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DIGITAL ART IN THE CONTEXT OF THE FORMATION OF NATIONAL IDENTITY IN STUDENTS IN ART COURSE CLASSES

The article contains the authors' research related to the implementation of digitization in the modern artistic process through the prism of the development of students' understanding of national identity. Necessary conditions for achieving the set goal are the emotional implementation of the Ukrainian worldview in the process of creating objects of one's own creativity, the development of ways to independently solve key tasks in painting, design, composition, searching with the help of tools for digital art construction, color scheme, etc. An important point is the incorporation of pre-prepared digitized visualization and modern means of digital art, which makes it possible to show the connections of natural, existing images, objects of the environment with the virtual world for the analysis of general and partial, real, and virtual in works of various types of art. The introduction of modern technologies contributes to the organization of the synthesized perception in digital art of visual and audiovisual types of art: visual, musical, poetic, etc., which creates the relationship of visual and auditory analyzers, thereby creating the necessary emotional base. The article states that the emotional side of digital art classes should have a basic basis of stable knowledge, abilities, and skills in each of the art subjects, without which solving the tasks will be impossible.

The use of digital art technologies significantly changes the architecture of building classes with students, filling it with more in-depth content and modern forms of presenting material for teaching art subjects, convincingly proves the need to use new digital techniques for the development of national identity in students. Attention is focused on the use of authentic national sources, the formation of a desire to investigate the very roots of the nation's ethos, understanding the origins of belonging to the Ukrainian people and, as a result, the creation of a true national product.

Key words: *digitization, art, national identity, painting, composition, design.*

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DIGITAL-АРТ В КОНТЕКСТІ ФОРМУВАННЯ НАЦІОНАЛЬНОЇ ІДЕНТИЧНОСТІ В СТУДЕНТІВ НА ЗАНЯТТЯХ ДИСЦИПЛІН ХУДОЖНЬОГО ЦИКЛУ

Стаття містить розвідки авторів, які стосуються впровадження діджиталізації у сучасний мистецький процес крізь призму розвитку в студентів розуміння національної ідентичності. Необхідними умовами досягнення поставленої мети є емоційне впровадження українського світогляду у процесі створення об'єктів власної творчості, розробка шляхів самостійного розв'язання ключових завдань з живопису, дизайну, композиції, пошук за допомогою інструментарію digital-арт побудови, колористичної гами та ін. Важливим моментом є інкорпорація заздалегідь підготовленої діджиталізованої наочності та сучасних засобів цифрового мистецтва digital-арт, що уможливлює показ зв'язків природних, реально існуючих образів, предметів середовища з віртуальним світом для здійснення аналізу загального і часткового, реального і віртуального у творах різних видів мистецтв. Впровадження сучасних технологій сприяє організації синтезованого сприйняття в digital-арт візуального й аудіовізуального видів мистецтв: образотворчого, музичного, поетичного та ін., що народжує взаємозв'язок зорового і слухового аналізаторів, тим самим створюючи необхідну емоційну базу. У статті зазначено, що емоційна сторона занять з digital-арт повинна мати базову основу стійких знань, умінь й навичок з кожного з художніх предметів, без яких розв'язання поставлених завдань буде неможливим.

Використання digital-арт технологій значно змінює архітектоніку побудови занять зі студентами, наповнюючи його більш глибинним змістом і сучасними формами подачі матеріалу для викладання художніх предметів, переконливо доводить необхідність використання нових digital-прийомів для розвитку в студентів національної ідентичності. Акцентовано увагу на використанні автентичних національних джерел, формуванні бажання зазирнути у саме коріння етосу нації, розумінні витоків приналежності до українського народу і, як результат, творення справжнього національного продукту.

Ключові слова: діджиталізація, мистецтво, національна ідентичність, живопис, композиція, дизайн.

Introduction. The current stage of the development of Ukrainian art, the formation of its national characteristics raises several issues of art education, in particular, the training of specialists who have the necessary knowledge and skills to create a nationally identical digital product.

National identification in digital art works did not arise immediately. Its birth can be associated with the fact that in the late 1950s and early 1960s, art began to enter the computer scene.

