Problems of preparation for educational design of students of institutions of higher art education

Problemas de preparação para design educacional de alunos de instituições de ensino superior artístico

Problemas de preparación para el diseño educativo de estudiantes de instituciones de educación artística superior

Yaroslav Lohinskyy¹, Olena Maydanets-Bargylevych¹, Alla Rudencenko¹, Volodymyr Tymenko¹, Yuriy Didovets¹

¹ Kyiv State Institute of Decorative and Applied Art and Design named after Mykhailo Boychuk, Kyiv, Ukraine.

Corresponding author:
Yaroslav Lohinskyy
Email: yarologan@yahoo.com

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ABSTRACT
In modern conditions of production development, the requirements for a young specialist in the field of higher art education are growing. The main task of higher art education is to train a competitive, mobile specialist who has a readiness for self-education throughout his life. When preparing a specialist in higher art education, it is necessary to form in him such knowledge, abilities and skills that will allow him to solve non-standard production problems, use modern technologies, independently analyze the results of his activities, and draw conclusions. Thus, a graduate of institutions of higher art education must be ready to work actively in a changing environment. Teaching focused only on memorizing the material can no longer meet modern requirements. The problem of the formation of such qualities of attention, memory and thinking that allows the student to independently assimilate information, is constantly updated, as well as the development of such abilities and skills, which, preserved even after completing education, would provide him with the opportunity to keep up with the accelerated scientific technical progress. One of the problems of modern education is that graduates experience some difficulties in applying theoretical knowledge in practice. The ability to apply the acquired knowledge, skills and abilities in professional activities cannot appear by itself, for this you need to teach. To solve this problem, it is necessary to introduce the educational design teaching method into the educational process, which today has its own characteristics and problems.
**Keywords:** Educational design. Educational process. Higher art education. Pedagogy. Project thinking. Students.

**RESUMO**
Nas condições modernas de desenvolvimento da produção, as exigências para um jovem especialista no campo do ensino superior artístico estão crescendo. A principal tarefa do ensino superior de arte é treinar um especialista competitivo e móvel que esteja pronto para a autoeducação ao longo de sua vida. Ao preparar um especialista em educação superior em artes, é necessário formar nele conhecimentos, habilidades e competências que lhe permitam resolver problemas de produção atípicos, utilizar tecnologias modernas, analisar de forma independente os resultados de suas atividades e tirar conclusões. Assim, um graduado em instituições de ensino superior de arte deve estar pronto para trabalhar ativamente em um ambiente em mudança. O ensino focado apenas na memorização do material não pode mais atender aos requisitos modernos. O problema da formação de tais qualidades de atenção, memória e pensamento que permite ao aluno assimilar informações de forma independente, está em constante atualização, bem como o desenvolvimento de tais habilidades e competências que, preservadas mesmo após o término da escolaridade, lhe proporcionariam a oportunidade de acompanhar o acelerado progresso técnico-científico. Um dos problemas da educação moderna é que os graduados experimentam algumas dificuldades na aplicação do conhecimento teórico na prática. A capacidade de aplicar os conhecimentos, competências e aptidões adquiridos em atividades profissionais não pode surgir por si só, para isso é necessário ensinar. Para solucionar esse problema, é necessário inserir o método de ensino de design educacional no processo educacional, que hoje possui características e problemáticas próprias. **Palavras-chave:** Alunos. Desenho educacional. Educação superior em arte. Pedagogia. Pensamento de projeto. Processo educacional.

