PEDAGOGICAL CONSULTING DESIGN-PROJECTING BASED ON THE COMPETENCE APPROACH IN THE UNIVERSITY

Zinaida Y. Maksimova\textsuperscript{1}, Sergei Y. Lavrentiev\textsuperscript{2}, Dmitry A. Krylov\textsuperscript{3}, Sergey G. Korotkov\textsuperscript{4}.

\textsuperscript{1}Postgraduate, Lecturer, Faculty of General and Vocational Education, Mari State University, Russia, zina.maksimova.80@mail.ru
\textsuperscript{2}Assoc. Prof., Faculty of General and Vocational Education, Mari State University, Russia, lavrsu@mail.ru
\textsuperscript{3}Assoc. Prof., Faculty of General and Vocational Education, Mari State University, Russia, krilda@mail.ru
\textsuperscript{4}Assoc. Prof., Faculty of General and Vocational Education, Mari State University, Russia, korotkov.s.g@yandex.ru
\*Corresponding author

Abstract

New tasks for vocational training of students in a higher education institution for work in the conditions of a post-industrial information society are impossible without formed competencies in design engineering. The article analyzes the possibilities of innovative pedagogical technologies for the formation of competence in the field of design-projecting, identifies their essence, reveals the content and structure. It is revealed that in the conditions of modern education, one of the priority directions of pedagogical consulting is consulting and pedagogical support of students in their ability to independently and motivatedly organize their cognitive activities, including in the field of design engineering. It is noted that the scope of pedagogical consulting is not only designed to meet the existing educational demand, but also to be ahead of it, to be at the forefront of the development of the student’s professional and pedagogical culture, its professional and personal development.

Keywords: Competence, consulting, design, projecting, design project, object-spatial environment, education, professional competence of the designer.

1 INTRODUCTION

Design as an independent branch of the environment and the objective world designing came from the architectural and artistic creativity at the beginning of the 20th century. The main reason for this phenomenon was the dramatic changes in the sphere of material production of consumer goods. The original “design” term meaning, is widely used today, signify “projecting”. In modern projecting practice, “design” primarily refers to the objective environment projecting of person surroundings. A designer is an artist-engineer who transforms everything that a person encounters in everyday life. In modern conditions
the technological education to ensure of trainees functional literacy and social adaptation based on the acquisition by students of competence experience in the field of learning, cognition, professional and labor choice, personal development and value orientations is designed. This predetermines the aims of training orientation on the formation of a competence-based personality capable of vital activity and self-determination in an information society that clearly presents its potential capabilities, resources and ways of implementing the chosen life path. One of the main tasks of modern pedagogical consulting is the development of a student as a competent person by incorporating him into various types of human activity. It today defined the goal of pedagogical consulting in the field of design engineering.

2. MATERIALS AND METHODS

Currently, it is planned to implement an actual competence-based approach that defined the tasks and expected results of pedagogical consulting. The most important feature of the state standard pedagogical concept is the transition from the sum of “objective results” to interdisciplinary and integrative results, which are generalized methods of activity, reflecting the specificity of not individual subjects, but levels of education (Simonenko V.D., Retivykh M.V., Matyash N.V., 1999).

3. RESULTS

Today, secondary school graduates are particularly attracted to the professions in demand in this field. The mission of the design school is to form an elite in the field of artistic design that is worthy of competing in the domestic design market. Today, in the field of art-design creativity the state of affairs in the system of education is far from perfect. In traditional design universities the training programs for specialists are focused on the prevailing stereotypes of practical activity. The graduates of traditional higher education institutions, as a result, often experience serious difficulties in applying for a job; they remain outside the realm of real professional practice. On the other hand, organizations emerging on the market of design services are in urgent need of qualified personnel. There is a clear imbalance between the education system and the profession form existence in the new conditions (Krylov D., Lavrentiev S., Komelina V., 2017).

However, the process of pedagogical consulting is not only designed to meet the existing demand, but also be ahead of it, to be at the forefront of the development of professional culture. At the moment, the search for innovative ways to effectively solve these problems is extremely relevant. Today, the tasks of training sessions are defined as consolidating the ability to divide processes into stages. Particular attention is paid to the cognitive activity of students, their motivation for independent study work. For modern education, the priority is pedagogical consulting in the development of skills to independently organize their cognitive activities. This can be facilitated by the project consulting activity of students, whether it is the subject area “Technology” or design-engineering - this is a joint educational, cognitive, creative or gaming activity that has a common goal, agreed methods, ways of activity aimed at achieving a common result (Polevshikova T.I., 2012).

