



## ASSESSMENT OF PUPILS' VISUAL ART EXPRESSION THROUGH THE USE OF CREATIVE TECHNOLOGIES AND STRATEGIES IN VISUAL ART EDUCATION

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### ABSTRACT

This study addressed research problem to examine the use of creative technologies and strategies in the subject visual art education in primary schools in Kosovo.

The main purpose was to provide methodological standards adequate to the new generation of learners (pupils in grades 1-5 in primary education) towards achievement of visual art literacy. We created an educational program with systematical approach in the use of contemporary visual art technologies and strategies and conducted in the elementary urban and rural schools (500 pupils from 1-5 grade were engaged and 22 primary school teachers).

Research presents strategies and data gained by the approaches in the defining the evaluation of pupil's visual artistic expression in both – experimental and control groups of pupils. Evaluation criteria implemented were:

1. Conducted works of art in different visual art techniques

Criteria - variety

2. Degree of realization of the visual art solution

Criteria – understanding of visual art language and visual art technique

3. Degree of clarity of the artistic idea

Criteria – the USE of visual art language and visual art technique

4. Quality of connecting the idea with the creative technology

Specially created research instruments (questionnaires for pupils and teachers, tests for examining visual art literacy and art portfolio for evidencing each pupil's achievements), showed that implementation of contemporary visual art technologies, multimedia and educational strategies have the significant influence in developing visual art literacy among primary school pupils. Conclusion based on quantitative and qualitative analyzes presents that the use of new learning strategies in visual art education can support primary school pupils to gain knowledge, skills and to develop critical thinking.

**Key words:** Visual art educational strategies, contemporary visual technologies, multimedia, teaching processes in primary schools, visual art literacy.

### INTRODUCTION - ART TECHNOLOGY AND MULTIMEDIA

Applying technology and multimedia using new teaching and learning strategies in visual art education can support primary school students to gain basic knowledge from the field, develop critical thinking and approach discovery, towards better learning.

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Research is focused on the processes needed to create curriculum and pedagogical practices that can integrate visual art media and technologies in a way that students understand and apply knowledge, achieve visual art literacy, and 21st century competencies.

New Media Art is a comprehensive term that encompasses art forms that are either produced, modified, and transmitted by means of new media/digital technologies or, in a broader sense, make use of "new" and emerging technologies that originate from a scientific, military, or industrial context. Along with its

emphasis on the “new,” New Media Art signifies an explicit difference—or *différance*—with art practices that make use of traditional, in other words, “old,” visual media. Hence, much of New Media Art indicates a concern with and reflection of new media and its ever-changing, complex modes of expression. A list of genres that are related to New Media Art showcases the large spectrum of this term—among others, it (commonly) includes virtual art, software art, Internet art, game art, glitch art, telematic art, software art, bio art, computer animation, interactive art, and computer graphics, as well as practices in the field of art and activism, such as hacktivism and tactical media (1).

The need appears in contemporary life that requires creativity and a completely new approach to research in any field, technology and multimedia are in step with time replacing old techniques with new ones. In addition to making arts from materials such as: colors, paper, fabrics, recycling tools and other materials, technology and multimedia enable them to be digitized and quite practical and usable. Generating digital art can also be a combination of digital and physical learning by having computer interventions and printing or printing and then transforming the various forms of art making.

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### TECHNOLOGY BASED ART

**Technology-Based Art** is one of the virtual and digital arts. Digital art is a creative and artistic work that uses digital technology as essential part of the creative process of presentation. Like all genre of arts, digital art placed itself under the larger umbrella term **new media art**

**Technology-Based Arts** is computer-generated or manipulated visual arts. Modern digital artists employ the ever-expanding powers of image manipulation programs and applications to create their masterpieces which

can appear in an entire range of media – whether as physical output or virtual experience.

