

**PEDAGOGICAL AND PSYCHOLOGICAL FOUNDATIONS OF TEACHING
ARCHITECTURAL DRAWING IN THE EDUCATION SYSTEM**

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Abstract: The article addresses the significant issues in understanding the teaching of architectural drawing and the methods for resolving them in student education.

Keywords: form, graphics, spatial imagination, architectural drawing, pedagogy, psychology.

It is known that people differ from each other in many aspects. For instance, some have an excellent memory for their experiences and can recall them precisely when needed. Others can describe any object they have seen in great detail. Some think more accurately about what they have heard, while others express their feelings in simple and fluent language or rely on various contents and forms of fantasy. The field of architectural drawing is no exception, with some individuals inclined to add elements of fantasy to each drawing. Thus, people's abilities to visualize and organize their perceptions of the external world vary. Additionally, certain professions allow for the refinement of specific qualities. For example, an operator in large automated control systems learns to focus on even the smallest changes, becoming adept at abstract mathematical calculations.

Consequently, reflecting the characteristics and features of the external world in one's abilities and skills contributes to personal development and professional competence. Therefore, it is crucial to understand the role of factors such as perception, intuition, memory, attention, thinking, imagination, creativity, and emotions in personal and professional growth.

With the advent of complex computer technology, interest in one's psychic processes has increased. Discussions now often revolve around information reception (akin to traditional perception), its reprocessing (similar to thinking), and retention (memory). However, this elevates the importance and complexity of nurturing and educating natural mental processes in individuals.

Similar situations frequently occur in memory. When faced with a problem related to a subject of interest, we ponder: "Where have I seen this?" You may not remember, but the structure of the problem, its operational principles, and other forms of understanding seem familiar. It is essential to explain that through

exercises, people's experiences are actually stored in the brain, and we can access them in various forms. Only when we are ill or deeply concerned about something do different thoughts come to our minds. These are, in fact, spontaneous recollections of existing things.

Observations reveal that teaching architectural drawing significantly impacts students' mastery of the subject. For example, theoretical knowledge and graphic skills included in the graphics curriculum are developed in architectural drawing courses. Thus, students acquire varying degrees of knowledge in this subject during their higher education. Those who have studied geometry in school also lay the groundwork for architectural drawing. However, the relative proportions of acquired knowledge compared to architectural drawing indicate a lower level. As a result, some lack 30%, and others up to 60% of spatial imagination.

This poses a critical problem for the field of architectural drawing. The negative consequences ultimately lead to a shortage of fully qualified personnel in architectural drawing due to the lack of development in the main foundation of the field, spatial imagination. Only individuals with developed spatial imagination, evolving skills, and competencies truly understand and assimilate the essence of this field. This may be attributed to psychological, pedagogical, and methodological factors such as:

- Difficulty in student acceptance of the subject;
- Familiarity of new topic materials to the student, causing repetition and lack of curiosity;
- Absence of spatial imagination;
- Incomplete understanding of the topic;
- Lack of spatial imagination in topics requiring visualization;
- During lessons, the teacher's failure to engage the student's interest to a certain degree and assign independent work, homework, and graphic tasks;
- The student's growing interest in graphic education without reinforcing the acquired knowledge;
- Students interested in graphic education not seeking to expand, deepen, improve, and develop it;
- The student being distracted by other activities during the lesson and being inattentive, etc.

Such situations, although rare, do occur in the practice of experienced teachers. In academic lyceums and vocational-technical colleges, topics studied during school

years are taught in a broader and more complex manner. This allows students to show interest in graphic education. In the traditional educational process, the teacher organizes the lesson mainly for students with a low level of assimilation. In this case, for students with high grades, the explanation of the topic in the lesson may be boring and cause a loss of interest, while students who have difficulty assimilating the material may fall behind in the educational process, no matter how hard they try. Because the difference in assimilation indicators among students does not allow for the activation of the educational process. Such a process can even be observed in spatial perception among students. Indeed, among students, interest in graphic education can be at a low level, at a medium level, be in the process of formation or already formed at different stages of the educational process, which creates problems for the teacher. Therefore, it is necessary to study the development of spatial perception in students as a pedagogical and psychological problem.