In the 1950s, many artists and designers worked with mechanical devices and analog computers, which marked the beginning of digital art in the computer space. One of the earliest electronic works is the «Oscillon 40», which dates back to 1952. Using an oscilloscope, Ben Laposky controlled the electronic waves and displayed them on a fluorescent screen. After photographing them, he was able to capture these images and record them for history. Laposky photographed various combinations of these waves and called his images «oscillons». Although the first photographs were in black and white, years after the first shot, Laposki used filters to create color images (Istoriya).

In the early 1960s, computers were still in their early stages of development and access to them was limited. And, although some universities could afford the purchase of expensive equipment, the introduction of the latest technologies into the process of teaching artistic disciplines was extremely slow.

Artists did not initially have access to computers because of their cost, and the first to use computers creatively were scientists and mathematicians. To use computers, it was necessary to know well how to create programs.

Towards the end of the 1960s, the main forms of digital art began to emerge. Computer engineers developed the drawing program used by pioneering digital artist Harold Cohen. This became known as AARON, a robotic machine designed to create large drawings on sheets of paper placed on the floor.

Most of the plotter drawings and early prints were in black and white, although some artists, such as Frieder Nake, produced color drawings on the plotter (Istoriya).

Practicing artists, in particular designers, immediately appreciated the possibilities of the plotter – a modern high-tech device, indispensable in printing activities. With its help, wide-format printing becomes available, that is, printing on paper from A2 to A0. The plotter can accurately print graphic images,

drawings, architectural and construction documentation, maps, and diagrams. A plotter is indispensable when printing advertising products, for example, banners, posters, etc. This is a common service, because today there are many types of advertising, including external, and it quickly covers new and new areas of activity. Plotters provide high-quality full-color drawings on film, vinyl, fabric, and other materials, which are determined by the type of plotter. Today's popular service – printing branded t-shirts – is the same printing on a plotter, but the material is fabric.

A separate type of plotters is cutting. They cut programmable images or details, while ensuring high accuracy of the cut (Why do you need).

Until the 1970s, many artists taught themselves how to program. Most of these artists come from a traditional fine arts background rather than a scientific or mathematical background. Even things with simple designs and patterns required planning and programming. In the 1980s, digital technologies became widespread and became part of everyday life. The increased availability and creation of pre-loaded programs has led to a boom in artistic creativity.

During this period, artists and designers who work with computers are less likely to use the term «computer art». Computers are just one of many tools that artists use interchangeably in their practice as they incorporate this technology into their practice. Most artists refuse to use only one type of media to present and create their artwork.

Today, digital art continues to change and develop with the advent of new technologies. Some digital artists work with lighting systems such as LEDs; others mix computers and sounds in an installation. Digital technology is another medium for artists to express themselves and explore ideas. Many new types of media include digital art, using video games, music, video, and interactive digital art exhibits. Therefore, art education should not remain aloof from the latest technologies in the field of digitization (Horodetskyi, 2018).

The Results And Discussion. The traditional approach to highlighting the problems of teaching art no longer suits scientists, the established consideration is the exploration of yesterday, when individual forms and methods are studied, but not the phenomenon of art perception in the context of all modern possibilities of digitization in their inseparableness from the entire compendium of the influence of artistic creativity on human life and activity, to create the environment. The proposed research is designed to shift the emphasis in the study of the given question, as the need for new scientific approaches to established phenomena in the history of Ukrainian art

has come, proof that new and modern computer technologies play an important role in the creation and implementation of the idea of national identity, which is mandatory a component of the harmonious existence of the people. The voiced problem acquires a convincing sound in connection with the neighboring country's attempt to deprive Ukrainians of an understanding of their roots and the origins of the national identity of everyone.

The situation of a significant gap in the awareness and implementation of modern computer technologies in art education leads to the emergence of scientific research that would have not only theoretical, but also practical significance in teaching the disciplines of the art cycle in higher education institutions. The significant cultural heritage of Ukrainians and the unexplored scope of the implementation of digital art require careful study, conceptual consideration, and the implementation of the found methods in the educational process of future artists. This practice will contribute not only to the increase of possible sources for creativity and the competent application of traditional national ideas in the future professional activity, but also to a deeper understanding of the spiritual and metaphorical essence of national art.

