

# Personalization of Art Students' Training in the Context of the Transition to the Digital Economy

Anastasia V. Mishina<sup>1,\*</sup>, Gulnara I. Batyrshina<sup>1</sup>, Zilia M. Yavgildina<sup>2</sup> and Irina S. Avramkova<sup>3</sup>

<sup>1</sup>Kazan Federal University, Institute of Philology and Intercultural Communication, Russia

<sup>2</sup>Kazan State Institute of Culture, Russia

<sup>3</sup>Herzen State Pedagogical University of Russia, Russia

**Abstract:** Today, one of the main resources for the effective functioning of many political, sociocultural, and communication processes is transition to the digital economy and digital reality in general. Informatization, computerization, automation naturally integrate into the artistic culture and transform it into a digital one. As a result, changes in the professional field of art definitely require changes in both the content, methodology and technological base of art education in the context of transition to digital economy.

At the same time, digital technologies are a factor in the modernization of the higher education system, and its tool. There is an objective need to individualize and personalize educational technologies. In turn, digitalization creates the foundations by which these processes can be implemented.

The article specifies pedagogical conditions for personalization of art students' training: activating self-education and self-development mechanisms through the creation of individual educational routes; enriching the informational educational and methodological base to maintain an individual format for studying the content of artistic culture; adopting a personal position of an adviser and a facilitator by the university teacher, which contributes to the design, stimulation and reflection of the personal and competent development of art students.

The reliability of conclusions made within this theoretical study is confirmed by the positive results of experimental work.

**Keywords:** Digital economy, information society, art education, personalization, individual educational route, art criticism competence.

## INTRODUCTION

Modern higher education (general and artistic, in particular) is at the stage of transformation caused by objective reasons for the change in the political, economic, sociocultural fields in the country and the world (Hakan, 2020)., Serditova, & Belotserkovsky, 2020).

The Government of Russia approved the program "Digital Economy of the Russian Federation" (Order No. 1632P dated July 28, 2017), aimed at formation of the information society, in which the main task will be to obtain, process and work with the information (Program "Digital Economy of the Russian Federation". 2019., p. 1-2). The basic resources for the functioning of this economy are neurotechnologies, artificial intelligence, quantum technologies, robotics, sensors, wireless technologies, etc. It follows that the human component, its intellectual work, which takes more time, is more inefficient, unlike modern computer applications, and is being questioned (Program "Digital Economy of the Russian Federation". 2019., p. 3].

In such a situation, a person will need new competencies, a high level of creativity, which will be expressed in solving problems of organizing the work of the information society's elements (Akbarova, Dyganova, & Yavgildina, 2016, Maiorova, 2019)., Salpykova, Akhmadullina, & Valiakhmetova, 2018)., Batyrshina, Kamalova, Dyganova, Murtazina, 2019). Consequently, a different approach to the formation, upbringing and education of these personality qualities is required.

All the digital economy elements described above are embedded in the artistic culture and transform it into a digital one. Of course, classical painting, material proficiency will never cease to excite the human soul. However, the modern consumer has a request for a breakthrough into other spaces, the delight that the impossible becomes real. More recently, it seemed that the knowledge of computer editors, the skills of DigitalArt would allow a new stream to be introduced into art, and the creators to be successful in this field. But already today we understand that the "artists" number one being in demand in the new economy are those who not only are proficient in computer technology, but are also able to create new tools, program new elements of graphic editors to masterly draw masterpieces on a computer.

\*Address correspondence to this author at the Kazan Federal University, Institute of Philology and Intercultural Communication, Russia; Tel: +79178668372; E-mail: anastasia-vm2012@yandex.ru

The art also forges ahead. Today, art experts and critics are asking whether the artificial intelligence can become the artwork author, whether high technology can open the fourth or fifth dimension in art. The sites of the State Hermitage Museum exhibit the works of Korean robots, which collected information on the financial exchange quotes, processed it and received an aestheticized creation of an abstract painting (The Hermitage. In Search of the Fourth Dimension). An artwork is the result of computer programs, which is created by random sampling from a colossal amount of data entered, for example, data on the consumers' bank accounts. As a result, changes in the professional field of art definitely require changes in the content, methodology and technological base of art education in the context of transition to digital economy. And the educational system will retain the social institution functions, if it can satisfy the needs of representatives of the generation who will live in an information society.

