nature of appreciative ability. Professionals have distinguished two theories:

1. Appreciative ability – which a child has or does not have.
2. Appreciative ability – as being made up of a broader scope of abilities and characteristics, which include: perception, imagination, associations, memory, emotions, and evaluation in general.

In our research we proceeded from the presumption that the appreciative abilities were present in the population of children as well as all the other abilities listed /11/. We presumed that appreciation is a part of a common ability that, more or less, all normal children have. In the majority of children this ability develops with age. "The development of art appreciation is based on the development of a very subtle perception of artwork. While developing perception, children encounter individual problems in visual art and learn to see the artwork, understand it and enjoy it." /12/ The same is true for music. The process of creativity gradually emphasizes the incorporation of conscious and rational components with emotional and spontaneous components. This process develops similarly to the process of art and music appreciation. Our creative character includes the process of receiving an artwork, which is a similar characteristic to those seen in one's appreciative abilities /13/. Several authors have used different methods to introduce and interpret individual phases in the development of appreciation /14/. In primary school we avoid intellectual evaluation that is based on defined esthetic principles and rules, which the students are just starting to learn. In school we persist with the perception of an artwork, but we do not deny the important components of appreciation, for example: affectivity, which is released while in the presence of a work of art and is the product of individual factors peculiar to every person.

### 3. Planning and realization of the research

The research was based on the fact that appreciation is accessible to everyone, however not to the same extent. It is possible, and necessary, to develop appreciation in schools and systematically bring it nearer to the students. For the development of art appreciation, it is not only important to perceive the artwork by looking, listening and quickly reacting to it. There, as well, has to involve a meaningful experience of its perception. There needs to be achieved an interaction between the student and the artwork while they simultaneously

observe and listen. This interaction is personal and varies from child to child. Therefore, classrooms need suitable conditions so that children can fearlessly express their opinions, which differ from child to child because of their own perspectives and associations. Each student having their own perspective will enhance the experiences of the rest of the students and in so doing indirectly stimulate the development of their own appreciative abilities. Teachers have to realize that every student responds differently to the same artwork. It is important that every one responds to a piece of art in many ways. We have distinguished three different ways of responding:

- Emotional response to a piece of art
- Associative response, which is based on the associations that students get from a work of art.
- Formal intellectual response, which appears when students formally analyze and interpret a piece of art. /15/

These three types of responding vary from student to student and from artwork to artwork. Some may immediately respond emotionally, while others will respond on an intellectual level. Some works of art can also stimulate an immediate emotional response by the majority of observers, while other works of art activate associations. We used these responsive types as our basic guide for the selection of artwork and musical compositions.

### 3.1 Selection of visual artwork

In selecting the visual art samples we considered a few facts that dealt with the age of the students included in the sample for a research. Characteristics, such as form and background, represent the simplest organization of emotional material in art. Therefore, we chose artwork with intense colors and contrasts. Based on their experience, the students will interpret the works of art in different ways. We knew that the subject of each artwork would have a strong impact on the results of our research. Therefore we decided for abstract painting. We chose works that were dominated by soft or hard shapes with contrasts of geometric and amorphous contours. The paintings were introduced using quality reproductions. Three artists were represented: Robert Delaunay, Wassily Kandinsky and Piet Mondrian. The following provides an introduction to these artists and the works we chose.

Robert Delaunay (1885 – 1941) studied the colorist view of cubism in his paintings. As a representative of orphic cubism, he was one of the first painters to experiment with nonfigurative art, however real abstract painting did not start until the



appearance of the artwork of Wassily Kandinsky. In Robert Delaunay's painting, *Circular Forms* (test painting 3); soft circular forms dominate using a contrast of warm and cold colors. The painting feels comfortable and can be connected with feelings of gentleness, happiness and especially warmth. Concentric circles, which dominate the painting, are "distributed in sectors as answers to different color-harmonies. An effect of dynamic rotation is achieved. The color scheme, as in music, is arranged using a defined rhythm." /16/

