Razvijanje in spodbujanje ustvarjalnosti z umetniškim delom pri mlajših učencih

KRISTINKA SELAKOVIČ

Povzetek Namens eksperimentalne raziskave je bil proučiti učinkovitost in učinek opazovanja umetniškega dela z uporabo posebej oblikovanih strategij, metod in postopkov na razvoj splošne likovne ustvarjalnosti pri učencih. Raziskava je bila izvedena na vzorcu 199 učencev dveh osnovnih šol v Užicah (Srbija). Spoznanja, ki so bila pridobljena, kažejo, kako pomembno je za otroke, da umetnino samostojno in skozi interakcijo doživijo na osebni ravni ter razvijajo lastne pojme.

Ključne besede: • ustvarjalnost • umetniško delo • učenci mlajše šolske starosti • razvojni program • muzej •


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Developing and fostering creativity through the works of art by young pupils

KIRSTINKA SELAKOVIĆ

Abstract The aim of this experimental research was to examine the effectiveness and impact of active observation of the work of art by applying specially designed strategies, methods and procedures to the development of general artistic creativity in pupils. The research was conducted on a sample of 199 pupils (the experimental group consisted of 102 pupils, and the control group of 97 pupils) from two primary schools in Užice (Serbia). The conclusions indicate how important it is for children to access the work of art on a personal level, independently and through interaction, as well as to develop their own concepts.

Keywords: • creativity • work of art • young pupils • Development program • museum •
Introduction

The development of creativity is one of the fundamental goals and demands of schools in working with children and is the basis of the concept of modern education. There is no doubt that art has creative potential, which is one of its primary and distinguishing features. Children's artistic expression has a creative character, and many studies in the field of art education indicate that adequately selected content and methods of fine arts education can influence the development of visual artistic creativity, the development of creative thinking and the emancipation of the personality of the pupils (Duh, 2004; Karlavaris and Kraguljac, 1981; Karlavaris, Barat, Kamenov, 1988). Numerous studies in psychology and pedagogy over the last fifty years have sought answers to three essential questions: 1. What is creativity and what is its nature? 2. Can creativity be measured? and 3. How can creativity be encouraged, developed, trained and cultivated? (Kvaščev, 1976; Maksić, 2006; Šefer, 2000a; Šefer, 2000b; Šefer, 2005; Škorc, 2012).

The importance of creativity and overall wellbeing for the whole society was noticed in the middle of the last century, and apart from art, it is present and necessary in science, at work, during work, in sport and in other areas of human activity. Experts in the field of education believe that, given certain educational groundwork, creativity can be successfully developed. Alice Miel says:

Creativity is the quality that every person can achieve in his life. Individuals differ only in different types and different degrees of creativity. Creativity in most individuals can be achieved and enriched through upbringing and education. This is when a capable teacher, who is himself a creative person, experiences the teaching process as a creative act, and not as a routine work. (Majl, 1968: 7).

The curriculum for the subject of Fine Arts in primary school presupposes, contains and evaluates the creativity of pupils and teachers. The aim of educational work in the teaching of the fine arts is to encourage and develop pupil's creative thinking and action (Pravilnik o nastavnom planu i programu za treći razred osnovnog obrazovanja i vaspitanja, 2006). Although this study does not focus on the research process, the process of this very important part of children's creativity should not be ignored, which some authors have pointed out (Šefer, 2005). Šefer believes that children's creativity can be discussed not only from the perspective of the product, but also from the perspective of exploring the action, which means that children are primarily focused on the creative process. Children's creativity can be viewed and studied from multiple angles; it is an inexhaustible topic and a constant challenge for researchers. Each child and adult has creative potential to a certain extent, and it should be encouraged. It is thus wise to encourage creativity in primary school children as the primary goal of teaching aimed at developing children's potential.
Works of art as encouraging and developing creativity in pupils

The curriculum for the teaching of Fine Arts in the lower grades of primary school is mainly based on productive, practical children's activities, visual expression and the process of research learning and creation. However, many researchers believe that, for the holistic development of pupils, it is necessary to connect and at the same time develop productive and receptive visual art abilities (Bertscheit, 2001; Chapman, 1978; Duh, 2004; Eisner, 1991; 2002; Housen, 1987). Explaining the importance of art for the development of a child, Eliot Eisner (Eisner, 2002) point out that, in addition to developing aesthetic intelligence and creative potential, the processes that take place in Fine Arts education enable pupils to learn through experience and help them to communicate through the work of art and thus learn to express their experience and impression. Therefore, one of the important values in Fine Arts education lies in the fact that art contributes to the formation of individual experience in understanding the world (Eisner, 1969). Through art, the child learns and adopts various ways of expressing, presenting and understanding ideas, feelings, values, emotions and cultural beliefs (Gibson, 2003: 112). That is why it is necessary to enable young children to encounter works of art and interact with artistic creations in order to develop in them the ability to perceive and also to trigger their creative charge.

