Abstract: The evaluation of fine arts is an extremely complex activity, in which the processes of communication and interaction create a multidimensional system of didactic procedures and communications serving as a means for the achievement of aims and tasks in fine arts. The innovative approach to summative evaluation in the process of teaching fine arts was experimentally tested, and it produced good results. The development of all factors defining art appreciation was statistically more significant in the experimental group than in the control group. Innovative approach to summative evaluation of visual art proved to be exemplary also in the light of developing art appreciation.

Key words: art education, art appreciation, evaluation of fine arts, experimental research, primary school.

INTRODUCTION

The evaluation of fine arts is an extremely complex activity in which various and demanding teacher and pupil activities, as well as other factors of teaching are combined through educational aims, contents and procedures. The communication and interaction processes in the evaluation phase of teaching fine arts form a multidimensional system of didactic methods and communication which are used for the implementation of aims and tasks in the teaching fine arts.

Present findings show that the pupils are developing their abilities of aesthetic evaluation gradually by a permanent willful observation of their own or their peers' art products, by actively contemplating individual original or well reproduced works of art and by the observation of aesthetic components of useful objects. Although it is difficult to supervise and evaluate all the components of fine art culture, which is complex and multilayered, some aims of contemporary teaching of fine arts are directed towards the training of appreciation of fine arts, creating an appropriate attitude towards artistic phenomena, useful objects and environmental art problems. Beside the question how, what with and in what way to supervise and evaluate these components, the question of the role of gender in teaching fine arts is being studied.
 ART APPRECIATION AND ART EDUCATION

"In the process of fine arts we develop students’ creative skills for the practical artwork and skills of observation and critical judgment and evaluation of artworks, which includes the development of ability to evaluate artworks and aesthetic phenomena in the environment."

(Duh and Herzog, 2012, p. 18). It means that in art education, we need to develop not only students’ artistic and creative abilities but also their perceptive and receptive abilities. This relates to the perception and reception of the artistic aspect in artwork. Perceptive sensibilities need to be trained. This does not relate to fast reactions of the eye but active and deliberate perception and processing of the seen. “Visual taste is judgment and as such a human ability that can be trained just as any other," says Seyler (2004, p. 230). We chose the term art appreciation abilities to denote all perceptive and receptive abilities of students and the complex phenomena that occur in observing and perceiving artwork. “In contemporary art education, artistic expression and art appreciation hold an equally important role. While our institutional art education facilitates free artistic expression with all age groups, less attention is paid to art appreciation”. (Duh, 2010, p. 148). Professionals across the globe have been pointing out the need for systematic teaching of art appreciation for a while, especially with older students whose artistic expression is already passing over to the critical phase. Karlavaris establishes that there are two theories relating to art appreciation as a special ability: (1) the first sees the appreciative ability as a specific talent that is either present in students or not; (2) the second theory sees the appreciative ability as part of a broader spectrum of abilities and characteristics, such as perception, imagination, wealth of associations, memory, emotions, general evaluation etc. (Karlavaris and Kraguljac, 1970).

The nature of appreciative abilities is important for both the art educator as well as for designers of art education programmes. If the appreciative ability is a specific talent, the school programme should be designed so as to enable the best possible discovery and development of this talent with students who have it. If art appreciation is however part of general abilities inherent to all children to a different extent, school programmes should enable the development of art appreciation with all students on the basis of artistic content. Our existent art education programmes and syllabi for primary schools provide enough opportunities for planned development of appreciative abilities, while we see the possibility of additional stimulation for the development of appreciative abilities in an appropriately implemented phase of initial motivation in the evaluation phase.

In primary school, we avoid intellectual evaluation that is based on individual aesthetic principles and rules that the pupils are only just getting to know. The process of art appreciation is developed by gradual inclusion of conscious and rational components without omitting emotional and spontaneous components. Thus the process of an artwork’s reception, which is a component of appreciative abilities, has a creative character (Duh, 2004). In developing art appreciation, we are not trying to direct pupils towards remembering different data about the work of art. The goal is for pupils to recognise complex connections by using a few exemplary works with the individual
components being so tightly interrelated that the pupils are able to recognise them quickly (Schütz, 2002).