Wassily Kandinsky (1866 -1944), a Russian by birth, studied painting with Anton Ažbe in Munich. He was one of the founders of the abstract school of art in Germany. First he formed a group of artist called "Phalanx" and later the famous group "The Blue Rider". The painting *Red Spot* (test painting 1) represents an abstract composition. The painting is dominated by softly shaped lines and strong light-dark color contrasts. Soft lines and dark colors give the painting a feeling of tranquility, sadness and peacefulness. Thematically, the painting comprises only basic visual elements, such as line and color. There are no realistic elements. The painting is full of anarchistic romanticism, which makes it impossible to recognize the architectonic constructiveness of the later "master masons". This type of art is referred to as abstract expressionism, which, without a connection to realism, can stimulate psychological spontaneity. Kandinsky, with his typical terminology, titled his abstract expressionist paintings "improvisations." /17/

The painting *Triangles in Arc* (test painting 4) radiates a certain sternness, which is the consequence of triangular shapes. The painting's distinctive quality is its light – dark contrasts with a dominant use of the colors red (associated to fire and blood) and black (associated to fear, sadness and loneliness). The painting is built on a complex composition scheme, "which is significant for its architecture of abstract elements. The artist's treasure of forms consists of a fully constructed universe of circles and triangles with winding and straight lines and right angles. Here Kandinsky achieved the stage of melting inward, which he indicates as the highest goal of his art. This enabled him to produce one of the most powerful paintings of his time." /18/

The Dutch artist, Piet Mondrian (1872 – 1944) assigned his art with the role of revelation, and almost gave it a religious meaning. This painting, one of his mature paintings, reflects a composition technique that is reduced to essential elements. This technique is referred to as neoplastic abstraction. The painting *Tableau II* (test painting 2), which Mondrian painted between the years 1921 and 1925, introduces several planes, between which, vertical

and horizontal black lines are painted in primary and achromatic colors. The painting looks quite dynamic and is a typical example of neoplastic abstraction. "Mondrian's painting is mainly dominated by yellow, blue and red colors. He only used the color black for wide, dividing lines. The painting has no central subject. The right corner of the painting contains its focal balance. Nothing is more static than the individual segments of the painting, and nothing is more dynamic than the entire composition." /19/

### 3.2 Selection of music

When selecting the musical compositions, we proceeded from the presumption that listeners experience traditionally composed tonal music as something orderly and pleasant. Modern compositions, which break down and even deny traditional musical structures, can give an impression of disorder. This sense of disorder can bring about unpleasant feelings when listened to.

For the music which was chosen to be experienced simultaneously with the selections of abstract artwork, we chose pieces that do not employ any programmatic techniques. We chose instrumental works that were composed using different musical languages, contrasting forms and a variety of structures and expression. One of the four selected works was taken from the baroque era, two were selected from the late romantic period, and the fourth composition is completely avant-garde and is characterized by sharp dissonances. The pieces selected were composed by: G. Mahler, T. Albinoni, J. Sibelius, and S. Osterc. The following provides an introduction to the composers and their works.

Gustav Mahler (1860 – 1911), like Sibelius, continued Beethoven's and Brahms' symphonic tradition. They both composed in the late romantic style and both loved nature. Their compositions depict nature, however, not in a realistic, imitative way. They were composed as expressions of a common mood about nature. /20/ Mahler's harmonic language is characterized by chromatic textures, complex harmonies and a fondness for using intervals of a third. He had an outstanding sense for instrumentation. In the symphonies he enlarged the orchestra, included vocal soloists and choruses and substantially extended the symphonic song-cycle form. /21/

Symphony no. 1 in D-major (1888) was originally conceived as a programmatic work connected with the novel "Titan" by the German writer Jean Paul. Originally, Mahler had given the movements subtitles; however, he later removed them. The symphony reflects innocence, the discovery and experience of nature, the need for giving and

receiving love, and the hard disappointment of resignation. In this work we can already encounter his habit of quoting folk music and borrowing material from his earlier works – »Lieder eines fahrenden Gesellen«. The quotations are connected within the framework of the movement's context. /22/ The second movement "Kraftig Bewegt" is deeply rooted in Austrian folk music. The movement is basically a landler (Austrian folk dance), transformed into a frolicking, stamping dance. The opening melody, which repeats several times, is played by the string and wind instruments. Interspersed with this are short passages which gradually combine to achieve a climax of wind instruments and quickly repeated cords played by the trumpets. The harmonic structure is based on intervals of a third, a style characteristic of Mahler. /23/