The relevance and urgency of the issue of self-awareness as a component of Europe, the synthesis of our national culture with the European one, the education of the domestic elite, national artistic personnel, prompts us to consider the possibilities of using digital art in the classes of art disciplines in institutions of higher education.

The level of modern education and upbringing determines one of the most important aspects of the human personality – the ability to create. The process of considering the development of creative imagination in students involves two directions: reproducible and directly creative. By creative imagination we understand the emergence of new images borrowed from the surrounding reality and the personal experience of everyone. However, creative imagination allows the independent creation of new images and gives rise to valuable, authentic artistic compositions. This practice of stimulating creative dissimilarity exists during the teaching of artistic disciplines: drawing, painting, composition, design, etc. It is these subjects that contribute to the most fruitful creative activity of students.

The authors of the article organized classes using some possibilities of digital art in the process of mastering traditional topics and practical classes with an emphasis on the study of ethnicity, national consciousness and Ukrainian identity of each student who participated in the tasks.

For example, in composition classes, a sketchy search for options for staging a still life from Hutsul household items was carried out precisely on the computer, using the form-forming metaphor of the Carpathian components of decorative and applied art. In parallel, in order to introduce texture into the production, a detailed study of the symbolism of the ornamental motifs of the selected region took place. The traditional staging of a still life has been enriched with new possibilities thanks to digital art and practically turned into a creative process.

The use of digital art gives even more opportunities to create replicas of the work of the chosen artist, stylized and decorative compositions in the national style, in conceptual and outrageous works, fashion compositions, etc. The use of digital art in avant-garde and design compositions acquires a special sound; significantly helps to explain to students the concept of «trompe-l`oeil» in traditional and modern Ukrainian art, to implement this knowledge in their own works.

In general, the use of computer graphics can facilitate the search for a composition, because it is enough to start drawing individual elements on separate layers, and then look for their location, relationship, and presentation. Searches, thus, will not require erasing and redrawing the elements of the composition. Also, in digital art, it is easy to combine separately drawn fragments of a composition and check their compatibility.

In some cases, it is expedient to talk even about secondary digitalization. We are talking about an already existing educational component, such as computer graphics, which has been present in the training plans of art specialists for almost 20 years. Competences related to this educational discipline include the ability to obtain high-quality digital images using a scanner (Pidgurniy, 2020: 242).

A modern mobile phone with its multi-module cameras and corresponding software can replace a traditional tablet or handheld scanner. Also, Adobe, one of the leaders in the field of computer graphics, constantly develops and supplements its software, including for mobile devices, combining the capabilities of a digital camera and a graphic device, which is essentially a modern smartphone. So, for example, one of the applications Adobe Capture (Click) is able to «live» capture textures, materials, form combinations of patterns (including ethnic motifs), thus serving as a source of ideas and inspiration. Also, the application can act as an integrating tool for creating brushes, color sets, patterns, font recognition using the same scanning technology, for desktop programs of a personal computer, etc. Unfortunately, support for Ukrainian (Cyrillic) fonts is currently not available.

Today, the most popular digital editors are Adobe programs (Photoshop, Illustrator, InDesign). These graphic editors help designers, artists, illustrators work with photos, process, digitize work, change colors, textures, while providing an unlimited number of palettes (Khramova-Baranova, 2017). In the course of conducting studies in painting classes on the combination of traditional oil and modern digital painting possibilities, students were asked to photograph a pose of a girl in Hutsul clothing and, using the Adobe Photoshop program, combine it with images of various Carpathian landscapes and interiors. In addition, the participants of the experiment looked at the paintings of O. Murashko (Library, Murashko), Y. Bokshay (Library, Bokshay), A. Bokshay (Art path, Bokshay), T. Yablonska (WikiArt, Yablonska), T. Golembievska (Golembiyevska, 1972) and several other modern Ukrainian artists, analyzed their pictorial language, the peculiarities of the presentation of the Ukrainiannes of the characters and their national spirit, which is expressed through the bright, harmonious, and picturesque background. Students supplemented their works with elements of Hutsuls life and regional ornamentation. Having received sketches of future works in a digital version, they converted this image into monochrome and began to execute the work in the traditional grisaille technique on cardboard (a monochrome sketch in the format of a future painting). This approach gave students the opportunity to better understand the tone and light and shade of the picture. After the cardboard was finished, the image was transferred to the canvas stretched on a stretcher and fixed with a fixative. The computer sketch was again converted from monochrome to color, and in the same Adobe Photoshop program, the necessary color scheme was selected, the color spots of the background and details of the work were adjusted (Pidgurny, 2019). Next, students, using the received sketch, as well as the opportunity to observe a live performance, began to perform a painting task with oil paints.

