Art is a perfect model of culture for education aimed at creative development of a child

El arte es un modelo perfecto de cultura para la educación que apunta al desarrollo creativo de un niño

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ABSTRACT:
The article addresses art and education as two mutually-complementing parts of culture; moreover, development of culture is provided by education that stimulates students’ creative activity, and art helps reaching the goals of their creative development. It presents the arguments that confirm the idea that art can become a generator of ideas, methods and approaches for education. Despite the fact that the main manifestations of education and art in the culture are different at first glance, they do not contradict each other; moreover, they interact substantially – art generates a strategy of the future, while education makes its existence possible, and the vector of actualization of art's prognoses depends precisely on the education. The role of a mechanism that integrates scientific and artistic cognition is played by the general concept of "image".

Keywords: culture, art, science, education, picture of the world, model of culture, scientific and artistic cognition, emotions, creative process, artistic creation, image, image-based models of the world, culture-creation, educational process, sign- and symbolic systems.

RESUMEN:
El artículo aborda el arte y la educación como dos partes de la cultura que se complementan mutuamente; además, el desarrollo de la cultura es proporcionado por la educación que estimula la actividad creativa de los estudiantes, y el arte ayuda a alcanzar los objetivos de su desarrollo creativo. Presenta los argumentos que confirman la idea de que el arte puede convertirse en un generador de ideas, métodos y enfoques para la educación. A pesar de que las principales manifestaciones de la educación y el arte en la cultura son diferentes a primera vista, no se contradicen entre sí; además, interactúan sustancialmente: el arte genera una estrategia del futuro, mientras que la educación hace posible su existencia, y el vector de actualización del pronóstico del arte depende precisamente de la educación. El papel de un mecanismo que integra la cognición científica y artística se juega con el concepto general de "imagen".

Palabras clave: cultura, arte, ciencia, educación, imagen del mundo, modelo de cultura, cognición científica y artística, emociones, proceso creativo, creación artística, imagen, modelos del mundo basados en imágenes, creación de cultura, proceso educativo, signo - y sistemas simbólicos.
1. Introduction

Culture is versatile, and, in the most general sense, it is perceived as a certain generalized image that includes art, religion, science, education, etc. The first three phenomena, representing parts of culture, have their boundaries and rather well-defined content. In turn, education is such part of culture that is not only equal to the whole, but is also able to reproduce and develop the whole. In this sense, boundaries of education, as well as its content, cannot be unambiguously defined – they depend on many factors that include the ruling ideology, general tendencies of society development, scientific and religious beliefs, and many other things. Content of education is defined by knowledge and abilities that the society wants to pass on to the next generation.

Potential mission of reconstruction and development of new cultural values lies on education, thus giving it the responsibility in the eyes of the future of humankind. However, education is aimed at culture development only in case if it stimulates students’ creative activity instead of the reproductive one. Such education is aimed not only at socialization, i.e., individual’s adaptation to the “ready” social norms, but also on culture production, i.e., productive activity in the culture. Modern person that is involved in the space of culture production not only has to master the sum total of knowledge and modern methods of using it, but also has to possess the ability to find substandard solutions for overcoming problem situations, to discover and create new cultural values.

Currently, longstanding perspective on education as a way of transferring the knowledge to the next generation no longer satisfies either the society, or a separate individual. Life and professional situations, which a modern person has to encounter from time to time, are rapidly changing. Nowadays, in order to solve constantly appearing problems, it is not enough to merely be informed, but it is necessary to possess an ability to transform and combine the present knowledge, which is impossible without the creative approach. Moreover, considering that creative process is one of the factors of humans’ emotional health (A. Kozhibskiy, V. Frankl, V.I. Samokhvalova) and an important component of professional competence of a specialist of any profile (A.K. Markova), the significance of developing students’ creative potential is undoubtable.

Within the modern anthropogenic space, which is filled with pragmatism and rationalism, it is important not only to provide creative development of a person, where the creative forces are aimed at “fighting” the nature, overcoming natural processes and phenomena and suppressing alien thoughts, which is in fact common for the modern civilization, but to mentor a cultural person, who is capable of productive activity in the culture (Levi-Strauss 2011). It is not surprising that, in the discussion about the interaction between culture and civilization, O. Spengler noted that “civilization begins where culture ends” (Spengler 1993). Therefore, nowadays (and even more in the future!) it is not enough that a person has high creative capacity, but rather it is his culture-producing potential that matters. Creation with the negative sign can place humankind in the abyss, up to its complete destruction or replacement with robotic mechanisms, while culture-production provides a perspective of humankind’s survival and development, because it gives a creative charge to the conscience. One significant difference between culture and civilization is the fact that civilization creates something new regardless of the past, while culture is capable of maintaining the traditions and yet perceiving the modern novelties. Reasonably, education’s priority should become the development of culture in a growing person, help with establishing his own cultural niche, with perceiving himself as a unique individuality that is capable of respecting the individuality of others. Emotional, and therefore subjective, comprehension and exploration of the world and the phenomena happening in it, is a unique process for every person. Modern education has to help a child in organizing this process instead of mechanically integrate him in the space of the modern civilization.