Tommaso Giovanni Albinoni (1671 – 1751) was a Venetian baroque composer with a gift for rich melodies. He had an outstanding sense for composing fluent, melodic melodies and harmonic elegance. /24/

Albinoni's slow movement, Adagio in G-Minor, from his Trio Sonata, has often been used as an underlying score in popular culture. The piece was arranged by the musicologist Remo Giazotto. He based his arrangement on the remnants of a score found among the ruins of the Old Saxon State Library in Dresden. The music was extracted from the basso continuo part and six measures of the melody. /25/

Jean Sibelius (1865 – 1957) was a Finnish composer "whose imagination was ignited by the beauty of his homeland and its past." /26/ Sibelius was a nationalistic composer. This can be seen in his meditative elegiac gentleness, melancholy and depictions of the cold beauty of Finland's northern landscapes. Beyond this, his music is characterized by an adherence to classicism with a warm romantic flow. With his seven symphonies he proved "that no classical form ever gets old for a composer with enough imagination and creative talent to fill it with heroic thoughts and strong emotions". /27/

Symphony no. 2 in D-major, op. 39 (1901 – 1902) was composed in a romantic, realistic style and is characterized by a darkly colored brilliance of sound, frequent ostinatos and tragic emotional expression. His genius can be heard in his exaggeratedly dramatic writing, great effects, varying tone colors and emotional intensity. "The symphony shows a new, individual musical expression perceived through orchestral color and an architectural structure of form. He doesn't follow the classical structure of introducing his thematic material in their entirety. He starts with fragments, bits and parts of themes, which gradually coalesce into a

whole in the middle of the movement. He then disassembles the theme back into the fragments he began with. /28/ The third movement (scherzo) is built on two main themes and is full of cheerfulness. According to Georg Schneevoig, the third movement represents the awakening of national awareness.

Slavko Osterc (1895 – 1941) "was one of the key personalities in Slovene music of the 20th century". /29/ He brought new artistic views to Ljubljana, from neo baroque and neo classicism to expressionistic constructivism; from atonality and a thematic material to quarter tone composition". /30/

Nonet (1937) for wind quintet, violin, viola, cello and double bass, is one of Osterc's late works where he broke away from tonality. The two movements (Moderato and Allegro con brio) disintegrate into several sub-movements of differing tempos. The melodic lines are rhapsodically confused and do not aim towards a tonal center. The rhythms change from phrase to phrase. A strong linear movement is present, which leads to melodic counterpoint. The thematic material is derived from the development and transformation of the musical ideas. /31/ Unusual harmonies and jagged counterpoint are created by composing melodic lines "while at the same time developing a harmony that is nicely hidden under perfected chromatic textures." /32/

As in music, where individual compositions can be connected to specific emotions and nonmusical thoughts, the selected abstract paintings can also awaken different feelings. This is where the two art forms connect. On the basis of one's appreciation of fine art, it is possible to associate the paintings with the music chosen for this research. This fact summarizes the backbone of our research into the simultaneous experience of art and music.

### 3.3 Implementation of the research

For the research into the simultaneous experience of art and music, we used the descriptive and causal methods of pedagogical research. The purpose of the research was to perform empirical research for the purpose of finding out the abilities of children, age 6 and 11 years old, in linking the visual and musical fields of fine art. We wanted to know if there exists a difference in the appreciation of the selected works.

186 students from southwest Slovenia were included in the research. They were put into two groups according to age. 49.5 % (92 children) were in the group of 6 year olds and 50.5 % (94 children) were in the group of 11 year olds. The children in the selected age groups were at different levels of development; therefore, we anticipated differences in the results from each group.

The research was performed during one school hour. First we talked with the children about the

painters and musicians. We then concentrated on listening to the music with closed eyes in an attempt to absorb the sound more thoroughly. We then examined the selected artworks in detail. After this was done we began the experiment of experiencing the art and music simultaneously. All the paintings were numbered and each student received a sheet of paper with numbered frames corresponding to the selected paintings. First they listened to all the music once through, then they listened to each piece in the order we prepared them. They were then asked to link the music that was heard to one of the selected paintings. For the first piece of music they were asked to circle the frame that corresponded to the painting they chose with black color. The frame they chose for the second piece of music was to be circled with red color. Blue was used for the third piece and yellow for the fourth. They listened to about two minutes of every composition. The children did not have any serious problems with completing their tasks. They all carefully listened to the music and observed the paintings. Interestingly, the 6 year old children carefully hid their work from each other.