This method allows you to avoid the direct drawing of color from nature, which is so often the sin of novice painters, teaches you to see complex color and better navigate in the tonal relationships of the composition. Of course, this is only one of the modern means of improving the professional skills of the future artist, both in the realm of traditional and digital painting, but it is quite effective, as it allows you to visually model the future work of art, combining living nature and the enormous capabilities of modern computer technologies.

Also, digital mobile technologies with constant access to cloud services can perform three-dimensional scanning with subsequent obtaining of three-

dimensional models. Multi-touch touch displays of phones, tablets, and personal computers allow not only traditional three-dimensional modeling, but also three-dimensional sculpting with ease (Horodetskyi, 2018: 9), which in the process of embodiment resembles a sculpture rather than a 3D graphic, remaining a digital work until it is embodied in a material by the method of 3D printing.

Three-dimensional graphics can serve as a perfect multimedia assistant when learning plastic anatomy. In moving 3D models, you can easily switch between skin, muscle, and skeleton layers. You can choose different positions and angles without any effort. However, with all the advantages, there will always be disadvantages, because we are used to perceiving the three-dimensional space with our eyes, which we install on the plane of paper, cardboard, or canvas. From a two-dimensional screen, the process of perception-transformation is disrupted and simplified, and accordingly, the effectiveness of learning decreases. Currently, many museums use multimedia technologies to expand the possibilities of interesting installations and supplement traditional expositions (Pidgurny, 2020: 242).

Conclusions and prospects for further research. Thus, we conclude that based on the data obtained in the process of conducting the classes of the art cycle, it can be stated that the main factors that contribute to the formation of manifestations of national identity in digitalized creative compositions of students are:

• emotional construction of the lesson, creating an atmosphere of participation, empathy, the value, and significance of using the Ukrainian worldview for one's own creativity;

• implementation of problematic and exciting situations, during which students independently solve key tasks in painting, design, composition, looking for construction options, color scheme, etc. with the help of digital-art;

• the use of pre-prepared digitized visualization and modern means of digital art, which provides an opportunity to illustrate the connection of natural, existing images, objects of the reality surrounding a person with the virtual world, which allows to carry out a comparative analysis of the general and partial, authentic, and virtual in works of different artistic direction;

• attraction of deeply national material, which causes wonder and admiration for the beautiful, subconsciously forming a desire to investigate the very roots of the ethnos, to understand the origins of belonging to the Ukrainian people and to create a national product;

• conducting real and virtual fragments of classes on observing and admiring the nature of Ukraine (its regions), the streets of ancient cities, museums-reserves, historical and ethnographic complexes, etc;

• the organization of a synthesized perception of various types of art in digital art: visual, musical, poetic, etc., which gives rise to the relationship of visual and auditory analyzers, thereby creating the necessary emotional base.

At the same time, we should not forget that the emotional basis of such classes should be based on the traditional formation of stable knowledge, abilities, and skills in each of the subjects of the art cycle, without which the solution of the tasks will be impossible.

Conducting classes with the introduction of digital art technologies significantly filled the content and modern forms of the presentation of the material of the disciplines of the art cycle and convincingly proved the need to use new methods for the development of students' national identity, understanding of their own ethos, subconsciously forming a desire to look into the very roots of folk art, to understand the origins of belonging to the Ukrainian people, to create a national product, etc.

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