In schools, we insist on the perception of artwork but do not negate the important component of appreciation, such as for example affectivity. In this way, when dealing with artwork, pupils reach into their own range of mental capacity. “In intuitive thinking, which results as the continuation of thinking bound to direct observation, children aged six to eleven find it easier to perform abstract mental operations without direct observance.” (Uhlig, 2005, p. 63). Many believe that perception of artwork is sensible only if it is appropriately explained. In conveying artwork “there is the fundamental question of interaction of independent perception on the one hand and the provided explanation on the other.” (Barth, 2000, p. 7). We believe that a premature explanation of artwork wastes the research capacity provided by the work of art. Research is reduced to the activity of the provided knowledge about the work of art and is at the most limited to searching for conformity between the heard and the seen. In this case, the instructing and the processing of knowledge determine the action. Instead of generating a situation that would help pupils to discover and observe and which would establish a certain relation to the work of art, appreciation is guided by what had been said. We are thus dealing with speech fixation of our approach to the painting or the “victory of speech over sight” (Didi-Huberman, 1990, p. 24). Hoshi (2008, p 7) also says “that when viewers experience artworks free from any additional information on them, their minds are set toward various fecund horizons beyond the typical interpretation. They sometimes find ‘hope’ in works generally interpreted as ‘painful’ and vice versa.” It was also revealed that the textual information on art pieces can lead a viewer’s mind to a certain direction. Text data such as titles, the names of the artists or explanations of subjects can be very influential for the reception of artworks. In order for pupils to be able to enjoy art forms, they first need to notice them. It is therefore of fundamental importance for pupils to obtain the technique of viewing aesthetic objects with regard to their directly visible qualities. Art appreciation takes place over different phases that different authors describe in different ways. In developing appreciation, Pagany (1993) determines four phases, (1) perception of artwork with all senses, (2) releasing of emotions, (3) transforming images into speech and (4) activity. Karlavaris (1991) states eight phases to the same process: (1) intentional attention and horizon of expectations, (2) intertwining of observation and intellectual and emotional processes, (3) the first evaluation, (4) global and synthetic experience, (5) analytical and critical evaluation of individual layers of artwork, (7) value synthesis and (8) end of reception. The Canadian curriculum (Saskatchewan Education) states seven phases of the viewing process: (1) Preparation – establishing a climate for viewing, (2) First Impressions – spontaneous reactions to a work, (3) Description – taking inventory, (4) Analysis – figuring out what the artist has done to achieve certain effects, (5) Interpretation – trying to figure out what the work is about, (6) Background Information – finding as much information as you can about the artist and the work and (7) Informed Judgment – culminating and reflective activity. Art appreciation needs to be corroborated through dialogues which starts with a teacher or navigator asking about what is happening or what is painted in the painting. “When the viewer replies, they further ask why the viewer thinks so. The viewer keeps looking at the work, while speaking or listening to other people’s comments,” says Hino.
viewer's environment, cultural background, personal experiences, and lifestyle.” (Hino et al. 2008, p 6).

**INCENTIVES FOR DEVELOPING ART APPRECIATION**

In order to develop art appreciation, viewing of artwork needs to surpass observation and quick reactions. It needs to become an experience of meaning. “Appreciation must be interaction between the viewer and the art object. Interaction is personal and will vary from student to student, an atmosphere of trust and respect should be established.” (Duh, 2010, p.151). Students should be encouraged to express their personal opinions, knowing that their unique perspective will enhance other students' viewing experiences. Different students respond in different ways to the same art work. “The opinions of children differ due to personal perspectives and associations. While expressing their opinions, their perception will enhance experiences of other children. Children can react on the emotional level, the associative level and the formal intellectual level. These three types of reactions vary and differ, as they depend on the observer and the artwork” (Duh, Zupančič, 2011, p. 49). For example, one viewer might have an immediate emotional response to a work, while another might have an intellectual response. One art work might demand an immediate emotional response so that most viewers will respond this way initially, while another work might demand that most viewers make immediate associations with images in the work.” (Saskatchewan Education).

