UDK 378 TO THE ISSUE OF HEURISTIC TEACHING (ON THE EXAMPLE OF OMSK SCHOOL OF COSTUME DESIGN)

Yushenko O.V.

¹SEE HPE Omsk Design and Technology University, Omsk, Russia (644099, Omsk, 13, Pevtsova Street), e-mail: <u>rector@omgis.ru</u>

The article deals with the problems of training designers, namely, the role of creativity and creativity in the design. The role of the heuristic approach in the process of creativity and learning in the professional activity of the designer. The article deals with the basic criteria of creativity as a process of psychological and intellectual activity, as well as possible forms of its realization in the pedagogical process. A further development of this aspect of the design activity is expected to create a detailed description of pedagogical support, developed on the basis of methodological technology created in the Omsk School of Design. This publication reveals the theoretical basis of educational technology and does not include a detailed description of specific didactic methods, aimed at developing the creative abilities or disclosure of creative potential of students of costume designers.

Keywords: design education; heuristic; innovation; creativity; creation; thinking; individuality; Design industry; creative activity;

Designing diverse learning activities of students, its effective organization - one of the main tasks of University teachers. Education of the individual student through learning a particular subject is the most important function of the teacher. Create your own creative laboratory, development of training-methodical complex and didactic material - the essence of pedagogical skills. In this regard, to teachers working in design education, the challenge is to prepare a competitive, soughtafter professionals in the field of design, that is, possessing a developed artistic taste, creative thinking, unconventional approach to the design process. The modern system of education puts the spotlight on the education of the person with the creative activity of divergent thinking, developed aspiration to create, based on the highest form of self-realization.

Classes at the University only be productive when in the educational process, implemented new training technologies, methods, enabling the most detail, objectively, to their implementation in the pedagogical process.

"Design thinking begins with skills that engineers and designers of training were for decades in their quest to match human needs and available technical resources, taking into account natural constraints of the business. Integrating desirable from the point of view of man, technologically possible and economically viable, designers have been able to create products that we use now... Design thinking is based on a person's ability to intuitive feeling, to recognize patterns, to create ideas that carry not only functional, but also an emotional component to express themselves not only in words or symbols "[4]. According to the author, to improve the competitiveness of Russian designers, you need to pay special attention to finding the most effective teaching technologies and such a vector of development in which our future professionals could create something new and progressive. "Of particular importance in the implementation of the problem-project approach in the training of future designers is the use of a variety of unusual, intricate and edgy design-the decision of which students allows them to "be creative". Due to this is expanding their perceptual experience in the perception of samples-standards design solutions, stimulated the expression of empathy, developing emotional reactivity, are formed skills of finding unexpected and innovative solutions," [5]. Associative thinking is one of the most valuable properties of professional consciousness of the designer can be a genetic gift, but it's much better and more real "it directed education different techniques that are provided with psychological support sphere of creative processes" [3].

The designer's job is first and foremost the work of his creative imagination. Application-the application of traditional design methods is ineffective, does not always produce new and exciting solutions. In modern situations, it is important fruitful and systematic production of new ideas. In this regard, in designing there is a need of activation of creative exploration, the development of creative thinking of the designer, the intensification of the process of design. Designers all over the world are looking for new ideas in any field of design (whether industrial products, clothing, furniture or advertising), first, to match the timing and progress, and secondly, to create new products and product forms, as products tend to gradually become outdated morally and physically. Firms producing goods, are not interested in an interesting idea, and the endless stream of fresh, original ideas. This leads to the search of methods of intensification of creative imagination (heuristic methods). Heuristics (from the Greek. heurisko — find, discover) is a science studying productive creative thinking [5]. Heuristic methods of clothing design is a productive methods of creative thinking are expected to help designers to overcome psychological barriers, inertia and stereotypes of thinking, the stalemate in the development of new ideas, products. "Heuristics is a relatively independent science and how science is an area of scientific knowledge, exploring the regularities, principles, methods and techniques of creative activity and on this basis develops a systemic-multivariate methodology of various types and forms of creative activities, including creative self-development in order to improve its effectiveness" [1]. "1) a special method of solving problems (heuristic method); 2) the organization of the productive process of creative thinking; 3) the science that studies heuristic activities section of the science of thinking. Its main object - the creative activity; major problems - problems related to the decision-making models (in a non-standard problem situations). Heuristics as the science develops at the interface of psychology, artificial intelligence theory, structural linguistics, information theory; 4) The specific method of learning "(Philosophical Encyclopedic Dictionary. 1983). The purpose of these methods - to activate the search for new solutions. It is to make the process of generating ideas intensively increase the "concentration" of original ideas. To this end, the development of methods using special psychological mechanisms to improve the creative process: associative thinking, switching and concentration, imagination game.