In general, the challenges inherent in working with digital technology can have an influence in encouraging artists to break with existing conventions and abandon well-established techniques, a development that is a core element of truly innovative practice. In deciding to use new technology, the artist is not simply changing the medium as in substituting oil paint for computer-based image generation. It is not a case of doing the same kinds of things but using a digital medium, although this is certainly happening. There are many software applications that can make the creation of visual material very easy, for example, but this kind of technology-based art does not represent the front edge of current work. Where innovative concepts direct the artist to seek out new digital techniques, it often takes considerable time and effort to develop the technology to a level where it can deliver the desired result (2). Student passivity during the normal learning process is possible when teaching is mundane and not at all creative, technology and related art promote and encourage engagement. Today teaching is an art and at the same time it should be practiced as such, so children are personalities and each represents a type of them, using technology to create art enables the classroom to look different by not creating monotony but connecting with all students by collaborating by exchanging ideas etc.



**Figure 1.** Making art with a computer



**Figure 2.** Three-dimensional art

### THE IMPORTANCE OF TECHNOLOGY AND MULTIMEDIA IN VISUAL ARTS EDUCATION

The first use of the term digital art was in the early 1980's when computer engineers devised a paint program which was used by the pioneering digital artist Harold Cohen. This became known as AARON, a robotic machine designed to make large drawings on sheets of paper placed on the floor. Since this early foray into artificial intelligence, Cohen continued to fine-tune the AARON program as technology becomes more sophisticated. Digital art can be computer generated, scanned or drawn using a tablet and a mouse. In the 1990s, thanks to improvements in digital technology, it was possible to download video onto computers, allowing artists to manipulate the images they had filmed with a video camera. This gave artists a creative freedom never experienced before with film, allowing them to cut and paste within moving images to create visual collages. In recent times some digital art has become interactive, allowing the audience a certain amount of control over the final image (3).

The way digital art started was innovative finding in search of new things or finding other expressions for making art. Computers since then have shown interesting opportunities to make art different, from colors and physical methods technology has made art to be seen differently for artistic creations.

Screens are dominant today in contemporary teaching, children of all ages use technology in different versions both in terms of learning but also for fun. The arts generally include some techniques ranging from the simplest ones that have white paper for use where it can be drawn



**Figure 3.** Combined technique

with a pencil but also painted in color. In the world of technology and multimedia there are programs that can become digital art, the screen as a means of expressing colors with your fingers or even with a technological pencil.

### VISUAL LITERACY - EDUCATION AND TECHNOLOGY

Visual communication is a process of sending and receiving messages using images. Visual literacy can be defined as the "ability to construct meaning from visual images" (Giorgis, Johnson, Bonomo, Colbert, & al, 1999: 146). To make meaning from images, the 'reader' uses the critical skills of exploration, critique and reflection. Lapp et al (1999) use the term "intermediality" to describe the combined literacies needed to read in a multi-media world. They stress the importance of active reading based on information visualisation and the importance of visual communication to capture attention, reinforce knowledge and increase audience responses. Visual literacy is about interpreting images of the present and past and producing images that effectively communicate the message to an audience (4).

In teaching with primary children today there is an important role of communication, how much children are able to communicate to socialize, learning should be liked by children and not mandatory. In this case, the arts provide greater opportunities for children to express themselves; in dramatic arts, visual arts, music, literature etc., The arts contain more opportunities for primary students to become more accessible and transparent against their closure and learning difficulties. Primary school children at this age (6-10) completely abstractly receive information which is given in school and in this case the visualization of lessons or

tasks enables them to assimilate information and gain knowledge better and easier in a more socio-emotional friendly environment.

Contemporary technology is an integral part of students of all ages especially for elementary school students. Technological tools /gadgets including phones, laptops, tablets, etc., in addition to the use of technology (computers, tablets or other smart boards which by touch can create artistic lines through the fingers), elementary school children within these technological devices are very accessible in various applications, including games and videos on youtube. In addition, nowadays, as in these cases of pandemics, technology has been used to hold distance learning, which has been a good aspect compared to the total interruption of learning. Technology nowadays is in trend and widely used by almost all ages, both children and adults. It is important that technology is used to be productive and used for good things, for example making art in technology offers pleasure and recognition and the development of a creative approach.