Regardless of the chosen technique of viewing artwork, the teacher should direct individual phases so as to make art perception increasingly subtle and differentiated and to evoke increasingly subtle emotional reactions. In primary school, the perception of the complex art form in all its subtle details is a task that requires a lot of training and experiences, while such a manner enables the enjoyment of each individual in the author's artistic message thus guaranteeing an adequate experience of the artwork. (Karlavaris, and Kraguljac, 1970). Developing the ability of such perception is probably the most important phase in developing appreciation and undoubtedly carries the most importance with higher grade primary school pupils. In order to achieve such clear perception, we need to distinguish the main elements composing the work of art; we need to be aware of the multilayered nature of artwork. We believe that artwork can be perceived and analysed according to its individual elements, while we need to keep in mind the comprehensive nature of the artwork. The pupils’ attention has to be directed towards concrete elements and structures of the work of art. Individual layers of artwork are easier to bring closer to pupils, other more difficult, with some this happens sooner and with others later and definitively not at the same time. In doing so, we need to consider the age of the pupils and their experience with fine art. Such concept in educational work will undoubtedly facilitate the development of art appreciation.

**SHORT PRESENTATION OF INNOVATIVE APPROACH TO SUMMATIVE EVALUATION IN THE PROCESS OF TEACHING FINE ARTS**

In our research we have experimentally tested the innovativeness of the approach to summative evaluation in the process of teaching fine arts. This can be clearly seen in all
aspects of the planning stage, according to both methodical, organization and content characteristics, according to didactic communication and to the characteristics of activities, role and relationships between the teachers and pupils.

Regarding methodological and organization characteristics of summative evaluation in the process of teaching fine arts, we have introduced most of the novelties into the current school practice mainly from those two aspects. This would not have been possible without a well prepared content base of educational work at the evaluation stage of the teaching of fine arts. The combination of general methods, which are mainly based on cognitive and educational processes, with specific methods, correlating the general ones with the pupils' abilities at fine arts, is a novelty in the evaluation phase. The phases in teaching fine arts follow the same pattern as in the process of creativity (learning-preparation; play-incubation; creating-illumination; work-realization; evaluation-verification). Dynamic changing of individual teaching methods in summative evaluation during the process of teaching fine arts stimulates pupils to visualize evaluation criteria and to discuss the criteria, compare them with the exhibited works of art and physically move the works to the place of exhibition in a new way, according to particular artistic characteristics. In this way all their senses are included in the evaluation phase of fine arts instruction and the pupils have activated the visual (V), auditory (A) and kinesthetic (K) perception system, since they have sensed the contents in the evaluation phase visually, auditorily and physically. Specific methods of fine arts instruction which refer to the particularities of artistic aesthetic field, the specificity of artistic creativity, to the respect of individual differences and the complexity of the art phenomenon, present an appropriate basis for the development of didactic communication. Besides creating a suitable emotional climate when exhibiting children's works of art, the didactic communication stimulates teachers and pupils to evaluate artistic work actively according to the set criteria.

Innovativeness in the organizational sense is shown in the manner of presenting children's work of art and above all in the permanent presence of evaluation criteria. The criteria are presented very clearly during the whole process of teaching fine arts, which results in a new quality of our school practice. The presence of those criteria influences favorably the process of artistically creative work, and teachers' as well as pupils' activity in formative evaluation and in summative evaluation during the final phase of the process. The transparency of the exhibited works of art and the evaluation criteria ensures pupils equal conditions for active participation in this particular phase of the process of fine arts instruction.

Innovativeness, as far as the content is concerned in the evaluation phase of fine arts instruction, is shown in the choice and presentation of the evaluation criteria which have been universally conceptualized, independently of the field, technique, problem, motif and task at fine arts and which included the essential layers of the children's work, being terminologically clarified to pupils. The basic scheme of criteria, prepared by teachers for each didactic unit in the process of teaching fine arts, consists of 4 criteria: the criterion, deriving directly from the presented problem; the criterion, deriving from the task of fine arts including other aspects of art phenomenon; the criterion deriving from the factors of artistic creativity; the criterion deriving from the command and creative application of
ARTISTIC TECHNIQUE. THE QUALITY OF EVALUATION CRITERIA STIMULATED A COOPERATIVE, FAIR AND SINCERE DIDACTIC COMMUNICATION. VERBAL MESSAGES WERE IN AGREEMENT WITH OR ADJUSTED TO NON-VERBAL BEHAVIOR. SPECIFIC TEACHING METHODS LEAD TO SINCERITY, CONGRUENCY AND SYMMETRY OF DIDACTIC COMMUNICATION.

