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PRINCIPLES OF FORMATION PROJECT CREATIVE THINKING FUTURE DESIGNERS DURING TRAINING

Annotation: Article based on the basic provisions of the features that characterize adult thinking and taking into account the specific design activity and design education, design principles of formation are determined and imaginative thinking in the future designers as professional thinking designers in the process of training in higher education institution.

Keywords: drawing, creative thinking, professional thinking, principles of formation.

Statement of the problem. Most urgent task of national vocational pedagogy of teaching is finding conditions that would ensure the successful formation of professional thinking professionals for most it by implementing regulatory, cognitive, developmental and other functions, determines the efficiency of professional work identity and her professional development. This, as we have already noted, applies to designers as an urgent need in society of specialists who harmonize technical, consumer and aesthetic areas increases the demands on their professionalism at extremely low domestic experience in professional training.

Defining the essence of professional thinking designers like design and creative, which is a complex, systemic phenomenon, particularly purposeful and deliberate form thinking process specialist, as a result of which there is awareness of the conditions of the problem situation by image generation and handling it with project activities carried out meet the challenges of design- activities. It has a particular composition is not constant phenomenon, formed and developed during the training of future specialists.

Analysis of recent research and publications indicates that the complexity of the phenomenon of thinking, ways of uncertainty of its formation and development in the future designer requires the definition of principles based on which the process of forming a focused design and creative thinking for future designers in high school. So thinking aspects of professional designers engaged in the following scientists: T. Bystrov, V. Ivashchenko, AA Magomedov, VF Sidorenko, AD Grigoriev, VV Turchin et al., But the principles of forming a professional design and creative thinking have remained unaddressed.

Goals of the Article. Purpose of this article is to define the principles of forming design and creative thinking for future designers of how thinking professional designers in the process of training in university.

The main part. The formation of design and creative thinking of designers is based on the basic provisions of the defining features of adult thinking. Carried out

our analysis of the scientific literature on the psychology of thinking allowed us to determine the following features of the development of thinking processes.

In - the first polimorfnist of thinking, which implies that in the mental development of the earlier, initial shape as visual-imagery and visual-thinking actors versus abstract, verbal and logical thinking persist in the adult, but transformed, converted (by AN Leontiev [2]). Verbal-logical thinking involves primary forms, creating a multi-faceted system. Thus, the development of specially organized in adult abstract logical thinking involves activation of visual-efficient and visually-imaginative forms of thinking, their mutual transition relationship.

Second, the development of thinking in practice because it is practical thinking generated by human activity, not just sensuality. Thinking has practiced practical activities in which it is expressed.

Third, the development of thinking in the process of speech communication, (giving thought linguistic form) is essential mechanism of thought processes that exteriors internal activities and outputs it to a higher level.

Fourth, the development of thinking is in the process of problem solving. The more complex, poli-system problems and tasks, the more significant "jumps" occur in human thought processes.

Fifth, the development of thinking processes in tandem with the motivation that together form the basis of creativity. In psychological science, this provision is formulated as a principle of the dialectical unity of intellectual and motivational components (DB Epiphany [3] AN Leont'ev [2] SL Rubinstein [4] et al.). It above situation motivation determines intellectual activity that leads to the further development thinking process personality.

Thus, based on selected characteristics of thinking can formulate the following principles forming design and creative thinking designers:

1) the principle of unity of image formation and project components of professional thinking, the development of so-called operant (mechanisms) that bind, transfer figurative to abstract thinking, level-pertseptiv images through image-representation to the images and concepts;

2) process the principle of formation of design and creative thinking in practice designer, ie the transformation thinking process in graphics, design and so on. form. It's a different language, meaning that the substantive design process of thinking is required in all phases of design. And reflect mental activity simultaneously in several forms purposeful activity is the most stimulating effect on the development of professional thinking as to manipulate simultaneously with different object shapes, materials and images. Transforming images in substantive form, allowing, in turn, the thinking to develop new qualities such as flexibility, criticality, variability, reflexivity, etc.;