#### 4 Interpretation of the results

Linking the paintings to the first musical sample (Symphony no. 1 in D-major, second movement)

The linking of the paintings with the first piece of music revealed a difference between the age categories of the children on the level of statistic importance ( $\chi^2 > \chi^2$  ( $\alpha = P = 0.05$ ,  $g = 3$ ) = 22,439). 43% of the 6 year olds linked the first piece to the painting (Red Spot); However, only 17% of the 11 year olds linked the music to this painting. 50% of the older children linked the music with the third painting (Circular shapes). The second movement of Mahler's symphony was written using a traditional musical language. It has a fast tempo and is rich with colorful instrumentation. It expresses happiness and warmth. The students felt a certain kinship to the music because of its use of Austrian folk melodies. The third painting (Circular Forms), which most 11 year olds linked with the first piece of music, expresses a harmony of warm colors and soft forms. Most of the 6 year olds chose the first painting (Red Spot). This painting is characterized by a contrast of soft forms and dominating cold colors which surround a warm red color-spot. The subject of the painting is quite stylized and blurred, while the melody in the music is clearly presented. In addition to this, Delaunay's Circular Forms is, in spite of its softness, clearly profiled and built on traditional principles. It was harder for the 6 year old children to link both art fields because they had less experience with them. They did not pay

enough attention to all the artwork when linking the first painting with the first musical sample. They only concentrated on the warm expression of the painting and the experience of positive emotions while listening to the first piece. The 11 year old children were able to link the emotional component of experiencing music and painting with the rational perception of the compositional elements in both works.

Linking the paintings to the second musical sample (T. Albinoni/R. Giazotto: Adagio)

The linking of the paintings with the second piece of music revealed only small differences between the age categories of children, and fell below the level of statistic importance ( $\chi^2 < \chi^2$  ( $\alpha = P = 0.05$ ,  $g = 3$ ) = 4,722). 32.6% of the 6 year olds and 35.1% of the 11 year olds linked the music with the fourth painting (Triangles in Arc). This painting displays soft and sharp forms that are dominated by repeated triangles, which give a feeling of sharp points. Contrasts of warm and cold colors can also be seen. The painting has a lot of cold color, which can be connected with melancholy and sadness. The music has a slow tempo and is in a minor key, both of which are usually perceived as conveying sadness. Also, the orchestration uses color contrasts between the organ and strings. The strings play freely shaped melodic lines accompanied by contrasting warm harmonies. The melody is composed in a style that is common for classical music. The analyses of the results show that both the younger and older students reacted to the music, which is emphasized by a melodic melody, on the emotional and associative level. For both of these samples, color had a strong effect on the children's reaction.

Linking the paintings to the third musical sample (J. Sibelius: Symphony no. 1 in D-major, 3. movement)

The linking of the paintings with the third piece revealed statistically characteristic differences ( $\chi^2 > \chi^2$  ( $\alpha = P = 0.05$ ,  $g = 3$ ) = 19,015) between the two age groups of the children. 39.1 % of the 6 year olds and only 13.8% of the 11 year olds linked this piece of music to the third painting (Circular Forms). Most of the 11 year olds linked Sibelius' music with the first painting (Red Spot). Sibelius' music is fast and explosive, expressing nervousness, anger and rage. The timbre is dark in tonal color and there are numerous dramatic orchestral effects. Instead of introducing the theme classically as a whole, Sibelius presents his main ideas in fragments, which he then slowly combines into an organic entirety. He then disassembles them back into fragments again. Similarly, the painting Red Spot is dominated by cold colors and is made up of partially composed forms mixed with soft abstract shapes. Most of the



6 year olds connected this piece of music with the third painting (Circular Forms), where warm colors and soft forms dominate. We discovered that the younger children reacted mostly on the associative level and linked the painting and the music without much deliberation. They linked it to the most suitable painting left. The older children reacted to and liked the samples according to the emotional, associative and formally intellectual levels.