The specificity of design and consulting activity is its focus on personal development and on obtaining a new research result. The purpose of educational and consulting activities is the acquisition by students of cognitive and research competence, enhancing the student's personal position in the educational process of the university (Simonenko V.D., Retivykh M.V., Matyash N.V., 1999).

Today, a new profession is needed, which is able to foresee the technological basis of the future - design-projecting, the complex formation of objects and systems of our environment as a harmonious, artistically meaningful unity of all its components. All this makes special demands on the designer's equipment with a complex of professional competencies and their use in their practical activities. The modern level of development of production, technology is unthinkable without artistic design, providing not only high manufacturability, structural strength, but also the aesthetic appearance of the product or object. Design nowadays largely determines the external and internal appearance of various buildings, clothes, furniture, and much more (Lavrentiev S.Y., Krylov D.A., Korotkov S.G., 2018).

The requirements for the current state of professional training of a modern specialist are dictated by the conditions of professional activity, the need for a flexible response to the demands of the labor market, the future specialists to acquire additional specialized knowledge and skills, and the need for professional mobility and imply major changes in the content and structure of graduates institutions (Polevshchikova T.I., 2012).

It has been established that in the process of pedagogical consulting that coincides in time with studies at university, professionalism is actively developed through the acquisition of functional literacy, professional qualifications, development of professional culture and the formation of professional competence of a
The effectiveness of a student’s professional training directly depends on his competent preparation, planning and organization. Creative and intellectual growth of future specialists will be particularly intensive, subject to the inclusion of students in active scientific consulting and various forms of innovation activities. Such forms include teaching and research groups, student creative workshops, student design bureaus, educational laboratories, scientific conferences, seminars, round tables, exhibitions, etc. It stimulates the creative and search activity of students, forms a steady interest in performing exploratory and experimental developments, intensifies educational and cognitive activity on solving various tasks of future professional activity and will ensure the student's personal educational trajectory and prepare high-quality and competitive specialists for the modern labor market (Polevshikova T.I., 2012).

Drawing up a project - a plan that is ready for implementation, synthesizes the knowledge and skills acquired by students at the university. This is a professional foresight of the image of the future product in the real product of the design product. In educational tasks on design-project, it is necessary to improve the knowledge and skills of drawing, develop three-dimensional thinking, consolidate and deepen knowledge on the practical application of the elements of the "decorative" order: pattern, ornament, decor, jewelry, decoration. As well as "design-graphic" interpretations: sketches, sketches, drawings, the actual project, drawings, designs. Acquaintance with concepts: plan, assumption, intention, intention, idea, intent and even intrigue. An important place is given to aesthetic development, which will equip students with methods for expressing design ideas when developing sketches and design projects (Polevshikova T.I., 2012).

The fundamental principle of design is visual art, which has absorbed the socio-historical and national characteristics of a particular region. Being a translator of sociocultural values and a carrier of authentic traditional culture to man, art in general and painting in particular is a powerful means of transmitting ethnocultural semantic meanings and national socio-psychological features. Naturally, the factor of education involves the systemic impact of a number of academic disciplines. One of these disciplines that form the internal culture, artistic taste, designer's imagination is composition, drawing and painting.

In the training course of these disciplines for the future designer, the student comprehends:

1. Place of a person in the ethnocultural space of the country, as well as their relationship.
2. Features of local color, the principle of stylization of the form, the specifics of crafts.
3. Cultural heritage through composition and painting in national costumes.

The experience of participating in inter-regional exhibitions shows how specific and unique the art school of each region is. Visiting art exhibitions is another important means of ethnocultural education of a student designer in the framework of studies on the history of costume and other disciplines.

Considering the prospects for the development of pedagogical consulting of design-projecting in Russia, we note that modern design-projecting implies a mandatory solution of the tasks set not only by means of graphics, but also by means of interdisciplinary connections. In the process of designing and projecting a modern product, the designer, the creator of the object, plays the main role. But also important is the professional competence of the designer.

The theory of design received the name "technical aesthetics", it covers a wide range of problems. Any design is the result of a large number of closely related decisions. The designer must determine the form and functionality of the product, the materials used and production methods. These decisions should be based on considering a wide range of ergonomic factors, on knowing the needs of people and on what is technically possible. The importance of design for modern society can be judged by the number of professions that are relevant to this phenomenon. The most prominent examples are the professions of architect and fashion designer (Minervin G.B., Shimko V.T., 2012).