2. Methods

From the historical perspective, creating process has been actualized in culture in forms of myths, religion, art, science, technology and morals, but for each single person, it manifests
in realizing one’s own mission in the general culture of the humankind and responsibility of preserving and developing it for the future generations. Furthermore, it is important not only to comprehend your specific destiny in this world, but also to understand that each person potentially has only the mission that was destined to him and the responsibility to fulfill it. Can education not only pass on an integration of knowledge to a growing person but also help him in self-comprehension and moral choice? It seems that it can, under the condition of active use of the main concept of art – “image”. Versatile nature of the concept of “image” and the role of image-based thinking in person’s mental life can make it the key pedagogical mechanism of education (Kashekova 2016; Finkelshtein 2006). An image is: an external appearance of a real object; a picture that translates its representation; subjective judgment and metaphorical synthesis; a model of something that exists; generalization that is manifested really or hypothetically. In this case, development of a scientific picture of the world has to occur simultaneously with acquirement of the models of artistic, mythological and religious pictures of the world. The integration of knowledge, feelings and emotional reactions will provide not only valuable information but, most importantly, it will indirectly and gently provide personal understanding, develop a worldview, and will teach to think, reason, compare and complete the content and perform moral evaluation.

It is known that culture development is defined by two creative processes – scientific and artistic activities, that lead to the comprehension of truth in different ways and solve different tasks. Considering that scientific and artistic comprehension of the world complement each other, the domination of solely scientific approach in the field of traditional education seems problematic, because the scientific approach deprives educational processes of many effective forms and methods and depletes the content. Art can become an excellent generator of ideas, methods and approaches for education in general (Kashekova 2006), because it:

1. Serves as a generator of languages and an effective means of communication;
2. Develops emotional and axiological attitude towards the world and the phenomena that occur in it;
3. Develops the system of person’s affirmations by affects person’s emotions and intellect;
4. Creates image-based models of the world and the phenomena that occur in it;
5. Raises deeply personal attitude towards the reality.

This is a small part of things, in which art can have strong positive developing influence on the conscience and feelings of a growing person.

Psychologists that study psychology of artistic creative process think that “artistic creative process is the essence, a foundation and a peak of the creative process per se. ...Scientific creative process ...is merely a specific case of the artistic creative process” (Selchenok 1999). It is not surprising that the great scientists of all times considered that the true things have to be beautiful, and the laws of nature correspond with the canons of beauty. In fact, modern mathematicians consider the beauty of a new formula as an important characteristic of its truthfulness.

This confirms the thought that no matter how much we talk about the aim of child’s creative, spiritual and moral development in education, it is impossible to actualize without artistic subjects. Art develops the qualities that are necessary for the creative process: emotional and image-based perception, intuition, integrative, spatial, connections-based and associative thinking; it provides an opportunity to perceive a phenomenon immediately and holistically and to solve complex, ambivalent and paradox situations; it helps explore the world through complex emotions and metaphorical synthesis; it teaches engaged attitude to everything that surrounds a person. The value of art for the development of activation of a person’s creative potential and axiological orientations is obvious and has been proven both in theory and in practice (Vygotsky 1968; Lotman 1998; Stolovich 1985).

Art (in fact, along with education) is not only an extremely important component of culture, but it also represents an ideal model of culture in its value. Moreover, art is one of the main modelling mechanisms of the macrospace of culture (Lotman 1998).

While in education culture reproduces itself by creating an efficient mechanism of its development, in art culture is recreated in artistic (imaging, literary, musical) images, it goes
through the stage of reflection and clearing and develops a strategy of the future. We see that, despite the fact that the main manifestations of education and art in the culture are different at first glance, they do not contradict each other; moreover, they interact substantially – art generates a strategy of the future, while education makes its existence possible, and the vector of actualization of art’s prognoses depends precisely on the education. Therefore, art can become an ideal model of culture for education, being oriented at its development and at the creative development of a child.

Art gives us a powerful tool – various sign and symbolic systems, the use of which in education increases linguistic variability and provides an opportunity for tightening the information, creating its “tight package” (Zinchenko and Nazarov 1991), i.e. making it brief in form but deep in content.

