Visual Instructions and Thereby Further Shaping the Spatial Imagination of Students

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Abstract
This article describes the methodology of preparing visual aids, the use of prepared visual aids in drawing lessons. Drawing classes from the building layout show techniques for forming spatial representations of the building, the facade of the building, the roof, the roof, the landscape.

Keywords: Innovative, visual, geometric, line types, projection, edged, technical, flat.

Each prepared visual aid should fully explain the purpose of the lesson. It is appropriate to draw a sketch of the methodical idea of the visual tool during the coverage of the topic of the future lesson. After the initial visual weapon sketches are approved by a consensus with the methodical teacher, a designated watman paper is worked on (done) with taste in color.

When making sketches of visual instructions, the teacher must take into account the following requirements:
- compliance with the subject of visual arts in the school program;
- work in compliance with didactic principles and rules;
- to help actively form the characteristics of harmonious development of a person.

The artistic decoration of visual instructions should be worthy of its functional task. For example, the educational table should be made with "soft" colors. It is also important to come up with a solution for the compositional structure. There is no need to fill it with all kinds of redundant images. Headings (titles) of educational materials should be short and reflect its main idea. A fluently readable font should be selected. The title of the visual guide is placed in relation to the images in it.

The visual instruction that we have prepared, i.e. the model of the building, is also effective for the students to master the subject of the lesson well. The model of the building is a multi-storey residential building with an external landscape. The main purpose of this is to form the students' spatial imagination and ensure that they can clearly see the parts of the building and have perfect information about them during the lesson. We prepared this model as a visual guide to the topic of construction drawings for 9th grade. During the lesson, we tested the students' knowledge about the parts of buildings. In them, they expressed the parts of the building called the terms in the drawing in the local language, and we gave them an easy understanding using this model to correct their understanding. First of all, we taught what are the facade, roof, basement, landscape of building parts and their symbols in drawings.

1. It is necessary to work together with students who are interested in making a model before class.
2. Students' interest is very strong. All products are prepared to make a model.
3. In the process of preparing the model, it is necessary to give them concepts.
   a. First, we cut the special foamix needed for the base of the model in the required dimensions.
   b. We scale the dimensions of the building and prepare the parts of the building by cutting them to this size.
   c. We glue them together with special glue.
   d. We combine the frame of the finished building with the base. We shape the facade part of the building with colored papers using the mold of the ready-made layout.
   e. We arrange the landscape of the building in a modern way in a state suitable for all conditions for recreation.
   f. The general appearance turned out to be very beautiful, it can be felt that the students' spatial imagination and aesthetic taste were formed during the preparation of the model.

The basis of the methodology of teaching any subject consists of three main components: the concept, the methodical system of education and the evaluation of the results of their influence.

The teaching of drawing in 8th and 9th grades has its own characteristics based on the age characteristics of students and their life and work experiences. By this time, students consciously seek to learn with a specific goal. Therefore, the teacher should analyze the tasks in front of him, think of the most optimal structure of each lesson, and try to find a structure that fully meets the objectives of the lesson. The success of the next lesson often depends on how it ranks among the previous lessons, the knowledge and practical skills acquired by the students, and the volume and content of the knowledge explained to them. In this, the teacher relies on the level of worldviews of the students, the possibilities of independent reading from the textbook or popular scientific and technical literature.

In pedagogy, different types of lessons and different forms of the teacher's presentation of knowledge are analyzed. For example, lessons are divided into the following types:

- A lesson to learn new material;
- A lesson to strengthen knowledge, skills and abilities;
- Repetition-generalization lesson;
- Mixed or combination lesson.

The most widespread and popular type of drawing lessons is a mixed or combined lesson. In addition to the teacher's presentation of the topic, it is also important for students to perform practical work. These practical works help the students to consolidate the knowledge obtained using educational literature and to master the information necessary for performing homework.

Currently, there is increasing interest in the use of interactive methods, innovative technologies, pedagogical and information technologies in the educational process. In this case, while the students were mainly taught to acquire ready-made knowledge, modern technologies teach them to search for the acquired knowledge by themselves, to study and analyze it independently, and to draw their own conclusions as much as possible. In this process, the teacher creates conditions for the development, formation, learning and upbringing of the individual, and at the same time performs the functions of management and guidance. In such an educational process, the student becomes the main figure.

Innovation is an English word that means innovation, innovation. Innovative technologies are innovations and changes in the pedagogical process and activity of students and pedagogues, and in its implementation mainly interactive methods are fully used. Interactive methods are based on collective thinking and methods of pedagogical influence, which are a component of the educational
content. The uniqueness of these methods is that they are implemented only through the joint activity of the pedagogue and the student.