The designer, creating a thing, should know ethnography, demographic situation, sociology, psychology, physiology, medicine, ergonomics, and technology of making things, properties of materials, possible engineering and design solutions. A designer should know that in this world everything correlates with each other and a person perceives it on a subconscious level. He makes a concrete figurative sense of things, forcing them to serve a person, simultaneously arousing certain aesthetic feelings and moods. A person in art is able to revive "soulless substances" - stone, wood, metal ... and express through them their essence and their attitude to the environment. The first group of concepts of design can be designated as "artistic", which came from primary sources - "senior" types of art - painting, sculpture, architecture. The second group of concepts came into the design of the field of engineering, design and construction, so you can call it "technical".
In the most generalized form, a design definition can be formulated as follows: design is a design artistic and technical activity for the development of industrial products with high consumer properties and aesthetic qualities, for the formation of a harmonious objective environment of the residential, industrial and socio-cultural spheres (Minervin G.B., Shimko V.T., 2012).

Design "originated" from art, but it is not art itself, but the design of the objective conditions of social life (the objective environment), taking into account the conditions of consumption. At the stage of formation and formation of design as a new sphere of creativity, together with architecture and decorative and applied art, he is responsible for the entire subject-spatial environment, and therefore has a direct relationship to the style-building processes, to taking into account national traditions, continuity, to the satisfaction of individual needs, to the most diverse aspects of artistic shaping. And as the object of design creativity now stands the entire material environment - "from a spoon to the city" (Minervin G.B., Shimko V.T., 2012).

Theoretical literacy of the designer allows you to approach the design projecting at a professional level, to achieve maximum communicative efficiency, to avoid many mistakes. To do this, the designer needs to constantly improve his knowledge, expand his creative horizons, improve the sense of taste. Creative personality development implies the development of creative and creative skills of a designer. The ability of the designer to create new expressive artistic, visual and graphic techniques depends on them.

There are two methods of producing ideas: creative (heuristic), based on the divergent thinking of the designer, and analytical, which is based on the analysis of the market and consumers. Both methods are necessary for effective creativity, since the designer must be in constant creative search for new ideas and tools that could attract the attention of the audience to the objects of design. It is important not to be afraid to shock the audience with your creative experiments. There are no specific strategies for the formation of the creative and creative potential of the designer, but there are ways to stimulate them. Each person can learn to think and act more creatively, since creativity is a model of behavior. In order to develop creative and creative thinking, the designer must have a "set on creativity", that is, a belief in their abilities. A further way to stimulate creative potential is to develop the skills of divergent thinking, which consists in finding a variety of solutions to the same problem. An effective tool here is the method of associations, the method of analogies and the method of "brainstorming", which helps to optimize these processes. A designer, being the main link in the process of pedagogical consulting of design-projecting, must be a fully developed personality, be able to operate with his creative skills and use technical capabilities to the full.

When building an educational process, the teacher needs to keep under review not only the system of pedagogical influences, but also the position of the students in terms of their needs and interests, abilities and capabilities. It is important to consider the main goal of the modern educational system:

- The formation of a free, creatively thinking, harmoniously developed personality;
- Gaining experience in studying, reviving, preserving and developing traditional folk culture;
- The awakening of a student of active interest in a future profession;
- Identification of talented youth;
- Assistance in choosing an individual professional route.

Students should acquire the skills to form their own algorithm for solving cognitive tasks, formulate the problem and goals of their work, determine the adequate ways and methods to solve the problem, predict the expected result and compare it with their own knowledge. Students must learn to present the results of individual and group cognitive activity. This approach reflects the strategy of modern educational policy: the need to educate a person and a citizen integrated into modern society, aimed at its improvement. The system of occupations should be focused on the formation of an active person, motivated to self-education, possessing sufficient skills and psychological attitudes for independent search, selection, analysis and use of information (Polevshikova T.I., 2012).

4. CONCLUSIONS

To implement the competence approach in the content of pedagogical consulting in the planning of the educational process should be:

- Mastering general labor and special skills;
- Education of diligence, thrift, dedication, enterprise, responsibility for the results of their activities;
- Gaining experience in the use of polytechnic and technological knowledge and skills;
and learning objectives:

- The acquisition of knowledge about information technology, artistic processing of materials;
- Mastering various ways of activity: plan and organize personal plans, independently acquire knowledge using various sources.

REFERENCE LIST