Organization of work and clear criteria played an important role in the establishment of positive relationships between the teacher and the pupils, since they presented a qualitative framework for the content of communication. The organization of educational work enabled a direct contact between the pupils, the teacher, and works of fine art and evaluation criteria. In this way the conditions for a relaxed, emotional and social climate were created. This activated pupils to take the initiative in analyzing the works of fine arts, and helped them comment their own endeavors as well as search for the parallels in the works of their classmates. The evaluation at fine arts became more successful, since the pupils were accompanied by intellectual and also emotional experience of artistic phenomenon. The latter established their relation to this particular phase of learning and stimulated the level of their activity. We have devoted certain attention to the creation of emotional climate, since the result of the artistic appreciation depends on the emotional experience as well as on clear and transparent evaluation criteria - is the evaluation phase in the process of teaching fine arts attractive or will the pupils reject it, will the evaluation be interesting or not, pleasant or unpleasant - it all depends on emotional experience.

The efficiency and success of such an innovative approach in the evaluation phase was tested experimentally in our research.

METHODOS
PURPOSE AND OBJECTIVES OF RESEARCH

The principal goal of the research was to measure the effect of the previously described innovation experimentally or of the experimental model in the evaluation phase of teaching fine arts on artistic sensitivity of pupils from the elementary school. Besides the influence of the innovation we were also interested in its direction, namely whether the influence has a positive or a negative influence according to the control group. Likewise, we wanted to investigate the role of experimental model in the evaluation phase on developing on art appreciation. Innovative approach to summative evaluation in teaching fine arts presents a set or a series of activities, which are intertwined and constantly interdependent and also at the same time lead to one another. When planning experimental work, we have conceived the innovative approach on the basis of new findings and experience of teacher's and pupils activities, wanting to improve children's artistic abilities. We supervised the development of pupils' abilities from the aspect of artistic appreciation.

RESEARCH HYPOTHESES

The research hypotheses were proposed according to the development of art appreciation in students.
We anticipate that with regard to students of the control group, students of the experimental group will show a higher level of:
H1: art appreciation abilities (AP 2), specifically
   H1.1: art perception
   H1.2: art reception

RESEARCH METHOD AND SAMPLE

The study was conducted using the method of empirical educational research with elements of action research as a single factor experiment with individual school classes as comparative groups. The comparative groups are existing 6th year classes in six chosen primary schools.

Six primary schools were included in the experiment (three experimental and three control ones). Four of them are located in the town, the other two in the suburbs. In order to make the compared groups more equal/similar according to the stratum, we introduced each modality of the experimental factor in the schools proportionally according to the adherent stratum. There were 129 pupils (n = 129) of the sixth grade involved in the research, 66 (48.83%) in the experimental group and 63 (51.16%) in the control group. The experiment lasted 22 weeks. The innovative approach was introduced gradually as a novelty in the experimental work, which was well accepted by both pupils and teachers. The latter could test the success of the new approach simultaneously with the underlying theoretic origins directly in their teaching practice. In this way the experimentally tested innovation acquired also a personal note of teachers and pupils.

The analysis of the obtained results showed that the experimental group had an advantageous position in the development of all factors influencing the child's artistic development. This confirmed the positive influence of innovative approach in the evaluation phase on the child's development in fine arts.

PRESENTATION OF INSTRUMENTATION TEST AP-01

We used a special test for the measurement of art appreciative skills. We named it the AP-01 test and it was a part of the LV1 test (Duh, 2004). In order to measure art appreciative skills a use of a questionnaire is suitable since its advantage is that it leads attention of a test, directs him/her to individual elements of masterpiece of art and thereby enables a researcher to obtain specific data that can be compared to. The AP-01 test monitors art appreciative development of testes which is based on a choice of the best possible answer among several possible. Basis for the conception of the test were found in various researches (Karlavaris and Kraguljac, 1970; Duh, 2004) where different compounds of questions or the AP-01 test have already been used wholly for the monitoring of art appreciation several times, and have given reliable results in very similar conditions. In afore mentioned researches it is shown that when observing a masterpiece of art children tend to see the whole firstly (yet quite indefinite) and they also respond to it emotionally. Only afterward they start to discover individual elements about which they do not know how to express themselves. Only using a questionnaire which helps to understand them what to look at in a masterpiece of art and why to do so can direct their attention to
specific elements. The AP-01 test is designed in a form of a questionnaire that consists of eight questions and all questions apply to Paul Cézanne’s masterpiece of art named The Blue Vase (oil painting, 52 x 63 cm, Musée d’Orsay, Paris). Questions from 1 to 4 monitor the development of students’ perceptive skills, whereas questions from 5 to 7 refer to artistic expression of an image and concern students’ emotions. At the same time they also monitor receptive skills of students. By asking these questions we tried to find out how students saw these images based on their emotions. The last question however deals with the knowledge of basic art expressions and bases of art theory. Students’ understanding of the bases of art theory were examined by this question.