Children should be allowed to solve problems or challenges on their own, as Piaget reiterates: "Children have real understanding only of that which they invent themselves, and each time that we try to teach them something too quickly, we keep them from reinventing it themselves."(5)

#### **VISUAL ART EDUCATION AND EDUCATION THROUGH ARTS IN THE PRIMARY SCHOOL CLASSROOM TEACHING AND LEARNING**

The steering wheel that runs elementary classes such as our teachers strives to keep the fine arts or arts in general properly maintained and as required in the 21st century curriculum. Art is still seen as a less important subject by factoring subjects such as Mathematics, Reading, Civic Education, etc., not being aware that the fine arts have an extraordinary incorporation that all subjects are taught better, faster and that The field of arts enables primary children to have a greater desire to go to school and at the same time turn the artistic game into mathematics, reading or much more. Making art especially painting and drawing requires skills in which students from the outset should be present in class and well prepared technically. Visual art education is required to become different, creative and up-dated to overcome ordinary forms and themes and making visual art with outdated methods.

Education can learn from the arts that everything interacts; there is no content without form and no form without content.

The point of this idea pedagogically is to acknowledge that when the form is changed into an object or an event, so too, is the quality of life it engenders. When the content of a form is changed, so too, is the form altered. Form and content are like two sides of a coin. One cannot have one without the other. There are no separate parts in a whole. what, for example, a color looks like depends upon the colors around it. The same is true in teaching. We call this interaction. The concept of interaction is as fundamental in education as it is in all human states of affairs. What is large and what is small depends upon what one is comparing it to. What is hard and what is soft depends on the hardness of the hard and the softness of the soft. Soft can be hard in some contexts and can be soft in others. This is because interaction is a condition of experience (6).

#### **THE ROLE OF ART EDUCATION TECHNOLOGY AND MULTIMEDIA**

Art education enables students to have a vision, to plan and set goals, to define different methods how to achieve those goals, to identify alternatives, to review them, to solve problems, to imagine, to work on groups and apply self-discipline, patience, concentration, courage and initiative. With all these actions in the Arts learning area, students use their full human, emotional and creative potential in a unique way. Other media for making art give students the opportunity to make art differently with white paper and physical colors, as art is a free game of thought if technology normally allows art to be created as a technological game . Today technology plays an important role in learning and as such 21st century students have technology as primary as it enables some problems in different fields to facilitate in identifying problems.

Incorporating works such as paintings, drawings, graphics, etc. in technology today is a super idea in the curriculum for elementary students, technically ordinary works can be introduced into technology and then manipulated, shaped or added colors and virtual lines which are composed both aspects, ie the traditional form with the modern one. Here we can have good progressive results and fun learning, no matter how important the process may be, i.e. the time when making artwork

through technology within the possible programs for primary school children.

### STRATEGIES FOR LEARNING IN ART THROUGH TECHNOLOGY

New learning strategies for primary school students are inevitable and necessary in the reforms that are possible. The time when students have to sit on the bench completely statically and the long stay on their bench today is unacceptable, the arts as a field in itself require that the classroom turn into a "good mess" giving children different opportunities in search of an enjoyable lesson.

It is essential that learning is fun, within fun learning we have the promotion of skills that are very useful for students to think critically then to communicate and above all to collaborate and in a key form of good results are the arts including technology.

Housen (7) emphasizes the way of visual thinking: "Visual Thinking Strategies is a sequential curriculum that includes in-school teacher facilitated discussions about art, yearly art museum visits, and teacher training. The curriculum grows out of my theory and research about aesthetic development, and is designed to match images and questions to the aesthetic developmental needs and naturally occurring capacities of beginner viewers. Our lessons are designed to be carried out in an environment of group discovery. The classroom teacher poses a sequence of open-ended questions about a series of carefully selected images of art works. Discussions unfold in which students puzzle and construct meaning about the art works. The learners are given a lot of 'time on task,' and have ample opportunity to build meaning one way and then another. They are also exposed to the thinking of their peers, which can accelerate shifts in their own thinking" (7).