Art concentrates the best and the most significant of the culture. Art reflects the world integrally, and a work of art affects person’s emotional and rational-logical fields simultaneously. Art is multifunctional: by reflecting the reality in images, it helps not only understanding the world rationally, but also accepting the new knowledge emotionally. Certainly, an artistic genius is rare, as well as a scientific genius, but every person is capable of perceiving art and therefore enriching his own internal world, as well improving external manifestations of life.

According to the psychologists, culture and art are able to help a person to resist destructive urges – aggression, heavy affects. In fact, L.S. Vygotsky called emotions obtained in the interaction with art “smart emotions” (Vygotsky 1968), and S. Freud considered that comprehending culture could help a mechanism that limited spontaneous biological reactions and instincts. In 1930, Freud wrote: “Culture has to use all of its strength in order to end humans’ aggressive impulses, to contain them with the help of appropriate psychological reactions” (Freud 2013).

Another psychologist, C.G. Jung, in the context of culture-research problems of his studies, addressed not only the individual unconscious, but also collective unconscious that is maintained in a person’s mind and that manifests in form of archetypes (from Greek arche – beginning + typos – image). They act in person’s subconscious as certain generally-meaningful primal images (Mother – Earth, Tree of Life, symbols of Sun, etc.). Archetypes represent primal ideas, certain principles that develop in images and symbols that lie at the basis of all that exists and that is, in Jung’s opinion, the bases of culture (Jung 1991).

System of symbols acts as a language of metaphors and structures the reality by images and symbols. In fact, comprehension of culture as a sign system created by humans due to the skill of symbolization, innate only to them, has already been explained by the founders of symbolic school in cultural sciences (Kassirer 2001; Likhachev, 1995). They considered humans’ symbolic thinking and symbolic behavior to be essential bases of culture.

A word, as a sign of an object, and other sign representations in life, science and art shape the information in a certain way that exists and is stored in time and space, and enriches the culture. Being in culture, a person constantly stays in the physical reality and in the world of symbols, which includes such elements as language, myth, art, religion, i.e., all spiritual manifestations of humans. A person and society live in a tight symbolic network that includes enormous humankind’s experience, the fundamentals of which are provided by education.

Therefore, we can state that culture is based on the process and the results of symbolization. Does this mean that a child, in order to enter culture, to master and accept its principles and to develop culture-production, the content of education (being one of the most important components of the education model), has to include the ability to understand, evaluate and create symbols? We suppose, yes. However, it is also not included in the programs of any educational subject, although each field of knowledge, being a part of human culture, contains a certain array of signs and symbols that facilitate mastering the subject and provide a dialogue of professionals in this field. However, the easiest way to introduce the students to the language of signs and symbols is through art, because the art masters it completely and uses it in all its types, forms and genre. The symbols provide versatile and unique nature of each artistic image created with talent. At the end of the
XIXth century, Russian art researcher, philosopher and religious activist A.N. Vinogradov suggested addressing Old Russian icon in the unity of its content, tools of artistic expression and cultural reminiscence (Vinogradov 1877) (memory, echo, resonance that cue the comparison with something). From the perspective of a modern person, it is possible to say that it is the best way of communicating with any work of art, because, in this case, we can see its linguistic variability.

Hence, we schematically defined three components of the analysis or interpretation of a work of art: knowledge of content, comprehension of means of artistic expression (i.e., language), connection with cultural experience of the humankind through conscious or unconscious memories of author and spectator. This cultural experience of the humankind is expressed in the form of architypes. It seems that the easiest way to master the language of symbols is through the visual art. Even more so considering that the recent cultural revolution is related to the transition of the priority of information transfer from verbal form to the visual one, and a theoretical researcher of visual culture W.J. Mitchell saw a “visual-artistic revolution” towards key cultural changes in the modern flow of images. He also reasonably noted certain return of technologically developed cultures to mythology in this phenomenon (Mitchell 1995).

Art is an ideal model of culture, but we would like to point out again that, within general education, art is able to model the image of culture only during two hours a week! Is it possible to create an integral idea of culture during this time, even in form of highly generalized model? Certainly no! However, even in such seemingly desperate situation it is possible to present this generalized model. We would like to explain it on the example of introducing images of art in the content of a subject, in which children study the surrounding world, nature and its laws. We would begin with the primary school, because the earlier a child enters the world of art the better. Small human is especially good at acquiring new knowledge, comprehending its values and meanings, and art is one of the forms of exploring the world. Artistic cognition, being fundamentally different from the scientific one, enriches and balances the picture of the world.