As a multilayered phenomenon, the work of art in the teaching of the Fine Arts represents an extremely important didactic means for gaining knowledge, encouraging creativity and moving imagination to the unimaginable and unreal. With its stratification, it can contribute to development of the child's entire experience and knowledge about the surrounding world. It also represents an appropriate visual art stimulation for understanding and solving a visual task, since it will foster multidirectional communication that can contribute to the whole experience of the child in learning about the world around him. As a didactic medium, apart from teaching in the field of Fine Arts, it can be used in other areas of learning as material through which various historical periods, culture and customs, as well as the religious and mundane lives of people of different epochs, can be introduced (Pavlović, 2013). Therefore, the work of art can contribute to the intellectual, cultural, humanistic and aesthetic development of pupils, but only if it awakens interest in children. The work of art provides broad opportunities for observation, understanding and evaluation, but does not allow improvisation and superficiality (Gajić, 2006).

According to the opinion of art historian Helen Gardner (1967), the work of art has its own form that is created by the artist, has its own cultural and temporal context, content or theme, and usually a function or application. Understanding the work of art is a demanding task when placed in front of pupils. Understanding different artistic styles and periods of creation of works of art, adopting the visual language and experimenting with techniques are all difficult tasks for pupils. The teacher should gradually and progressively encourage pupils towards observation, understanding and experience of the work of art, since this is one of the goals of fine arts education. Some authors (Kuščević, 2013) believe that the encounter with works of art should be adequately realized at all levels of pupils' education, in order to develop the capacity...
for aesthetic evaluation among pupils, along with their cognitive and emotional abilities.

**Methodology (Methodological framework of the research)**

*Subject and purpose of the research*

The main purpose of this research was to determine what active observation and perception of the work of art can develop in pupils of the younger school age, or whether both can influence the development of creativity. The subject of the research puts into context the belief that the manifestation and development of pupils' creativity can be fostered by adequate and diverse strategies, methods and approaches that stimulate active observation, perception, reception and appreciation of the work of art. Therefore, the subject of research is the role of the work of art in encouraging and developing creativity. The aim of this research is to examine the effectiveness and the impact of active observation of the work of art through the application of specially designed strategies, methods and procedures for the development of artistic creativity among young pupils in the teaching of fine arts. One objective of the study is operationalized through the following research task:

1. Examine whether there are statistically significant differences in the level of general visual artistic creativity in pupils from the experimental and control groups before and after the introduction of active observation of works of art.

We began from the observation that, in the contemporary visual artistic upbringing and education of pupils, in addition to independent artistic expression and creativity, it is necessary to pay equal attention to how children observe, perceive and react to the work of art; on this basis the hypotheses were formulated that constitute the starting point in this research. In order to better handle the subject and accomplish the set goal of the research, a general hypothesis is defined, as follows: *active observation of the work of art, with specially designed strategies, methods and procedures, influences the development of visual artistic creativity in pupils from the third grade of primary school in the teaching of Fine Arts*. It is expected that there will be no statistical differences in the initial testing, but that there will be changes in the final testing of pupils.

On the basis of the defined general hypothesis, a special hypothesis was formulated to provide the foundation from which the research was carried out:

1. It is assumed that there are statistically significant differences in the level of general visual artistic creativity between pupils from the experimental and control groups after the introduction of *active observation of the work of art*, where pupils from the experimental group in relation will show a higher level of general visual artistic creativity when compared to pupils from the control group.