In the context of comprehensive and interactive learning with many questions, answers or other comments from students are welcomed as a new form of classroom learning pupils commenting on works of art, discussing, learning history of art or much more about works of art that can be displayed on screen or read from the books and web- sites.

There are many benefits to interpreting art. When we interpret a work of art, we engage meaningfully with the work of art, intellectually and emotionally. We perceive the work and very likely receive the work—our version of it—and make a response to it, privately or

publicly. When we interpret a work of art, we construct a version of that work in our minds, for ourselves. When we build a version of that work, we learn about the work itself; we experience its insight, its particular view of the world and of human experience. We get a glimpse of the world through the artist. This is often satisfaction enough. If we interpret with some self-reflection, we may also get a glimpse into ourselves: what we value, what we prefer, what we resist, what we accept. Self-knowledge can come through interpreting works of art, those that we are drawn to and those that may repel us (8).

The way author Terry Barrett has defined the meaning of a work of art or a creator himself is extremely comprehensible. In childhood they are all artists and personalities and here begin the first perceptions of parents (family), nature, space, color, voice, fear, joy and much more from a visual and emotional point of view, but their lack of knowledge is lacking as we are still children, then as an adult the author T. Barrett in his opinion says "We get a glimpse of the world through the artist" where through art we can understand what may not be seen but imagined and exactly the aspect of fantasy and imagination they have more developed artists who perform in front of the public or audience. Strategies and technologies:

- Experimenting with different materials and techniques

The third grade pupils have developed the lesson from the plangrogram but have handled it very differently by experimenting with 3D materials and painting on it.

- Constructive criticism and reflection

Organizing discussions about pupils work to develop their analytical skills.

Pupils learn how to give and receive constructive criticism, reflect on their creative process and improve their skills

Technology integration:

- The third to the fifth grade, over 400 pupils have used technology such as computers to create art with technology. Has greatly enriched the experience of the pupils where they have completely developed the same teaching unit with a new technique.
- Using screens, pupils have made art directly on digital devices. it has given them the opportunity to experiment with traditional drawing and painting techniques in a new medium.
- They used technology such as computers and projectors - applications with

direct access to make artvirtual visits to galleries and museums

### **FOCUS OF THE RESEARCH**

Our research will be focused on the process needed to create curriculum and pedagogical practices that can integrate visual art media and technologies in a manner that student can understand and implemented knowledge, reach visual art literacy and 21 Century competences. Concerning the fact that listed educational theories have focus on different aspect of student`s participation in the educational process, we will select those criteria of each that will provide active and meaningful learning process strongly connected with visual art creation and critical thinking.

### **AIM OF RESEARCH**

The aim of the research is to create structured implementation of contemporary theoretical analyses for development of modern creative technologies and learning strategies in visual art education.

- To examine to what extend educational systems that use visual art education provide adequate strategies for reaching knowledge and abilities in primary school age;
- To examine are the strategies used enable primary school pupils to understand and to communicate with proliferation of images transmitted through traditional and in digital media;
- To define strategies for the selection of adequate creative technologies in visual art education
- To create and implement contemporary strategies that are using creative technologies for learning in visual art education

### **METHODOLOGY OF RESEARCH**

The fact that in contemporary education there are already changes in the organization of the lesson, including technology and the most suitable methods for learning, is an indication that changes should be made, especially in visual education. Research implementes creative visual art technologies that allow students to express themselves, explore and learn while enjoying the learning process.

We are constantly faced with is a stagnation in the preservation of visual art education and its perception as an important subject in pupil`s development.

With created research instruments we received the data about preliminary level of visual art literacy and visual culture.