In teaching practice Omsk school costume design (Omsk fashion design school) offers a wide variety of heuristic methods to wake up in the designer's initiative, to open his individual creativity, to develop mobility, flexibility and divergence (multivariate) thinking in professional direction. Mastering these techniques to perfection allows us to pass to a higher level of intuitive creativity. In the proposed method, a system of heuristics as a method of association, exaggeration technique metaphor method and many others. "Metaphorical understanding" is perhaps the most appropriate term to express the specifics of design art - the art of reading material benefits of peace and figurative language translation of specific items on the abstract requirements through code language. The designer is learning to think in sketch form, making an abstract model of customer requirements in a particular image of the object. This type of thinking is similar to the study of artificial language, which with the help of code (system) "thought" are transferred to "the words" and where structured relations between phenomena (sounds and significance - in language, artifacts and needs - in design). Associations method - one of the most sought after in the educational process. Association is the relationship between the individual performances, in which one view is different. This pattern of associations built method. "It is most effective in the case if the designer catches the multifaceted phenomenon of reality and creates a connection between them and the object of its activity. When designing new forms and images of costume designer can use an abstract phenomenon - the music, the free flow of consciousness, dreams. They give a vivid emotional impulse for the development of costume ideas. As a designer can use the push and psychological phenomena; it is focused on the imaginary atmosphere conditions, emotions that should be felt in these conditions, and converts them into graphic object solutions. The development of associative method develops associative thinking and allows the designer to quickly find ideas. Designer clothing from reality can take almost everything that somehow can be transformed, converted into clothes: a motive, a fragment of something, or a source of a whole ". [2] C. Dior admitted: "Actually, all that I know, I see or hear anything in my existence turns into a dress."

Finding silhouette forms are a necessary link in the formation and implementation of design ideas. A silhouette lays the basic foundation of forming a collection, its basic characteristics of the plastic, shaped the beginning, the degree of proximity to the human body, and even the direction in which the author works (industrial collection or unique author's model). Working with the silhouette helps you find the author's unique course and a new aesthetic, using a minimum of graphical tools. Methods of finding new silhouette making often involves working with almost abstract spot with little or no reference to the human figure, as in the silhouette thanks to its unique plastic possibilities, concentrated huge information formal and figurative-emotional. One of the tasks of a propaedeutic

course of the Omsk school costume design includes a variety of exercises to find new silhouette making associative source which are verbal concepts with the most diverse emotional and semantic content. Produces types of associations for the identity, contiguity, similarity, generalization, contrast (Fig. 1). Strengthening associations metaphors, exaggeration of the resulting bright positive or absurd (an oxymoron), images and concepts, in contrast.



b – "biology", c – "yes", d – "no"

Exercises on the creation of an image through the abstract form of help to feel and understand the communicative possibilities of the silhouette shapes. Numerous studies on the psychology of visual perception helped to make conclusions about what a straight line is associated with calmness, clarity and solidity even and curved - with grace and ease. The landscape is mainly dominated by straight horizontal lines that evoke a sense of calm and space. Vertical lines create a sense of height, but they can create a sense of anxiety, if a lot of them and they are too close to the viewer. Diagonal lines are dynamic, creating the impression of speed. Curved lines have grace, gaze slides easier on them than in straight lines. The rounded contours of hills, bends of the river or stream may play an independent role in the composition. Curved lines, like the diagonal, can create the impression of movement, but this movement is slower and quiet. In contrast to the curved, sharp jagged lines mean cruelty or destruction, and broken lines suggest heterogeneity. For example, the motto as "biology", "music", more suitable for curved, rounded shape, while the words "yes" and "no" are contrasted with one another on a plastic basis: the rounded contours of the "yes" correlated with its positive energy, and the word "no" solved at the expense of direct broken lines that convey stiffness and negativity embodied in this notion [6].

The principles of this educational technology: the development of design of visual thinking, visualization skills of graphic presentation, the implementation of formal and emotional aspects of the image. Features of the proposed method of creating a graphic image and allow it to be a means of communicating information on the emotional and sensual level, ie at the same time to perform communicative and aesthetic functions. Very productive for the development of associative thinking exercises are built on the disclosure of various meanings of the same object. At the time, the typology of visual messages developed by different authors (Yu. M. Lotman, E. V. Chernevich et al.). The typology proposed by J. H. Store that most closely meets our objectives in building the structure of the visual image. This author offers the following types of graphic object transformations:

• synonymy - image identical meaning;

- metonymy part expresses a whole;
- antonymy contrast by opposing extremes;
- hyperbole exaggeration excessive;
- association the identification of the calling object of sensuous images with reality.