For the purposes of this research, a program was designed which systematically introduces into Fine Arts teaching active observation of the work of art and practices...
frequent visits to art exhibitions in galleries and museums. Active observation of the work of art implies perception, reception, appreciation and evaluation of art, which are all dynamic processes and should be seen from the methodological and pedagogical-didactic angle. The specially designed program was called *Active observation of the work of art in encouraging the development of visual artistic abilities in the teaching of the Fine Arts.* Since the aim of this program was to bring children closer to the works of art of the world and national cultural heritage through adequate and diverse strategies, methods, methodical approaches and procedures, all in order to *develop* creativity as part of visual artistic abilities and artistic sensitivity to art and the work of art, this overly long name was replaced by the phrase *Developmental Program.* The justification for this name was confirmed by the results at the end of the research, which showed some progress in the development of general visual artistic creativity in pupils who had attended this program in the experimental group.

**Methods, procedures and research instruments**

During the realization of the research study, we used an experimental method with parallel groups (a control group (C) and an experimental group (E)). The study also used the descriptive method in the interpretation and analysis of scientific literature, data collection, processing and interpretation of the research results. Among the scientific-research procedures during the research, the testing was carried out in two cycles: the initial and final measurement. Testing of the pupils of the control and experimental groups was performed in order to check whether there were changes in the level of visual artistic creativity after the application of the *Developmental Program,* which includes active observation of works of art.

For research purposes, we used the General Creativity Test (LV1) (which measures general visual artistic creativity) and the Test of four drawings (LV2), which measures general visual arts creativity, but also examines the specificity of visual artistic creative development. The study used standardized tests that had already been applied (Kraguljac and Karlavaris, 1970; Berce-Golob, 1993; Duh, 2004; Duh and Zupančič, 2011; Duh, Čagran, Huzjak, 2012; Duh and Korošec-Bowen, 2014). The research began from the fact that the measurement of visual artistic creativity would not be complete if established with only one test. Although illustrations and drawings are used, and the respondents are required to draw, it was considered that this would not provide sufficient opportunity for the participants to express their creativity through their own work. Therefore, two tests were applied in the research, which examined general creativity and visual artistic creativity. These are precisely those factors of creativity that Gilford defined. All the drawings made during the LV1 and LV2 tests were assessed by a committee of experts, which consisted of three assessors who knew the topics and method of testing, and when evaluating took into account the children’s developmental level.
Research sample and groups

The research was conducted on a sample of 199 third-grade pupils from two primary schools in Užice, with 102 pupils in the experimental group (E group), and 97 in the Control group (C group). Independent and dependent variables were defined in accordance with the object, purpose and tasks of the research, whose cause-and-effect relationships are considered. An independent variable was active observation of the work of art, which was added to the regular teaching of Fine Arts. The dependent variable was General visual artistic creativity.

Presentation and discussion of research results

In an effort to achieve a higher level of objectivity and validity for the experiment, initial testing was conducted which preceded the introduction of the experimental factor, or Developmental Program. In the initial phase of the study, the base level of general visual artistic creativity was established. In the initial testing, pupils of the control (C) and experimental (E) groups were placed in the stratum according to school and gender. The uniformity of the experimental and control group by school and group is shown in Table 1.

<table>
<thead>
<tr>
<th>School</th>
<th>Experimental</th>
<th>Control</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prva osnovna škola kralja Petra Prvog, Užice</td>
<td>51</td>
<td>49</td>
<td>100</td>
</tr>
<tr>
<td>Nada Matić, Užice</td>
<td>51</td>
<td>48</td>
<td>99</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>97</td>
<td>199</td>
</tr>
</tbody>
</table>

The uniformity of the experimental and control group in terms of gender is shown in Table 2. There is no statistical significance in the analysis of the representation of a particular category of gender among pupils in the experimental and control groups; the groups of pupils are equal in terms of gender. In both groups, the experimental and the control, the number of girls is slightly higher than that for boys, but the difference is negligible.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Experimental</th>
<th>Control</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>47</td>
<td>45</td>
<td>92</td>
</tr>
<tr>
<td>Female</td>
<td>55</td>
<td>52</td>
<td>107</td>
</tr>
<tr>
<td>Total</td>
<td>199</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prior to the application of the Developmental Program, analysis determined the initial level of general visual artistic creativity. In order to collect data relevant for monitoring
the development of creativity, two tests, LV1 and LV2, were used, by which individual factors of artistic and creative development were examined and monitored, as well as the overall result of all creativity factors together. At the initial level, the total score of all 6 artistic creativity factors was monitored (redefinition, originality, elaboration, sensitivity to visual problems, flexibility and fluency), because the research began with the assumption that in the final phase, after the introduction of the Developmental Program, which included active observation of works of art, there would be a change. The program should have positively influenced the development of general visual artistic creativity in third-grade primary school pupils' in the Fine Arts. Therefore, according to this criterion, it was necessary to compare the experimental and control groups (E and C) in the initial state (Table 3).