The main goal of the modern higher art school is not only to introduce the student to classical and traditional artistic and aesthetic practices of an applied nature, but also to introduce him/her into the course of modern reality, to show that his/her main competitor is the "machine", which (as shown practice) can work more efficiently and be more profitable for the state.

The higher art education system cannot be reconstructed at once. There are separate opportunities for its modernization at this stage. In particular, it is necessary to introduce training personalization technology.

## **MATERIAL AND METHODS**

In a broad sense, "personalization" is considered as a transformation process, when a person "tunes" the elements of the surrounding reality, thereby ensuring comfortable and effective interaction with them.

In education, personalization is an interdependent exteriorization of different features of a particular person in the educational process, as a result of which there are expedient transformation and diversification of the learning process that activates its potential for personality development in accordance with its needs, interests and abilities; and the interiorization is a reverse process, i.e. borrowing the personally important socialization elements from the field of public relations (Grachev, 2005). (Grachev, 2006)., (Petrovsky, 2010).

The education should include the opportunities that will allow modern youth identifying their own personal development vector.

In order to verify the effectiveness of findings received in the course of a theoretical study, we have carried out a pedagogical experiment for four years (from 2016 to 2019). It included students of the Institute of Philology and Intercultural Communication of Kazan Federal University, receiving higher art education in the field of fine art, design and musical art. A total of 152 students participated in the experiment. This amount was divided into two groups: the experimental group (EG) - 72 persons, and the control group (CG) - 72 persons.

As the main indicator of the effectiveness of education personalization and the quality of competence-based art students' training, we determined the development level of their art history competence. Special art criticism competence is manifested in the student's readiness to use systematic artistic-historical and artistic-theoretical knowledge to solve professional problems on the basis of a holistic, philosophical understanding of art, awareness of its role and significance in the development of society and each individual person.

We have identified three development levels of the art competence of art students: high, medium and low.

The "expert assessment" and "project methodologies" were chosen as the study methods of art competence development. We have developed special design tasks, which comprehensively included all the art competence components. An expert commission evaluated the students' work results according to three criteria: cognitive, activity-behavioral, and creative.

Initial diagnostics of the development level of the art history competence of art students in the experimental and control groups allowed us stating the following results: low level was observed in 43.4% of the total number of students in the EG and 45.9% in the CG; average level was observed in 40.2% in the EG and 41.3% in the CG; high level was in 16.4% in the EG and 12.8% in the CG.

Most students have the opinion that the main reasons for the lack of a holistic understanding of art is an insufficiently structured organization of the learning process, aimed at the need to master a large volume of material. The reasons for the existing problems were

also the students' poor awareness of the available resources devoted to art and art criticism, as well as the inability to self-organize the process of mastering artistic and theoretical disciplines.

Then we included the experimental group students in the formative stage of the pedagogical experiment, which consisted of the consistent implementation of pedagogical conditions of personalization of art students' training.

The first pedagogical condition is the activation of self-education and self-development mechanisms through the creation of individual educational routes. We believe that the individual routes can be created not only with respect to the entire educational process, but also with respect to the individual courses of disciplines and activity fields (an individual educational route for mastering relevant competencies, an individual educational route for studying theoretical disciplines, and an individual educational route for research).

The identification of the features of students' inclusion in the development and implementation of individual educational routes is based on the design theory, because the routes conceived as a kind of student's self-development project in the context of education. Designing an individual educational route is a phased process that provides for the focus on goal implementation and process sequence. We consider it expedient to divide this process into six stages: preparatory, diagnostic, conceptual, constructive, performing, evaluative and reflexive. The implementation of each stage allows treating the student as a subject of his/her competent education, giving expediency and consciousness to the learning process through the students' knowledge of their individuality.