If the teacher organizes a lesson on graphic education for students of different levels in the process of teaching the subject of drawing, taking into account the level of assimilation of students who have not yet formed or poorly formed an interest in graphic education, then students who have not formed an interest in graphic education may experience a lack of interest and irritation towards the lesson. If the teacher does the opposite, then the level of assimilation may decrease in students with a low level of interest in graphic education. In this case, it is necessary to develop factors that stimulate interest in graphic education in students, based on their psychological characteristics. In psychology, perception is understood as the process of reflecting, reproducing in the mind of a person the perceived, experienced phenomenon or event. If the goal of interest in graphic education was simply to transfer knowledge to paper, then tons of paper and educational materials would be required for students.

Therefore, it is possible to strengthen and assimilate knowledge through interest in graphic education. The teacher conveys his knowledge to students through educational means and activates the effective conduct of the lesson with the help of factors stimulating interest in graphic education. Students, in turn, assimilate knowledge with the help of these means and strive to form and develop the presented information in their perception through interest in graphic education. For example, in a lesson on construction drawing, such as the appearance of a building, an accurate description, the construction of its projection based on two views, drawing an accurate image based on views, performing various tasks or sections and sections on

planes in mental objects, is carried out directly based on the representations of students. Here, interest in graphic education plays a big role. Therefore, interest in graphic education is considered an important psychological and pedagogical problem in the educational process of a student. This important psychological and pedagogical problem is solved by developing students' interest in graphic education. Rational use of interest in graphic education is an effective means of solving this problem.

Investigating these issues in the education system and activating the educational process, where negative factors described above were highlighted in the research works of psychologists and educators. They emphasize that the introduction of new methods and methodological tools in the field of education will lead to further improvement of the educational process in the future. The application of these methodological tools, especially based on interest in graphic education, in the process of teaching students of higher educational institutions graphic design disciplines, contributes to the development of their interest in graphic education and yields a number of positive results.

The educational process is the intellectual activity of the student, that is, the activity of thinking. For this, students are offered problem tasks, which contributes to the development of their intellectual activity and the desire to solve. In regular lessons, the teacher spends most of the time explaining the new topic. As a result, there is often not enough time to consolidate the material covered, its connection with the new, and most importantly, to control and assess the students' knowledge. Unfortunately, many educators consider the organization of the educational process to be only the transfer of new knowledge and consider this a secondary issue for the development of students' intellectual potential. As a result, students lose interest in the subject and wait for the bell to change.

To solve these problems, there are a number of tools, including enriching the content of lessons with interesting factual and historical materials, as well as the sensible use of interest in graphic education. For this, it is necessary to use unconventional teaching methods to develop students' interest in graphic education, which, of course, requires the development of content and methodology. This is a very important pedagogical problem. After all, the materials of the educational programs not only develop the individual working characteristics of the student and his interest in graphic education but also contribute to his active activity. Interesting sequences of information in topics, test programs for self-control, software didactic games

designed to facilitate assimilation and interesting understanding, stimulate individual student work. Even under necessary conditions, it is possible to organize educational activities without a teacher and without feeling negative effects.

The level of understanding of the educational material, its reflection in the student's consciousness, and the acquisition of knowledge based on this information are determined by the principle of visibility in education. This improves the quality of teaching and facilitates the learning process for students. Psychologically, in this process, all sensory analyzers of the student's brain are activated, leading to the reflection and preservation of scientific knowledge about the object or the person himself in memory. The formation of a particular event, historical memory in the brain, firstly, from a psychological point of view, increases the student's inclination to acquire knowledge, and secondly, the expected result from education is pedagogically guaranteed. Over time, the emergence of the same image, i.e., an architectural drawing, image representation, evoking information in memory, is observed.

Also, it is necessary to provide the educational process with technical means.

The individual's ability to think, that is, their ability to engage in mental activity, is developed through mental operations.

Another important aspect of using interest in graphic education is its assistance to the student in fully and accurately representing concepts related to the topic or subject, the reflection of object elements and their characteristics in the human mind.

In conclusion, it can be said that the direct application of descriptive geometry and drafting in lessons contributes to the perfection of interest in graphic education, the assimilation of each topic, and the increase in the level of spatial perception in students up to 100%.

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