Table 3. Results of measuring the initial state of general visual artistic creativity (Creativity 1, unified all 6 factors) in the experimental and control groups.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Group</th>
<th>M</th>
<th>Σ</th>
<th>F</th>
<th>P</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>General visual artistic creativity 1 (unified all 6 factors)</td>
<td>EX</td>
<td>12.1765</td>
<td>3.74275</td>
<td></td>
<td></td>
<td>0.239</td>
<td>0.625</td>
</tr>
<tr>
<td></td>
<td>CO</td>
<td>11.4433</td>
<td>3.97379</td>
<td></td>
<td></td>
<td>0.625</td>
<td>0.182</td>
</tr>
</tbody>
</table>

* Maximum 36 points

A comparison was made between the aggregate values of the measurement of all 6 factors in the experimental (M = 12.1765) and the control groups (M = 11.4433). These values show that the variance in this case is not equal (F = 0.239, and the significance p = 0.625). The t-test showed that there was no statistically significant difference in the initial measurement of general visual artistic creativity (Creativity 1) between the experimental and control groups (t = 1.340, p = 0.182), measured by the LV1 test. Thus, the results from the initial measurement indicate an approximately equal level of general visual artistic creativity in both groups, which means that there was no statistically significant difference between the groups. On the basis of these results, it can be concluded that the hypothesis from which the research began has been confirmed, i.e. that there is no statistically significant difference in the level of general visual artistic creativity between the experimental and the control groups during initial measurement.

After the initial measurement in the experimental group, an innovative way of teaching in fine arts was introduced, which included the systematic introduction of active observation of artwork and frequent visits to art exhibitions in galleries and museum. The focus of the Developmental Program was directed to the selection of specific methods for stimulating visual artistic appreciation. The most important thing was to select good methods for motivating children to observe and perceive, or to help them learn how to watch, observe, perceive and receive the work of art, regardless of whether it is a reproduction of a painting or an original artistic object in a museum or gallery. After the process of active observation and experience of the artwork, sufficient time and space was left for pupils to articulate themselves visually. What was very important for Developmental Program, and in fact is the most important part in the teaching of fine
arts, is that this program develops the creative potentials of each child, their artistic creativity and expands their aesthetic experience.

The final measurement was carried out to examine and analyze the effects of the experiment and check the impact of the application of the Developmental Program. In the framework of the first research task, the intention was to examine and determine the effect of the Developmental Program on the level of general visual artistic creativity. This sought to examine the effects of an innovative approach to active observation of the artwork in the teaching of visual arts among young pupils, as well as its influence on the development of general visual artistic creativity in children. Innovative work in observing and experiencing the work of art in the process of teaching Fine Arts was designed to raise the level of sensitivity of children towards works of art, to raise the level of perceptive experience of the work of art and, above all, to increase general visual artistic creativity and the level of knowledge about and use of artistic expression assets, i.e. to encourage the artistic development of children. Thus, the research began from the basic principles of modern teaching in art education: that is, by encouraging and developing creativity. In the final measurement of general visual artistic creativity, the results of all 6 factors of visual artistic creativity (redefinition, originality, flexibility, fluency, elaboration and sensitivity to visual problems) are analysed together, not individually (Table 4).

Table 4. Results of the final measurement of general visual artistic creativity among pupils of the experimental and control groups.

<table>
<thead>
<tr>
<th>Factor of general visual artistic creativity</th>
<th>MIN</th>
<th>MAX</th>
<th>$\bar{x}$</th>
<th>s</th>
<th>Skew.</th>
<th>Kurt.</th>
<th>t-test</th>
<th>ANCOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>8</td>
<td>29</td>
<td>21.7745</td>
<td>4.51599</td>
<td>-0.894</td>
<td>0.487</td>
<td>0.042</td>
<td>0.837</td>
</tr>
<tr>
<td>CG</td>
<td>0</td>
<td>22</td>
<td>11.5155</td>
<td>4.68622</td>
<td>0.050</td>
<td>-0.569</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Maximum 36 points (6x6)