In a testing process a testator provided adequate conditions that were completely the same for all testees. Testator warned students to look carefully at the enclosed reproduction before they start answering the questions. Only after this they could circle or write down the answers for which they thought they could be most suitable. However, there was no time limit, therefore students had enough time to perceive and accept the masterpiece of art that was presented in a reproduction.

RESULTS AND INTERPRETATION
INITIAL ART PERCEPTION AND RECEPTION

We employed the AP-01 art test to establish the initial level of art perception (PERCEP 1). This criterion is part of the criteria variable that is used to monitor the development of art perception and reception abilities of students. As the study drew on the hypothesis that the effect of the experiment will favourably affect the development of this variable, this criterion was used to control the comparable groups in their initial phase.

Table 1: Results of the t-test of differences between arithmetic means and the F-test of homogeneity of variances of measuring initial art perception (PERCEP 1) in the experimental (EG) and control (CG) group.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Group</th>
<th>Arithm. mean x</th>
<th>Stand. deviation s</th>
<th>F</th>
<th>P</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCEP 1</td>
<td>CG</td>
<td>10.175</td>
<td>2.594</td>
<td>1.205</td>
<td>0.274</td>
<td>1.244</td>
<td>0.216</td>
</tr>
<tr>
<td>EG</td>
<td>10.712</td>
<td>2.312</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result of the F-test of homogeneity of variances shows that in this factor the assumption is justified (F = 1.205; P = 0.274). The result of the t-test of differences between arithmetic means shows that there are no statistically significant differences between the experimental and the control group in the initial phase of students’ art perception (t = 1.244; P = 0.216).

The initial level of art reception (RECEP 1) was also established with the AP-01 art test. This criterion is part of the criteria variable that is used to monitor the development of art perception and reception abilities of students. As the study proposed the hypothesis that the effect of the experiment will favourably affect the development of this variable, this criterion had to be used to control the comparable groups in their initial phase.
Table 2: Results of the t-test of differences between arithmetic means and the F-test of homogeneity of variances of measuring initial art reception in the experimental (EG) and control (CG) group.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Group</th>
<th>Arithm. mean</th>
<th>Stand. deviation</th>
<th>F</th>
<th>P</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECEP 1</td>
<td>CG</td>
<td>7.524</td>
<td>2.828</td>
<td>0.014</td>
<td>0.905</td>
<td>0.877</td>
<td>0.382</td>
</tr>
<tr>
<td></td>
<td>EG</td>
<td>7.090</td>
<td>2.778</td>
<td></td>
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</tr>
</tbody>
</table>

The result of the F-test of homogeneity of variances shows that the assumption is justified (F = 0.014; P = 0.905). The result of the t-test of differences between arithmetic means shows that there are no statistically significant differences between the experimental and the control group in the initial phase of students’ art reception (t = 0.877; P = 0.382).

**FINAL ART PERCEPTION, RECEPTION AND ART APPRECIATION**

The study drew on the hypothesis (H1) that experimental innovative work in summative evaluation in art education could have favourable effects on art perception and art reception of students, as part of didactic decisions was directed towards the method of aesthetic communication. This method required the students to observe their own works of art and the work of their peers more closely. With the perception of artwork, we are also dealing with reception, which could have positive effects on the development of students’ art appreciation abilities. The level of art appreciation abilities is the total result of measuring the level of art perception and art reception that was conducted after the concluded experiment by employing the AP-01 test, as we analysed individual segments (PERCEP 2, RECEP 2) and joint art appreciation abilities of students (AP 2).