**RESUMEN**
En las condiciones modernas de desarrollo de la producción, aumentan las necesidades de un joven especialista en el campo de la educación artística superior. La tarea principal de la educación artística superior es formar un especialista móvil competitivo que esté preparado para la autoeducación a lo largo de su vida. Al preparar a un especialista en educación artística superior, es necesario formar en él conocimientos, habilidades y destrezas que le permitan resolver problemas de producción no estándar, utilizar tecnologías modernas, analizar de forma independiente los resultados de sus actividades y sacar conclusiones. Por lo tanto, un graduado de instituciones de educación artística superior debe estar preparado para trabajar activamente en un entorno cambiante. La enseñanza centrada solo en memorizar el material ya no puede cumplir con los requisitos modernos. El problema de la formación de tales cualidades de atención, memoria y pensamiento que le permite al estudiante asimilar información de forma independiente, se actualiza constantemente, así como el desarrollo de tales habilidades y destrezas, que, conservadas incluso después de completar la educación, le proporcionarían la oportunidad de mantenerse al día con el progreso científico técnico acelerado. Uno de los problemas de la educación moderna es que los graduados experimentan algunas dificultades para aplicar los conocimientos teóricos en la práctica. La capacidad de aplicar los conocimientos, destrezas y habilidades adquiridas en actividades profesionales no puede aparecer por sí sola, para ello es necesario enseñar. Para solucionar este problema, es necesario introducir el método de enseñanza del diseño educativo en el proceso educativo, que hoy tiene sus propias características y problemas. **Palabras clave:** Diseño educativo. Educación artística superior. Estudiantes. Pedagogía. Pensamiento de proyectos. Proceso educativo.
INTRODUCTION

Today, art cannot be considered as a closed (elitist) system that develops autonomously in relation to broad social strata and the world cultural context. Due to the universality of artistic language, art encodes and transmits semantic information that is clear to everyone, allows to enter into nonverbal dialogue with different cultures of the past and present, understand others, expand their own spiritual world, which is extremely important in the context of globalization. That is, verbal information of the learning environment should be supplemented by sensory information of the artistic environment. The values of art are important given the modern existence of children and youth in a multicultural space. Children who sit at desks today, as well as future teachers must be ready to live in conditions of permanent change, unpredictable situations, create an aesthetic sphere of their own life, and therefore art education should help to understand various aspects of life and coexistence with others: intellectual (culture of mind), moral and ethical (culture of feelings) and aesthetic (culture of creativity). At the same time, the tendencies of coexistence of various art styles, integrativeness, as well as avoiding the polarization of elite and popular arts are relevant in the modern era. A reflection of such trends is the emergence of the phenomenon of design and art design, which is "embedded" in everyday human life (aesthetics). This is a material and artistic culture, which is "involved" in everyday space.

Design today is an integral part of the development of society of the XXI century, as well as one of the most important areas of modern art culture, which is undoubtedly necessary to ensure human life, reflect its spiritual and material needs, in particular, encourages the creation of new forms and images. and spaces, develops and elevates the very subjectivity of the individual, aestheticizes and improves various areas of human activity. Therefore, the professional training of future design specialists acquires a special socio-cultural significance. A modern design specialist must have a broad worldview, high intellectual potential and level of culture, ability to self-improvement, ability to be creative in solving problems and choose the best solutions, ability to analyze, ability to navigate in rapidly changing design trends of the market environment. Scientists in the field of design claim that today design is a complex interdisciplinary design and artistic activity, integrating natural science, technical, humanitarian knowledge, engineering and artistic thinking, aimed at forming on an industrial basis the objective world in an extremely large "zone of contact" with man in all spheres of life without exception. Artistic design in the process of training future design professionals provides an opportunity for self-development, self-actualization of the individual in accordance with the new doctrine of Ukrainian education. But so far the problem of forming the ability to artistic and design activities remains insufficiently studied. Analysis of the content of training in "Professional Education", current curricula, study of theory and practice of training students in "Design" in higher education confirms the contradiction between the social order for creative personality with developed professional competencies and insufficient level of psychological and pedagogical conditions for preparing students for future art and project activities.

Today’s society needs proactive individuals who are able to act consciously, make decisions, and quickly adapt to changes. Therefore, in modern pedagogy, an active search and testing of various forms and methods of activity of the subject of cognition is being carried out, thereby laying the objective prerequisites for a qualitative transformation of pedagogical education (Dijkstra et al., 1997).

The teacher should act not so much as a source of knowledge and a controlling subject, but as an organizer of independent active cognitive activity of students, their consultant and assistant. To do this, in the process of university training, it is necessary to involve students in an active cognitive process, the application of the knowledge gained in practice, cooperation in solving various problems, the formulation and argumentation of personal opinions (McAndrew et al., 2005).