The same aims, the level of visual art literacy and visual culture were noted after implementation of new programe with contemporary strategies and techniques

### **RESEARCH INSPIRATION**

Effectiveness of the structured implementation of creative technologies and visual art learning strategies in reaching visual literacy in primary school students

### **OBJECTIVES OF RESEARCH**

This research aims to see the possibilities for contemporary teaching including new techniques and new approaches for the subject of figurative education. Figurative education as a subject that promotes skills, offers students opportunities to develop their skills, to know themselves. Teachers should understand the importance of visual art education by including creative technologies and folow the performance of pupils and the great opportunities that these techniques offer:

- Teaching art using technology and creative aspects
- Assessing the impact of creative technology during teaching
- The role and importance of creative technology in learning for primary school
- Making art using digital art in developing critical thinking, problem solving and decision making

To provide structural implementation and analyses, we defined our **objectives** as:

- To see the differences in the techniques used in the visual art education lesson
- To see the possibilities of teachers in the realization of creative technologies
- To see the possibilities and potential of third, fourth and fifth grade students in visual art creation
- To see the difference between two schools with the same approach and ideas
- To see socialization in the classroom by implementing creative technologies
- To see challenges and opportunities in relation to teachers and students

Based on this foundations, we defined hypothesis:

### **HYPOTHESIS OF RESEARCH**

#### **General hypotheses**

We assume that students will acquire visual arts literacy through structured implementation of creative technologies and visual arts learning strategies.

**Additional hypothesis**

**Hypothesis 1:** We assume that structured implementation of creative technologies and strategies for learning visual arts in primary school will make the visual arts more attractive and create a positive and stimulative classroom climate

**Hypothesis 2:** We assume that through the use of creative technologies learning will be more inclusive and will support different approaches of pupils` creations

**Hypothesis 3:** We assume that students will be more socialized using different expressive visual art techniques

**Hypothesis 4:** We assume that students' visual artistic expressions will be influenced by the use of technology and digital media

**Hypothesis 5:** We assume that making art using creative technologies will increase students' level of creative thinking and reached level of visual art literacy

**Way to prove the hypothesis**

- **Hypothesis 1:** questionnaire for pupils and teachers,
- **Hypothesis 2:** evaluation form for student`s visual art expression
- **Hypothesis 3:** questionnaire for pupils and teachers, documented pupils accivities
- **Hypothesis 4:** evaluation form for student`s visual art expression/ visual art tests
- **Hypothesis 5:** evaluation form for student`s visual art expression

**VARIABLES OF RESEARCH**

Independent variables are:

Curricula, textbooks, teaching methodology, school year (age) of the student, place of school (urban or rural);

Dependent variables are:

Level of reached visual art literacy and visual artculture.

**SAMPLE OF RESEARCH**

A rural primary school "Ibrahim Mazreku" will be selected in Malisheva and An Urban Primary School "Dardania" in Prishtina

The total number of pupils included in the research is 500

322 pupils in the experimental group

174 pupils in the a traditional group

The total number of **teachers** included in the research is

11 teachers in the experimental group

10 teachers in the traditional group

**METHODS AND TECHNIQUES OF RESEARCH**

**METHODS**

I will use descriptive and experimental methods.

Descriptive methods during the data collection, processing and interpretation process.

Experimental methods with practical implementation of creative technologies in pupil`s visual art expressions will be used to evaluate its effect the reached level of visual literacy and visual culture.

**RESEARCH TECHNIQUES AND RESEARCH INSTRUMENTS:**

- Questionaries for pupils
- Questionaries for teachers
- Formular for evaluation of pupils` visual art creations
- Formulars for documentation of pupil`s visual art activities
- Test for determining level of pupils` visual literacy

**ANALYSES OF THE ANNUAL PLANS OF THE SUBJECT VISUAL ART EDUCATION**

To create the instruments for research in this work, we have performed deep analyses on the annual plans for grades 1-5 in primary school, based on the program that is provided by the Ministry of Education in Kosovo.