3) Unity formation thinking process designer and his thinking communicative i (by GP Shchedrovitski [5]), which is manifested in two aspects: 1) the formation of design and creative thinking in the future designers will take place through the mechanism of articulation of themselves the course of their activities, ranging from preparatory phase and ending with the reflexive, the final phase, 2) is obligatory articulation course for other project activities, language presentation of their own

design project, participate in making collective discussion of design issues that promote the formation of both designers require communication skills (we already mentioned , the feature of design activity is its communicative richness - communication with clients, customers, colleagues, and other related professionals involved in the further implementation of design solutions) and promote the formation of thinking skills such as detsentrychnist, reflexivity, cognitive openness and so on.;

4) problematic: the principle of formation of design and creative thinking designer in the process of solving design problems. To disclose the specifics of this principle to form a design thinking necessary to describe the features of design problems as poli-system. Mono-system problems can be described within any one system, even complex, they already contain tasks rather quickly formulated, properly presented, is algorithmically solved. Poli-system problems include many clearly defined such that it is difficult to formulate, often unsolved problems algorithmically (for VM Druzhynin [1]).

Under the theory of solving complex problems specially organized training aimed at developing the intellectual processes, including thinking, and then - design and creative thinking designers should include three main areas [1].

First, the formation of students' systematic targeting of type in design, in which the expert teacher identifies them system-properties relationships and patterns of design. It enables students to analyze specific tasks and build them in terms of the basic laws and rules of design.

In - the second of independent learning research, which is carried out through the activities of the new complex design object with a mediocre teacher participation ("doctrine without instructions"), which represented the teacher training implicitly - through content selected or specially designed training them against the objects and environments, but does not provide any advice and direct students in course activities will not interfere.

Third, the combined learning methods that combine self-study phases of new design objects, without a teacher, and stage of purposeful learning under the guidance of experienced designers, artists, engineers and experts. According to the researchers [1], the greatest effect of combined teaching methods in the process of solving problems poli-system provide methods when experts communicate to students the knowledge and strategies both clearly defined and precise form and in the form of fuzzy recommendations, intuitive and poorly understood methods of activity perceived by students as the conscious and intuitive (even tacit knowledge) levels;

5) The principle of formation of design and creative thinking for future designers based organizing, analyzing, synthesizing, specifying expertise that make tentative basis projecting business professional designer and mapping of knowledge of this particular design situation, identify their relationship. This encourages the development of anticipation at all its levels and thus activates the professional phase course thinking activities future professionals up to the final phase - the results of design-design;

6) providing motivation: the principle of formation of design and creative thinking for future designers of simultaneous development of their professional motivation, professional orientation, providing a high level of professional activity of students, including intellectual sphere.

So in the process of design and creative thinking for future designers all these provisions must be considered at both the content of their training, and the level of form and methods used.

In addition to the principles of thought processes as much specific principles forming design and creative thinking for future designers in the learning process consists generally accepted principles Pedagogics (IF Isaev [3] VA Slastonin [3], etc.). 1) raw stemnosti, consistency, regularity, 2) awareness, 3) independence and activity, relying on independent work of students, and 4) scientific, 5) individual approach, 6) humanistic approach, 7) ensuring uniformity of educational, developmental and educational functions , 8) priority active forms and methods of training, 9) the optimal combination of all forms of educational process.

Conclusions. Based on the characteristics of adult thinking, and given the specific design activity and design education by forming principles of design and creative thinking of future designers like thinking professional designers.

Prospects for future research are to formulate the basic teaching environment based on the principles set out thinking of forming a professional future designers and their implementation in the process of training students how to ensure the success of the learning process and the formation of professional thinking of future designers.

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Аннотация

Деревянко Н.В. Принципы формирования проектно–образного мышления будущих дизайнеров в процессе профессиональной подготовки. В статье определяются принципы формирования проектно–образного мышления у будущих дизайнеров, как профессионального мышления дизайнеров, в процессе профессиональной подготовки.

Ключевые слова: проектно–образное мышление, профессиональное мышление, принципы формирования.

Анотація

Дерев'янко Н.В. Принципи формування проектно-образного мислення майбутніх дизайнерів у процесі професійної підготовки. *У статті визначаються принципи формування проектно-образного мислення у майбутніх дизайнерів, як професійного мислення дизайнерів, в процесі професійної підготовки.*

Ключові слова: проектно-образне мислення, професійне мислення, принципи формування.