Thus, the need to update education has led to the emergence and spread of a large number of new approaches to the organization of the educational process, methods and technologies of
teaching and education. In particular, the so-called pedagogical technologies have recently gained great popularity. The term "pedagogical technology" has been used in education since the 19th century, but there is still no single definition of this concept. Pedagogical technologies are interpreted as teaching methods, teaching principles, pedagogical technique, as an algorithm for the process of achieving planned results, as science, pedagogical system, knowledge system, teacher's art, etc. Common in all definitions is the direction of pedagogical technology to improve the effectiveness of the educational process, guarantees the achievement of planned learning outcomes. There is also a generally accepted concept of technology as the design of the educational process according to a certain scheme. It should be noted that the pedagogical technology reflects the model of the educational process, combines the content, forms and methods of teaching and education. One of the most common is the design technology or project method. The project provides for the development of a theme, idea, detailed planning; is aimed at the development of active independent thinking of the student, the ability to find and solve problems, attracting knowledge from different areas for this activity, to be able to predict the results and possible consequences of different options for their solution (Maclean & Scott, 2007).

Especially valuable in this technology is that all theoretical knowledge that a student receives in the process of preparing a project, he immediately implements in practice. So, the project becomes both a path of cognition and a means of organizing the pedagogical process. Taking into account the relevance of pedagogical technologies and the effectiveness of the use of design technology in higher education, we consider it appropriate to highlight the possibilities of using educational design for students of institutions of higher art education.

MATERIALS AND METHODS

Methodological basic research embodies the most important approaches, methods and principles of theoretical and methodological research. Also, this article in the process of learning the problem of preparation for educational design of students of higher educational institutions of art used: a) general scientific methods (formal-logical, systemic, structural-functional, concrete-historical); b) general logical methods of theoretical analysis (analysis, synthesis, generalization, comparison, abstraction, analogy, etc.); c) private scientific methods (technical analysis, specification, interpretation, etc.).

RESULTS AND DISCUSSION

For the development of personality and the formation of its value orientations it is necessary that professional and value relations of participants in the educational process are carried out taking into account the individual value of each student, understanding the creative essence of teaching, awareness of self-worth, dignity, personal freedom and self-awareness. cultural values. The teacher himself must be deeply convinced of the worldview he is promoting. However, it should be noted that at the present stage of development of general education the issues of subject content of such field as "design" are insufficiently developed, there is almost no psychological and pedagogical literature on art design, there are no established views of scientists on design and art design.

The purpose of the project activity is to initiate changes in the artificial environment surrounding a person. Therefore, we can say that in our lives we set and solve design problems every hour, that is, design has become the defining boundary of our consciousness and existence. Design activity is analyzed by modern researchers on the following indicators: a) the need for new knowledge, the ability to thoughtfully analyze various objects, processes and phenomena of reality, the realization that the world (environment) - is a source of valuable information; b) different emotional states: joy, indifference, irritation, etc., gestures, facial expressions, the predominance of positive emotions, their adequacy; c) expansion of own experience through activity assimilation of
values, need for creativity, a way of self-expression. The task of primary school is to raise the child’s thinking to a qualitatively new stage, to develop intelligence to the level of understanding of causal relationships.

The main arguments in favor of teaching design in pedagogy should not be sought in the fact that teaching design, we prepare a person for a successful career or provide him with a pleasant environment, not in the fact that we prepare a qualified consumer, although these aspects are important in themselves, and that design strengthens and unites in one whole verbal and nonverbal formation, that it increases amplitude of imagination and thinking.