Annual plan for the **first grade** - separate for the months of September-October, November and December:

*Table 1. Description of the learning unit in short form*

Grade:	First grade
Topics:	Drawing, Line and Drawing, Color, Color Types and Techniques Gallery and Exhibitions, Form and Modeling, Traces and signs.
Technique:	pencil, colored pencil - Drawing and coloring
Objectives:	draw, color, model with pencil, color, plasticine, paper and other materials in a free and creative way or on a certain topic
Evocation:	we talk to the students, having brainstorm from them and presenting their artistic works. Ask the students themselves questions about the given topic and know how to build questions that are from their critical point of view.

Annual plan for the **second grade** - separate for the months of September-October, November and December:

**Table 2.** Description of the learning unit in short form

Grade:	Second grade
Topics:	Color, Color Types and Techniques, Gallery and Exhibitions, Form and Modeling
Technique:	pencil, colored pencil - Drawing and coloring
Objectives:	Line types, shading, color combinations
Evocation:	we talk to the students, having brainstorms from them and presenting their artistic works. Ask the students themselves questions about the given topic and know how to build questions that are from their critical point of view.

Annual plan for the **third grade** - separate for the months of September-October, November and December:

**Table 3.** Description of the learning unit in short form

Grade:	Third grade
Topics:	View from summer vacation - drawing, Coloring work: Sketch as desired (classroom, house, theater, gallery, etc.), Human portrait, Drawing: Fruits, Drawing: Village, Coloring work: Village, Collage-Autumn, Drawing: Theme free
Technique:	pencil, colored pencil - Drawing and coloring
Objectives:	Line types, shading, color combinations
Evocation:	Use different colors and techniques. To sketch the shapes of the human figure-portrait. Draw at least one landscape using lines and their shapes. To draw at least one work from different objects (products) of still nature

Annual plan for the **fourth grade**- separate for the months of September-October, November and December:

**Table 4.** Description of the learning unit in short form

Grade:	Fourth grade
Topics:	Free theme drawing, Knowledge and use of drawing tools (pencil, colored pencils, pastels, felt-tip pens, ink, computer, etc.) To know the types of colors and the benefit of the nuances required for the realization of paintings. Create a color work or collage with colored materials to distinguish between warm and cold colors.
Technique:	pencil, colored pencil - Drawing and coloring, cheap materials, watercolor paints, tempera paints
Objectives:	Line types, shading, color combinations
Evocation:	Identifies his own qualities that he possesses and the necessary qualities that he must develop in order to learn a certain task or activity and to cooperate with others. Uses different sources of information when preparing a certain topic

Annual plan for the **fifth grade**- separate for the months of September-October, November and December:

**Table 5.** Description of the learning unit in short form

Grade:	Fifth grade
Topics:	Perspective in space, Form and figuration, Figuration, Shape and form, New Year's card
Technique:	pencil, colored pencil - Drawing and coloring, cheap materials, watercolor paints, tempera paints
Objectives:	Develop the ability for perspective views in space
Evocation:	They draw and color works from the given topic. Distinguish and compare natural and artificial shapes, figures. They are expressed with works of various forms.



Thus, during the visual education lessons week by week, dealing with the same topics of the school curriculum for each primary class, we will guide and advice pupils to start by "experimenting" with the techniques and materials as a teaching strategy.

During this research we will collect as much data and materials related to Creative Technologies and Strategies in the Learning Processes in Visual Art Education.

Visual arts as a specific field today have a great importance in the lessons for primary schools across curricula, but in our research, we are going to focus how the classes of visual art education are held and is it possible to understand reached levels of of creativity, technology and visual arts.

Through descriptive and experimental instruments we will look closely at the level of knowledge and understanding of figurative art and digital art media as a creative strategy and the applicability of these techniques. Experimental methods with the practical application of creative technologies to students will use visual art expressions to prove its effect on the achieved level of visual literacy and visual culture.

We will also use the methods of analysis, synthesis, concretization method, comparative method, observation method. As a conclusion to see the course of this research we will look at the advantages and disadvantages by examine the extent to which educational systems using visual arts education provide adequate strategies for achieving knowledge and skills in primary school age. Examine whether they enable elementary school students to understand and communicate with the dissemination of images transmitted through traditional and digital media. Define strategies for selecting adequate creative technologies in visual arts education. Create and implement contemporary strategies that use creative technologies to teach in visual arts education.