The study monitored the effects of innovative experimental work in summative evaluation in art education from the viewpoint of developing art perception and on this basis we searched for confirmation of the specific hypothesis (H1.1).

Table 3: Parameters of descriptive statistics and the results of the general F-test of differences between arithmetic means (covariance analysis) with the F-test of homogeneity of variances (Leven’s F-test) of results of the level of art perception (PERCEP 2) of students of the experimental (EG) and the control (CG) group.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Group</th>
<th>Minimum value</th>
<th>Maximum value</th>
<th>Arithmetic mean</th>
<th>Standard deviation</th>
<th>Coefficient of asymmetry</th>
<th>Coefficient of kurtosis</th>
<th>Analysis of homogeneity of variances</th>
<th>Analysis of covariance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MIN</td>
<td>MAX</td>
<td>x</td>
<td>s</td>
<td>g1</td>
<td>g2</td>
<td>F</td>
<td>P</td>
<td>F</td>
</tr>
<tr>
<td>PERCEP 2</td>
<td>CG</td>
<td>4</td>
<td>13</td>
<td>10.556</td>
<td>2.077</td>
<td>-0.851</td>
<td>0.340</td>
<td>1.951</td>
<td>0.165</td>
</tr>
<tr>
<td></td>
<td>EG</td>
<td>7</td>
<td>13</td>
<td>11.212</td>
<td>1.723</td>
<td>-0.953</td>
<td>0.179</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As evident from the table, the parameters of basic descriptive statistics show that from the viewpoint of the achieved level of art perception after the experiment was completed the experimental group has an advantage over the control group. This group namely shows higher values of maximum and minimum results and average. The standard
deviation does not show and expressive differences between the two groups with regard to variability. The coefficient of asymmetry and kurtosis shows that with regard to the level of art perception, results are distributed more to the left asymmetrically due to more commonly higher values (-0.953 < g1 < -0.851), however no expressive deviations from normal are noted (-0.179 < g2 < 0.340).

The assumption on the homogeneity of variances (P > 0.15) is justified and confirms the existence of statistically significant differences in average results (P < 0.05) to the benefit of the experimental group. (F = 4.253; P = 0.041). The posed research hypothesis (H1.1) is confirmed on this basis, which means that according to this criterion, the students of the experimental group had an advantage.

The study also monitored the effects of innovative experimental work in summative evaluation in art education from the viewpoint of developing art reception and on this basis we searched for confirmation of the specific hypothesis (H1.2).

Table 4: Parameters of descriptive statistics and the results of the general F-test of differences between arithmetic means (covariance analysis) with the F-test of homogeneity of variances (Leven’s F-test) of results of the level of art reception (RECEP 2) of students of the experimental (EG) and the control (CG) group.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Group</th>
<th>Minimum value</th>
<th>Maximum value</th>
<th>Arithmetic mean</th>
<th>Standard deviation</th>
<th>Coefficient of asymmetry</th>
<th>Coefficient of kurtosis</th>
<th>Analysis of homogeneity of variances</th>
<th>Analysis of covariance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MIN</td>
<td>MAX</td>
<td>x</td>
<td>s</td>
<td>g1</td>
<td>g2</td>
<td>F</td>
<td>P</td>
<td>F</td>
</tr>
<tr>
<td>RECEP 2</td>
<td>CG</td>
<td>1</td>
<td>12</td>
<td>7.381</td>
<td>2.612</td>
<td>-0.539</td>
<td>-0.293</td>
<td>0.486</td>
<td>0.487</td>
</tr>
<tr>
<td>EG</td>
<td>3</td>
<td>13</td>
<td>8.470</td>
<td>2.531</td>
<td>-0.228</td>
<td>-0.494</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The parameters of basic descriptive statistics show that after the experiment had been completed, the experimental group had an advantage over the control group also from the viewpoint of the achieved level of art reception. The students of the experimental group display higher values of maximum and minimum results and average, while standard deviations do not reflect major differences between the groups regarding variability.

As evident from the coefficients of asymmetry and kurtosis, the results are distributed rather evenly as regards the level of art reception (-0.228 < g1 < -0.539) and there are no major deviations from normal (-0.293 < g2 < -0.494).