The preparatory phase is aimed: firstly, at determining the objective potential of the educational program for creating individual educational routes; secondly, at identifying opportunities for rational organization of the artistic culture development throughout the educational process. The bridge to the second stage of design process is the need to inform students about the importance of creating an individual educational route for effective learning.

The essence of design diagnostic stage is to determine the current development level of art students' competencies. In the natural conditions of the

educational process, it is impossible to carry out diverse and extensive diagnostics; in this regard, it is advisable to use such techniques such as rapid polls, rapid testing, short-term assignment, questionnaires, etc. However, an important component of the diagnostic phase is self-diagnosis using the above methods, based on explaining to students the essence and structure of their future activities. Thus, training personalization is based on the students' awareness of their intentions, goals and expected results.

The conceptual stage should include identification of the possibilities of individual diversification of the learning process and determination of the general "concept" of an individual educational route. The effective implementation of this stage is facilitated by the use of competency maps, which contain basic information about the structure and content of competencies.

The key stage in the design of an individual educational route is a constructive one, where it is advisable not only to determine the route content, but also the ways to assess the route effectiveness.

At the final evaluative-reflective stage, a serious place is occupied by the students presenting the results of their work, the form of which has been determined in advance, together with the teacher. Of course, the individual educational route for mastering the disciplines implies unique, individual results of the students' competency development. It seems important to include the possibility of a comprehensive result assessment (assessment of the teacher, other students, other teachers, experts, etc.).

The second pedagogical condition is the enrichment of informational educational and methodological base to maintain an individual format to study the art culture.

In experimental model, we implemented the following thematic modules: "Modern art space in the digital economy", "Digital culture", "Computer programming and artistic image".

Transition to a digital economy naturally involves translation of the educational resources into a digital format, which, in turn, strengthens the training personalization potential.

The third pedagogical condition is adoption of the personal position of an adviser and a facilitator by the university teacher, which contributes to the design,

**Table 1: Dynamics of the development level of art history competence of art students in the experimental and control groups (in %, of the total number of students)**

Growth dynamics		Level					
		High		median		Low	
		experimental group	control group	experimental group	control group	experimental group	control group
	Ascertaining stage	16.4	12.8	40.2	41.3	43.4	45.9
	Control stage	41.2	18.7	56.8	42	2	39.3

stimulation and reflection of the personal-competent development of art students.

Position of the teacher-adviser and teacher-facilitator is manifested in the following provisions:

- dialogue between the educational process subjects, which is implemented in the exchange of experience in the field of art history and culture, in the resolution of art history issues, as well as professional and personal development problems;
- favorable atmosphere for the students to show initiative, inclusion in individual and collective creative work;
- initiation of partnerships and cooperation in the field of educational, creative and research activities.

## RESULTS AND DISCUSSION

At the control stage, we re-diagnosed the development level of art competence in the experimental and control groups. Comparative results of the initial and final experiment stages are shown in Table 1.

## SUMMARY

Thus, in the era of transition to digital economy and digital format, the task of higher education is to train specialists who will have unique experience in solving various problems. An important tool for implementing modernization in higher education is training personalization. Diversification of the educational process taking into account the personal needs of students is the essence of training personalization. As a result, a subjective-personal space is created for the competent development of students.

Training personalization is manifested in the creation of individual routes of educational, creative and scientific activities by students. Since the route is conceived as a kind of student's self-development project in terms of education, it is advisable to enclose the route at certain stages.

## CONCLUSION

As a result of the experimental work on personalization of art students' training, we can argue that the indicators are objectively higher in the experimental group than in the control one. This situation gives us reason to consider the work done at the formative stage of the experiment as effective.

It should be noted that the diversification of the learning process based on the identified pedagogical conditions allowed us personalizing the training of students in artistic areas and achieving positive results during the experimental work in the experimental group.

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