We highlight the following principles of educational design: a) effective goal setting: a clear idea of what students need to learn in the classroom and how to assess the changes that have taken place; b) the principle of scientificity: the use of such techniques and methods of organizing educational material, which will be theoretically substantiated and tested in practice; c) the principle of clarity: during training the maximum number of channels of perception of information should be involved; d) the principle of accessibility: in the learning process should be ensured the availability and usability of scientific knowledge, and the level of complexity should be in the area of immediate development of students; e) individualization and differentiation of education: taking into account the psychological characteristics and needs of students and the appropriate adjustment of the program, the division of students into groups according to their levels, the implementation of individual tasks that contribute to the formation and development of personality; f) openness and nonlinearity of the learning process, creating conditions for constructing their own experience: relevance and versatility of topics, as well as their connection with the surrounding reality, modular organization of the curriculum, atmosphere of free and informal dialogue between student and teacher, the possibility of building an individual trajectory experience for each student without ready knowledge, models, algorithms and ways of solving problems, conditions for self-expression, self-learning, self-improvement and self-realization of students; g) comprehensive impact on all representative systems: the effectiveness of teaching is ensured by appealing to different styles of thinking, different cultural heritage, as well as the impact on all representative systems or sensory modalities (visual, auditory, taste, tactile and olfactory sensations), based on which experience is formed; h) reflexivity and constant feedback as an integral component of learning: assessment by students of acquired knowledge, skills and abilities, as well as changes in the spiritual world; i) aestheticization of the educational environment by means of pedagogical design.

Active teaching methods, search methods, research methods are a group of methods that contribute to enhancing the student’s activity in the learning process. Indeed, it is in the conditions of active search and research that the proactive development of the person himself, the formation of a creative personality that projects and organizes his own life and expediently transforms the world around, comes to the fore (Horbenko, 2013).

The method of educational design is not fundamentally new in world pedagogy. It arose in the twenties of the twentieth century in the United States. At first it was called the "method of problems" and it developed within the framework of the humanistic direction in philosophy and education, in the pedagogical views and experimental work of J. Dewey. This American philosopher and teacher believed that education should provide not only knowledge that will be useful in future adult life, but also knowledge, skills and abilities that can already today help the student in solving her pressing life problems. The main task of education is the actual study of the surrounding life.

Dewey’s follower, American teacher W.H. Kilpatrick, practically embodied the ideas of educational design of his predecessor and called the method of organizing work with students by the method of projects. Educational design is based on the development of cognitive, creative skills of students, the ability to independently design their knowledge, navigate the information space, and think critically (Bailey et al., 2006).
Kilpatrick proposed the following classification of projects (Sangsawang & Thosporn, 2015):

a) a productive (forming) project related to work (design, creation of a layout, caring for plants and animals); b) consumer project (preparation of excursions, provision of services, organization of leisure activities); c) research project (biological, physiological, technical, solution of historical or literary problems); d) an educational project (project-exercise) for mastering certain skills.

In world pedagogy, the method of educational design has been successfully used and developed. Recently, in connection with the formation of the personality-oriented education paradigm, the method of educational design is experiencing a rebirth as an effective addition to other pedagogical technologies that contribute to the formation of the individual as a subject of activity and social relations. There are several reasons for this (Van Merriënboer, 1997):

a) the need not so much to transfer to students the amount of certain knowledge, but to teach them to acquire this knowledge on their own, to be able to use the acquired information to solve new cognitive and practical problems; b) the relevance of acquiring communication skills and abilities, that is, the ability to work in different groups, performing various social roles (leader, performer, mediator, etc.); c) the relevance of broad human contacts, acquaintance with different cultures, points of view; d) the importance for human development of the ability to use research methods: to collect the necessary information, be able to analyze it from different points of view, put forward hypotheses, draw conclusions.

If a graduate of a higher education institution possesses such skills and abilities, he will be more adapted to life, will be able to adapt to changes, and work in various teams. Today, the project method is a way to achieve a didactic goal through a detailed development of a problem (technology), which should result in a real, practically tangible result. The main feature of the project method is the complete and organic consistency of learning with life, with the interests of the student. That is, the project method puts future specialists in a position similar to that of an adult. And in the end, there is an active process of development of practical thinking, but based on science.