It is known that “picture of the world” (the concept was introduced by German physicist H. Hertz), or “image of the world” (the concept was specified by German theoretical physicist, founder of quantum physics M. Planck), initially represented the integration of information about the objects of the external world, i.e., physical reality, but later got a wider meaning – nowadays, it means the integration of belief-based knowledge about the world. Scientific picture of the world is being mentioned often, but “it is a pity that few people pay attention to the word “picture””, K.V. Selchenok writes (Selchenok 1999). In fact, apart from objective scientific knowledge, picture of the world includes also the system of intuitive representations of reality, i.e., at the level of an individual, it basically is his personal model of culture, and therefore, contains the trace of his knowledge, level of intelligence, level of general culture, axiological orientations, feelings and emotions. Changes that occur in the culture change also the picture of the world in the ideas of people of each era. Different nations and ethnical groups that represent different religions had different pictures of the world in different times, which still help understanding cultural specifics of the nations.

All pictures of the world differ in two main bases: 1) level of generalization and 2) means of modelling the reality – the integration of interconnected systematically arranged ideas about the structure of the world, a certain model of the world.

In education, the level of generalization is provided by sciences, while the means of modelling the reality are provided by arts, because sciences give a child objective general knowledge about the world, while arts provide a model of culture of each separate era, each ethnical group, and ultimately, each specific artist as a carrier of the culture of his ethnical group, values of his time and personal preferences. Sciences and arts have their own languages, which they use to shape their texts and carry information. Languages of sciences are formal sign systems accepted by the international community and clear to anyone who is included in the space of a certain science. Languages of art are supranational sign- and symbolic codes (of different times and beliefs, languages of metaphor and allegory, language of associations), which are interpreted subjectively, i.e., it depends on personal qualities of
the spectator – on experience, imagination and upbringing. American psychologist and aesthetic scientist R. Arnheim stated that “artistic fantasy states the truth again” (Arnheim 2007).

However, apart from the subjective qualities, there are representations common for all people of a certain culture, which can unconsciously actualize during the perception of a work of art, thus providing multiple variations of reading its meaning. Therefore, unambiguity of the languages of sciences and versatile nature of the languages of art create an opposing pair, and it is known that opposition is always an impulse for development. And thus, it is an excellent mechanism of productive education (Kashekova and Temirov 2013).

3. Results

In the context of everything stated above, we have developed cross-cultural pedagogical technology “Art+”, which introduces a child to the world of culture with the use of a general concept of “image” and uses the languages of signs and symbols (Kashekova 2016).

The technology is characterized by:

- Being based on emotional and vital experience of a child, which provides an opportunity for personal experiencing and attributing of the education content, as well as the phenomena of the world reflected in the art;
- Problem-based presentation of the content: a child is provided not with the complete concepts but with a goal-oriented chain of questions and images that give an opportunity to find the correct answer on one’s own and discover the new knowledge for oneself;
- Active use of art’s communicative function: engaging a child in a dialogue in order to develop speech and judgments;
- Robust return to the semantic function of art, introduction to the role of a sign and symbol in artistic culture, their mindful use during the interpretation of artistic works, natural phenomena, and in one’s own creative activity;
- Being based on primal images of art, mythological ideas and their transformation in the artistic culture.

Cross-cultural pedagogical technology “Art+” works on the basis of mutual complementation of natural-scientific and humanitarian knowledge. It corresponds with the specifics of modern culture with its endless flows of information, priority of visual form, tendency of integration, highly presented semantic element and new forms of manifestation of the mythological perception of the world. Using new connections, general and common patterns of phenomena, semantic elements of the studied subject with art provides “mutual exchange” and mutual complementation of natural-scientific and humanitarian knowledge.

It is easier to present the mechanism of technology use as a “net”, in which the vectors of the content of the studied subject are arranged in one direction, and vectors of the content of art are perpendicular to them. “Knots” of comprehension in the student’s conscience appear in the places of intersection of scientific and artistic knowledge. Finding the “knots” of integration and convergence of the educational fields and art significantly increases content-, emotional and image-based saturation of information, also significantly reducing its form, i.e., providing “tight packaging”.

4. Conclusion

Actualizing the technology in the educational process at school provides an opportunity of interdisciplinary integration that allows integrating knowledge, which was obtained in different subjects, into an integral picture of the world.

Mechanisms of actualizing the technology:

1. **Being based on the concept of “image”**. General concept of “image” adds axiological and subjective shade to the attitude towards new knowledge and helps using associative connections during the actualization of student’s experience.
2. **Intersection and mutual complementation**: provides the discovery of “knots” of integration and convergence of the educational fields with art.
3. **Engagement of opposing languages** of science and art in the educational process.
4. **Comparison and interaction of opposing pairs of concepts**, which has been evaluated by time: this opposition lied at the basis of the ancient myths of all world nations, as well as religious guidance that was a “textbook” of life that actualized the development of culture.

In education that is based on the cross-cultural technology “Art+”, artistic subjects play a constructive role.

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