Using the statistical procedure, single-factor covariance analysis (ANCOVA) determined the effect of the experimental factor (the Developmental Program) in relation to the final level of general artistic creativity. Covariance analysis (ANCOVA) was used to remove results obtained from the initial test because the results of the test prior to the intervention were treated as control covariates. After removal of the influence of covariates, which is the result for general visual artistic creativity at the initial measurement, it was found that there are statistically significant differences between the experimental and the control groups in the final measurement of general visual artistic creativity ($F = 35.19, p = 0.00$). The partial eta square is 0.153, which is, according to Cohen, a great influence (Cohen, 1988). This means that 15.3% of the variance in the final measurement of general visual artistic creativity can be explained by an independent variable (the intervention). This confirms the hypothesis that pupils who attended the Developmental Program showed a higher level of general visual artistic creativity than pupils in the control group.
In order to yield a more comprehensive analysis and more complete examination of the data obtained, the respondents did tasks based on the factors of artistic and creative child development. The tasks were designed so that pupils were sketching or drawing as a means of doing a certain task. The first part of the LV1 test is based on the factors of visual artistic creative development in the following order: flexibility and fluency; originality and redefinition; sensitivity to visual artistic problems and elaboration. In Graph 1, on the x-axis, the individual results are expressed in points, and on the y-axis is given the number of pupils. It can be noted that respondents in the experimental group achieved much better results and obtained high scores in performing these tasks (Graph 1). For example, there were 12 pupils in the experimental group with 29 points, almost the maximum available, while in the control group there were only 6 pupils at this level. It can also be noticed that pupils in the control group did not get high grades for their work and were not creative in doing the assigned tasks. It can be concluded that current work in the teaching of Fine Arts certainly influences the development of general visual artistic creativity, but the experiment proves that stimulation of the development of general visual artistic creativity can be increased if, as part of the teaching of visual arts, in addition to visual productive expression, active observation of works of art is systematically introduced. This creates in children a subtle observation of all the art elements in the work of art and develops the memory, learning and connection with what has been learned which is the basis for visual thinking, which then contributes to the development of general visual creativity.
Conclusion

Comparing the expectations with the results, it can be concluded that the Developmental Program did have an influence on the development of creativity among those pupils who actively observed works of art as part of the regular teaching of Fine Arts. It is considered that any change, in qualitative terms, can contribute to the promotion and improvement of the teaching of Fine Arts. In this research, the change lay in the establishment of personal contact with art and on the implementation of artworks in the teaching of Fine Arts in the lower grades. In the context of the research, in which the work of art is regarded as an incentive factor in developing visual artistic abilities, the emphasis is placed on the importance of the museum (gallery) as a specific institution that has great educational potential. Each visitor – whether child or adult - to the museum can acquire a cultural and artistic heritage that activates them to make their own efforts in gaining personal experience, thereby developing their creative thinking about and critical attitude towards the information and implementing it to research, select and receive information individually (Selaković, 2012). Museums are open, dynamic and attractive environments that provide the conditions for creative and conceptual learning, individual thinking, research, social interaction and the acquisition of rich experiences (Selaković, Milutinović, 2013).

The Developmental Program, with its frequent visits to gallery and museum settings and exhibitions and interactions between pupils and works of art, where children were encouraged to freely, independently discover and explore, served to foster the child's individuality while influencing the development of creativity. The potential for children's knowledge in observing and experiencing works of art can be limited, because perception and reception depend on experience and cognition. It was therefore effective to work with children on improving or learning skills in observing works of art, as well as describing, getting to know, experiencing and understanding it. The world is apprehended through experience and the senses, and perceptual activity is an active process that occurs within mental life and comes under the influence of basic knowledge, interests, needs, desires and expectations.

After completion of the experiment and the final measurement, and based on the analysis of these results, the initial hypothesis was proven that the Developmental Program, which introduces active observation of works of art into the teaching of visual arts, using specially designed strategies, methods and procedures, will significantly influence the development of general visual artistic creativity. Pupils in the experimental group showed statistically significant results in the measurement of all factors of creativity compared to pupils in the control group. Therefore, it can be concluded that the Developmental Program is more effective in comparison to teaching that does not apply active observation of artwork and that it can have a positive influence on pupil's visual artistic development.
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