Project thinking is defined as a strategically creative personal and professional quality of a future specialist in the field of creative education, which is able to bring the process of comprehending works of academic art with the needs of modern youth closer to the peculiarities of their thinking and perception. Today, there is a certain component structure of design thinking. According to the latter, such components are (Hanke et al., 2011): a) motivational-strong-willed (which provides for the activation of the motivational sphere of future specialists, stimulates a positive attitude of students to creative self-realization, reinforces the subject's focus on the implementation of step-by-step planning of activities, increases interest in design); b) cognitive-strategic (ensures the success of the constructive-design, analytical-synthetic activity of the subject in the process of mastering the educational product and its artistic and pedagogical interpretation, is responsible for modeling the desired results and ways to achieve them); c) creative activity (designed to solve the problems of innovation and information, is responsible for the creation of a new artistic pedagogical product, original and expedient in the context of solving the assigned tasks); d) reflexive-prognostic (determines the implementation of a reflexive assessment of the process of project activities and provides an adequate understanding of one's own capabilities and available resources for predicting further development.

The pedagogical technology "educational design" includes a set of research, search, problem methods, creative in nature. It is not for nothing that this technology is referred to as technology of the XXI century (Awe & Church, 2020).

Educational design is a solution by a student or a group of students to a specific problem, which involves, on the one hand, the use of various methods and teaching aids, and on the other, the integration of knowledge and skills from various fields of science, technology, art.
The results should be "tangible": if it is a theoretical problem, then its concrete solution, if practical - a concrete result ready for implementation. To achieve such a result, it is necessary to teach performers to think independently, find and solve problems, using for this purpose knowledge from different areas, the ability to predict the results and possible consequences of different solutions (Berggren et al., 2005).

Project activity is always focused on independent work - individual, pair, group, which they perform within a certain period of time.

The purpose of educational design is to gain practical experience of students of institutions of higher art education.

Tasks of educational design is (Martens & Vogten, 2005): a) to teach students of institutions of higher art education to independently acquire knowledge and apply it to solve new cognitive and practical problems; b) contribute to the development of communication and creativity; c) expand the circle of communication; d) to instill the ability to use research methods: collect and analyze information, put forward hypotheses, draw conclusions.

Basic requirements for the use of technology of educational design: a) the presence of an interesting and significant social problem; b) predictability of results (report, reportage, album, etc.); c) independent activity of performers (individual, pair, group); d) structured content of the project (indicating the stage-by-stage results).

For the effective organization of educational design, there is the need to pay attention to the basic approaches to project structuring (Amorim, Lama, Sāínchez, Riera, Vila, 2006): 1) you should always start by choosing the topic of the project, its type, the number of participants; 2) Next, the teacher needs to think over possible variants of problems that are perverse to investigate within the framework of a certain topic; 3) an important point is the distribution of tasks between the participants, discussion of possible research methods, information search, creative solutions; 4) then the independent work of the project participants begins in accordance with their individual or group research, creative tasks; 5) interim discussions of the obtained data are constantly held in groups; 6) a necessary stage in the implementation of projects is their protection; 7) the work ends with a collective discussion, an examination, the announcement of the results of an external assessment, the formulation of conclusions.

In general, educational design can include three types of results. There is a tangible product that has been designed, manufactured, tested, and evaluated. There is the folder mentioned above. But the main thing for a teacher is the learning process and how much the students’ confidence in their abilities, their self-esteem, has grown. The teacher's task is to create comfortable, safe and stimulating conditions for the child’s development. An important aspect can be an exhibition of leaves from folders on special stands or cabinet walls. This emphasizes the importance of the process of exploring, reflecting and accepting the decision.

But in any case, the implemented educational design should arouse enthusiasm among the performers, captivate them. Any action performed individually, in a group, with the support of a teacher or on their own, students should independently plan, perform, analyze and evaluate. Of course, while understanding the purpose of the design work.

In order to master the educational design and the methodology of its organization, you must first of all know that the use of projects in the educational process requires serious preparatory work, and the projects themselves may be different, so it is worth familiarizing yourself with their typology.