If we imagine a visual story about any object or subject, it shows all the properties and meanings of this object, we will certainly use many of these types of meaning, answering the simple question "what is a bee?", for example: " bee sting is a "- hyperbole, metonymy (Figure 2 a.)," bee - hive is "association (Figure 2b.)," the bee - a swarm "- association (Figure 2 in.)" bee - is honey "- the association (Figure 2, r.)," bee - it strips "- metonymy (Figure 2, d.), bees picture - Synonyms (Figure 2, e.) etc. [6]... The basic material for illustrations of the creative idea is a metaphor. Metaphor (from the Greek -. Transfer) - in the broadest sense - is the figurative likeness of one object to another. Consequently, it moved the meaning expressed in the form of an image. And because the image this image (from English - a mental image, an idea, a metaphor), the metaphor - this image. Therefore, as a metaphor shaped reception is often used in advertising, social and commercial (Figure 3.) In the creation of the image of the creative process can not be deployed on the external pulse, and reverse, based on the actualization of verbal symbols, like the avant-garde art, displays the ideological concepts and passing the selection of filters, depending on graphic technology, changing world, aesthetic metamorphosis. There a different interpretation of the source of the image: in realistic and abstract manner. In some cases, the semantics of the image is brought to the viewer is not directly verbalized by a combination of characters and motivation "invent" the image and thus to engage in dialogue.





Fig. 2. The use of different types of visual communications: a - a bee sting is (hyperbole, metonymy); b - a bee hive is the (association); c - a bee swarm is (association); d - honey bee is the (association); e - a bee this strip (metonymy); f - picture bee (synonyms);

For the development of creative thinking should be used, especially in the introductory course:

- special psychogymnastics exercise (aimed at creating awareness on health and the concept of creativity and phases of the creative process, to the development of predictive capabilities, the ability to find solutions unlikely);

- psycho-pedagogical tasks;

- communication and pedagogical situations;

- associations, the work that leads to involvement in the process of finding solutions to problems of unconscious layers of experience and overcome the reciprocity in the large hemispheres in the brain;

- images: visual (pictures, which depict objects, numbers, animals), auditory (sound recordings). In the examples revealed constructive and creative nature of design thinking and activity that is more synthesis process model, than the process of their realization [7].





Fig. 3. Posters "Chanel" using metaphors. Educational work of students of OMSK SCHOOL COSTUME DESIGN;

In modern society, in various sectors of professional activity creativity is one of the leading factors of human success. The lists of requirements for candidates for the various positions are very common qualities such as creativity and innovative thinking. Educational space of the university teaches removing the creative potential of the observations and perceptions reveal the vital importance of the studied objects, arms alphabet creative thinking, conscious perception of the senses, learns to comprehend the principles of their actions and be guided by them in new situations. During the training there is a need for a variety of creative forms of organization of educational process. This scientific and creative methodical complexes, by which the students practice the knowledge and skills to apply their realizing their creative potential. Selection and development of teaching a specific course of technology teacher made on the basis of personal beliefs and teaching of his individual style of innovative educational activities.

Bibliography:

- Andreev, V. I. Pedagogical heuristic for creative self-development of multidimensionalthinking and wisdom: monograph / V. I. Andreev - Kazan: Center-innovative technologies, 2015.
- 2. Blagova, T. Yu. Heuristic methods in the design of clothing: teaching aid / T.Y. Blagova Blagoveshchensk: Amur State. University, 2006. 60 p. Ill.
- Semeshkina, T. V., Tkachev, V. N. Creative Technology initial stages Architechtural Education Bulletin MGSU. Scientific and technical journal for construction and architecture; Number 1 / T. Semeshkina - Moscow: FGBOU VPO 2014.
- 4. Brown, Tim. Design Thinking: from product development to the design of business models: the text provided by the publisher Ivanov and Ferber // Tim Brown Moscow; 2012 [electronic resource] http://www.litres.ru/pages/biblio_book/?art=3714995 (reference date: 08.08 in 2016).
- 5. Scherbakova, M. V. Psychological and pedagogical approaches to formation of communicative creativity in design: Collected materials of All-Russian scientific-practical conference INNOVATION IN EDUCATION / M. V. Shcerbakova - Nizhny Novgorod, 2014.
- 6. Yuschenko O. V. Project schedule in costume design: teaching aid / O. V. Yushchenko. Omsk: Omsk State Institute of Service, 2011. 101 p.
- Yuschenko O. V. Creativity and its value in teaching students fashion designers: International Journal of Experimental Education; Number 4 (Part 2) // O. V. Yushchenko. Moscow; 2016 [electronic resource] p. 294-297.

http://www.expeducation.ru/ru/article/view?id=9789 (reference date: 2016 08.08.)