The assumption on the homogeneity of variances (P > 0.15) is justified and confirms the existence of statistically significant differences in average results (P < 0.05) to the benefit of the experimental group (F = 7.864; P = 0.006). It is on this basis that the posed research hypothesis (H1.2) on the advantage of students of the experimental group over students of the control group from the viewpoint of art reception is confirmed.
THE EFFECTS OF THE EXPERIMENT FROM THE VIEWPOINT OF THE FINAL DEVELOPMENT OF ART APPRECIATION ABILITIES

The total art appreciation abilities of students (AP 2) represent the total result of measuring the level of art perception and art reception. The results were obtained using the AP-01 test after the experiment had been completed and represent a criteria variable to confirm the posed hypothesis (H1).

Table 5: Parameters of descriptive statistics and the results of the general F-test of differences between arithmetic means (covariance analysis) with the F-test of homogeneity of variances (Leven’s F-test) of results of the level of art appreciation abilities of students of the experimental (EG) and the control (CG) group.

<table>
<thead>
<tr>
<th>Factor</th>
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<th>Minimum value</th>
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<th>Arithmetic mean</th>
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<td>MAX</td>
<td>x</td>
<td>s</td>
<td>g1</td>
<td>g2</td>
<td>F</td>
<td>P</td>
<td>F</td>
</tr>
<tr>
<td>AP 2</td>
<td>CG</td>
<td>6</td>
<td>24</td>
<td>17.380</td>
<td>3.658</td>
<td>-1.009</td>
<td>1.141</td>
<td>0.006</td>
<td>0.936</td>
</tr>
<tr>
<td></td>
<td>EG</td>
<td>11</td>
<td>25</td>
<td>19.682</td>
<td>3.211</td>
<td>-0.427</td>
<td>0.040</td>
<td>-0.04</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

In the experimental group, the results were distributed rather symmetrically (g1 = -0.427) and normally (g2 = 0.040), while the distribution of results in the control group shows a tendency toward left asymmetry (g1 = 1.009) and increased kurtosis (g2 = 1.141) but within lower maximum and minimum values and with a lower average than in the experimental group. These characteristics are clearly evident from the diagram (Figure 1).

![Figure 1: Frequency distribution of results of the final level of art appreciation abilities of students of the experimental (EG) and control (CG) group.](image)
As shown by standard deviations, variability is similar in both groups and the assumption on the homogeneity of variances is thus justified (F = 0.006; P = 0.936). There is however a statistically significant difference between adjusted arithmetic means (F=12.000; P=0.001), as the students of the experimental group showed a higher level of art appreciation abilities, which justified our hypothesis (H1). It is on this basis that we find the innovative method of evaluation in art education to have had a positive effect on the students’ total level of art perception and reception, i.e. on art appreciation abilities, as this criteria represented an advantage for students of the experimental group over the students from the control group.

**CONCLUSION**

Innovative work in the phase of summative evaluation in art education was also based on the method of aesthetic communication, which motivated students to comment on their own works of art and the work of their peers, of course by considering specific relevant art criteria. With regard to initial criteria, active and interpersonal communication in the evaluation phase required a more intensive observation of their own artwork among students and the acceptance of different solutions chosen by their peers, which affected the general increase of art appreciation abilities in students who were included in the innovative evaluation methods, i.e. in students of the experimental group.

The results of measuring art appreciation abilities of students of the experimental group, which represent the total result of measuring the level or art perception and art reception, do not indicate a major leap with regard to the control group but the difference is nevertheless statistically significant. Such results were anticipated, as innovative work in the phase of summative evaluation in art education was not based on content-related measures (visiting galleries or providing additional hours of art evaluation) but on the didactic implementation of this phase (activating a set of appropriate didactic decision, didactic communication and the use of adequate forms and methods of work).

**REFERENCES:**


Biographical note

Matjaz Duh, born August 5 1957, has a Ph.D. in art pedagogy and is an associated professor of art pedagogy at the University of Maribor. He is an active researcher at the Faculty of Education, and a member of InSEA (International Society for Education Through Art), where he actively participates in the congresses. He is also the author of several books and textbooks. For the last few years he has been actively researching the use of contemporary media in art education, the development of art appreciation, problems of the ongoing paradigm inside art education, the development of artistic expression and other similar work.