A drawing teacher is also required to know modern technologies and have the skills to use them appropriately in his professional activity. We will not dwell on it in detail, so that modern pedagogical technologies are taught as a special subject.

Drawing lessons in general education schools are slightly different from other subjects according to their characteristics. Students perform individual graphic works on the main parts of the learned information, and in the process of checking them, the teacher has to work with each student individually. In practice, the student learns drawing in a specially equipped drawing office under the guidance and supervision of the teacher. After the teacher explains the theoretical information in the lesson, the students do graphic work on this topic in their workbooks. The teacher is well aware of the abilities and possibilities of each student and taking them into account in the educational process will have a good effect. But the time for individual engagement with students is limited. The teacher has the opportunity to observe the work of each student and show them rational ways of drawing, explain the difficult areas of the subject and check the completed work. Therefore, a lot depends on the teacher's organization of the lesson. Drawing lessons are held in specially equipped drawing rooms. Since the equipment of drawing rooms will be discussed in the following topics, it will not be discussed here.

The focus of the teacher's attention should always be on the main task of forming students' skills in performing graphic work. The type of lesson should be chosen accordingly. When choosing educational methods, it is necessary to take into account the features of the science of drawing. When learning a new topic, ask students "Is everything clear?" or "Does everyone understand?" It is not appropriate to ask such questions. Because few people admit that they don't understand. Therefore, it is necessary to ask specific questions such as "In what situation is the plane forming this section?", "How to find the horizontal projection of point A on the surface of the cone?", or "How to create stepped and broken sections." In particular, the teacher stops in the process of making a drawing on the blackboard and asks the students, "How will we do the next drawing?" or "How many views will be needed to complete this detail drawing?" Asking questions like This way of asking the question makes the students active participants in finding a solution to the work being done and teaches them to think and choose the most correct one among their guesses.

Questions can be asked to the whole class or to individual students. For example, "Toshmatov, in this view, the length of which edge is shortened and why?" This may indicate that Tashmatov was distracted from the lesson, so the teacher attracted him to listen to the topic. So, the teacher should not get too involved in his explanation or story during the lesson. During the training, the teacher should constantly monitor the attitude of the students in the class to the lesson, and should have acquired the ability to attract the attention of the students.

According to the simplest classification, classes are divided into oral, demonstrative and practical methods. It is possible for the teacher to explain the material in the form of a lecture-conversation, make drawings related to the subject on the blackboard, and show the students' independent work using textbooks and reference books.

Demonstration methods include the use of educational demonstration manuals such as posters, educational tables, models, natural objects, electronic versions during the lesson. Practical methods include students' independent reading and execution of sketches and drawings, various graphic exercises aimed at strengthening the acquired knowledge and practical skills. In all these methods, two-way process: teacher-student communication should be in the leading place. The teacher is the main organizer of education.

In the process of teaching drawing, the teacher often has to use concepts and terms unfamiliar to the students. In order for students to learn drawing, it is necessary to master these concepts thoroughly. On the other hand, the large number of unfamiliar terms that need to be remembered, the need to
brainstorm theoretical concepts during practical graphic activities can reduce students' confidence in mastering science. But students cannot learn drawing without mastering these concepts thoroughly. If we take these into consideration, the problem of quantity and quality of concepts (terms) of drawing science will appear before the teacher.

There are enough drawing terms, they are not evenly distributed among the topics, and it is impossible. Terms and concepts in drawing can be conditionally divided into three groups: geometric, projection and technical. Horizon to geometric conceptual, vertical, parallel, edge, side, point, section, ray, angle between planes, names of geometric objects, etc. enters. Basic projection concepts include all the concepts related to the theoretical analysis of the projection process, auxiliary projection concepts include terms related to drawing and drawing (drawing tools, DST elements, line types, dimensions, conditional designations, etc.) are included. Technical terms in drawing (terms related to the names of details and assembly units) are technical concepts.

It would be a great methodical help especially for young teachers if concepts in drawing were classified according to their complexity, level of accuracy or abstractness and other qualities. Most of the concepts in drawing are used in a slightly different way, depending on whether they are used in the process of projection or reading the drawing. Some concepts are used without changing their meaning (for example, connecting lines of a complex drawing). Other concepts can be used in many ways depending on their function in the image (plane of projections, plane of symmetry, cutting plane, projecting plane, etc.).

References:

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