**INTERPRETATION OF RESULTS**

**Table 6** presents the Cronbach's Alpha coefficients for the four key variables: Technology, Activities, Visuality, and Strategies. Cronbach's Alpha is a measure of internal consistency, indicating how closely related a set of items are as a group. The closer the value is to 1, the higher the reliability of the questionnaire.

**Table 6.** Provides a summary of the descriptive statistics for four key variables: Technology, Activities, Visuality, and Strategies.

	N	Minimum	Maximum	Mean	Std. Deviation
Technology	421	5.00	14.00	7.7553	1.61083
Activities	495	6.00	18.00	11.5030	5.19415
Visuality	507	7.00	134.00	30.9961	12.00346
Strategies	495	6.00	18.00	11.5030	5.19415
Valid N (listwise)	420				

**Table 7** provides a summary of the descriptive statistics for four key variables: Technology, Activities, Visuality, and Strategies.

**Table 7.** He model of the implementation of creative technologies in the teaching of visual art in the classroom for the impact of increasing the perceived attractiveness of visual art by students in the classroom.

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	10.857	1.229		8.834	.000
	Technology	.032	.155	.010	.204	.839

**Table 7** Coefficients for the implementation of creative technologies in the teaching of visual art in the classroom for the impact of increasing

the perceived attractiveness of visual art by students in the classroom

**Table 8.** Provides descriptive statistics for various strategies and techniques used in implementing creative technologies.

		N	Mean	Std. Deviation
1. Realized works of art techniques 1	Total	420	1.7976	.89522
. Realized works of art techniques 2	Total	420	1.8571	.88938
3. Realized works of art techniques 3	Total	420	1.8619	.90344
4. Realized works of art strategy 1	Total	420	1.8738	.90122
Strategy2	Total	420	1.8857	.91202
Strategy3	Total	420	1.8262	.82663

Descriptive analysis for changes depending on strategies in learning processes in the use of creative learning technologies that are

comprehensive and support different approaches of students.

**Table 9.** The application model of strategies has a significant impact on the socialization of students with the use of different expressive techniques of visual art

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.329 <sup>a</sup>	.108	.097	11.27682

The application model of strategies has a significant impact on the socialization of

students with the use of different expressive techniques of visual art

**Table 10.** The model for the influence of students' visual art expressions from the use of technology and digital media

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.340 <sup>a</sup>	.116	.114	11.24376

The model for the influence of students' visual art expressions from the use of technology and digital media

- The recordings made with the pupils of grades 2 and 3 were carefully observed
- Presented with percentages and graphs
- The data were analyzed with descriptive statistics

**RESULTS**

From this research we assume that the structured application of creative technologies and visual arts learning strategies in the elementary class will make the visual arts more attractive and create a different classroom climate.

**CONCLUSION**

Conclusion based on quantitative and qualitative analyzes presents that the use of new learning strategies in visual art education can support primary school pupils to gain knowledge, skills and to develop critical thinking.

Also through the use of creative technologies learning will be more inclusive and will support different approaches of pupils and pupils will be more socialized with the use of different expressive techniques of visual art.

From the results of this research, we conclude that there are significant differences between the use of outdated - traditional methods compared to new contemporary strategies and techniques for the subject of Figurative Education for grades three, four and five.

- Pupil's responses to the project reflection were be selected

Reached results after conducting the test for determination of pupils' visual literacy:

- There are significant differences in relation to gained pupils' knowledge, skills and visual art culture
- Greater enthusiasm and interest in creating visual art statements
- Motivation in using contemporary technology and strategies as a tools in creating visual art

### RECOMMENDATIONS

- To create conditions for the best realization of the lesson, especially for figurative education
- technological equipment
- To integrate more technologies and creative strategies
- To set an extra hour a week for Figurative Education
- To provide students with materials that enable exploration
- Teachers know more about the possibilities of technology in visual education

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