Usually, educational design is divided into types according to the following criteria (Goodyear, 2004): a) on the dominant activity in the implementation of the project; b) on the subject and content industry; c) by the nature of the project coordination; d) by the nature of contacts in project activities; e) by the number of project participants; f) by the duration of the project.
In general, the instructor plays several roles during an educational design. He is an enthusiast, as he must "spark" the project participants with a common idea. He is also a specialist, for he possesses knowledge and skills in several fields. He is a consultant, organizer of access to the necessary resources and specialists. Leader, especially in matters of distribution of time and effort of performers. This is a person who asks a question, encourages, provides moral support. He is a partner in the learning process. Its goal is to develop initiative, resourcefulness, creativity, thoughtful attitude to practical work.

The challenge is scoring project work. Educators in the UK distinguish between summary grade (i.e. a score that indicates how well a job was done) and formative grade, which shows students where and how they can improve. Of course, of these two assessments, formative is of much greater benefit. Both grades are given both during the work on the project and after its completion (Schott & Seel, 2015).

External evaluation of the project makes it possible to track its effectiveness, the need for timely correction. The nature of such an assessment largely depends on the type of educational design, as well as on the topic (content), conditions of its implementation. If this is a research project, then it inevitably contains stages of implementation, and the success of the entire project largely depends on properly organized work at individual stages (Koper, Bennett, 2008). Therefore, it is necessary to track such activities of performers step by step, assessing it step by step. However, the grade does not have to be expressed as a grade point. Various forms of encouragement are possible: “That's right. Continue ”, “You need to stop and think. Something does not work. Think.” In game projects that have the character of a competition, it is advisable to use a point system. In creative projects, it is often impossible to measure intermediate results. But it is still necessary to track the work in order to come to the rescue on time, if necessary (but not in the form of a ready-made solution, but in the form of advice). That is, an external evaluation of the project (both intermediate and final) is needed, but it can take different forms, depending on many factors.

For example, the following parameters of the external evaluation of the project can be cited (Avgeriou et al., 2003): a) the significance and relevance of the problems raised, compliance with the topic; b) the correctness of the research methods used and the processing of results; c) activity of each participant; the collective nature of decision making; d) the nature of communication and mutual assistance in the implementation of the project; depth of penetration into the problem, use of knowledge from other areas; e) evidence of decisions made, the ability to argue their conclusions; f) aesthetic design of the results; the ability to answer the questions of opponents, brevity and reasoned answers.

CONCLUSION

Thus, the practice of introducing educational design in of institutions of higher art education is a difficult task and requires elaboration of the issue due to the low level or lack of the necessary material and technical base, which would allow combining theoretical training with practical skills.

Project thinking is an important integral quality of a future music teacher, which affects his success and professional compliance in the context of modern sociocultural processes. The criterion apparatus outlined in the work is based on the component structure and attributive characteristics of the phenomenon under study.

The introduction of educational design into educational programs will bring the education system of of institutions of higher art education closer to the most optimal education system, which leads to the development of student mobility with the possibility of further employment, and increases the competitive advantages of graduates.

Separately, we note that modern education is developing in an increasing flow of information, the interpenetration of different cultures, the need for the individual to operate with a huge amount of knowledge in various fields of human activity. The reform of the educational
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system is associated with the rapid development of information, virtual and communication technologies and is aimed at reducing the period of study of students, expanding their horizons, changes in curriculum, deepening knowledge, as well as individualization and differentiation of learning. As part of the modernization of education, a new form of education is inevitable, based on the use of Internet technologies, modern multimedia interactive equipment and ensures the effectiveness of the implementation of basic educational programs - e-learning. However, this form of education, despite its rapid development, still leaves many unresolved issues in the field of theory and practice. One of such problems is the question of formation of positive motivation of students in the process of e-learning in the study of disciplines of professional orientation. We believe that educational design is the means to ensure the active involvement of students in the educational process through the selection and use of higher education teachers a set of interactive forms, methods, techniques and modern information tools (including the information and educational environment of higher education), which will guarantee to achieve the planned result, providing feedback and selection of control and evaluation system in a dialogue mode and optimally taking into account the life experience and future professional development of students. Taking into account the motivational component, the use of a set of interactive forms and methods, information (multimedia) tools and creative skills of the teacher can ensure effective learning of the content of learning, reducing its time and optimizing effectiveness.

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