Linking the paintings to the fourth musical sample (S. Osterc: Nonet)

The linking of the paintings with the fourth musical sample revealed statistically characteristic differences ( $\chi^2 > \chi^2$  ( $\alpha = P = 0.05$ ,  $g = 3$ ) = 20,212) between the two age groups of the children, wherein the majority linked the second painting (Tableau II) with Osterc's music. The age percentage of the children who linked the paintings to this sample is as follows: 47% of the 6 year olds and 53 % of the 11 year old children. The painting (Tableau II) is dominated by sharp and regular forms using primary colors separated with black. Even though the painting is lacking a central subject, it gives a feeling of order. The entire composition is very dynamic with strongly changing rhythms and tempos. It has no tonal center and displays unusually sharp timbre combinations and unpredictable texture changes, such as the use of polytonality and unisons. All the children found the above mentioned painting and music sample unusual and different from the rest. From the results we concluded that all the children associated this difference with their being unusual, and reacted to them on the emotional and associative level. We discovered that the older children were aware of the desired effects of avant-garde composition technique and thus responded to the samples on the intellectual level more than the younger children did.

## 5 Conclusion

Even though we experience music and artwork completely on an individual level, there exists a tendency to express specific emotions when experiencing certain colors, shaping styles and forms. The more we know about an individual piece of art, and the deeper we absorb ourselves in it, toward a harmony with the artist's attention, the more we can be perceptive and receptive. Our research showed that apperception is an ability that can be developed. Older children more actively listened to the music, experienced it on a deeper level, and therefore, with most of the samples, more suitably linked them to the selected paintings. They responded on the emotional, associative and intellectual levels. The younger children responded to the artwork mostly on an emotional and associative level, and therefore

had more trouble linking the two mediums than the older children did. The children had the least amount of problems in linking the painting Triangles in Arc by Kandinsky to the baroque music by Albinoni, and Tableau II by Mondrian with Osterc's music. The children had the least trouble with accordant apperception when dealing with the cleanest and the most traditional forms, and the most avant-garde works. The paintings and music from these categories represented the samples that were closest and most distant from their audio and visual expectations.

In Scheidegger's words /33/ "artistic experiences serve as a link between material welfare and emotional well-being". Multi-sensory perception enables a deeper experience and understanding of art, therefore schools should pay more attention to creating a multidisciplinary approach to teaching fine art, in which the works should be presented using quality reproductions and modern technology, as well as real life interaction.

## References

- /1/ Students recognize and respond to different artistic elements (line, color, gradation...), structures (rhythm, size...), musical elements (sound – its duration, pitch, intervals, dynamics, and color), their organization and structure (rhythm, melody, speed, harmony).
- /2/ Trümper (1966, pg. 292) "Assimilation is a procedure borrowed from natural science (which also has an important role in sociology). It presents contrary aspects to the term apperception (apperzeption)." For example, the term assimilation hides the following terms: experience, understanding, cognition, conquering. Regardless of this, the term assimilation includes all of the described psychological and individual activities that cannot precisely indicate the inner process that occurs when observing a work of art. This process cannot be indicated only as an experience of art or understanding of it because it is multilayered and involves the entirety of a person.
- /3/ Ibidem, p. 293-294
- /4/ Karlavariš B. (1991). Metodika likovnog odgoja 1. Rijeka, Hofbauer p.o., p. 4.
- /5/ Vrljič, T. (2001). Likovno-ustvarjalni razvoj otrok v predšolskem obdobju. Ljubljana: Debora., p. 126.
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- /9/ Rajneesh O. (1990). Vrhovna alhemija. Beograd.
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- /11/ Recent research has shown that creative and appreciative abilities are a matter of quantity, which means that special characteristics whom only talented children should have, do not exist. All normal children have all these characteristics.

- /12/ Duh M. (2004). Vrednotenje kot didaktični problem pri likovni vzgoji. Maribor, Pedagoška fakulteta., p. 45
- /13/ Karlavaris separates the process of art education into the following phases: intentional attention, horizon of expectation, intertwining of an observation with intellectual and emotional processes, first evaluation, global synthetic experience, analytical-critical evaluation of individual layers of an artwork, evaluation synthesis, and conclusion of reception. (Karlavaris, 1991, pg. 101)
- /14/ For the development of appreciation in primary schools it is necessary to consider two phases. The first phase is to give the child a clear perception of the artwork and the second phase is that the results of their perception are expressed with the words: to become conscious.
- /15/ From <http://www.sasked.gov.sk.ca.docs/artsed/g7arts-ed>
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