

## Use of Ready-Made Handouts and Didactic Materials in Drawing Teaching

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**Abstract:** *While the development of a student's personality takes place in the process of shaping his or her cognitive activity, we believe that although the two components mentioned above are inseparable, it is appropriate to categorize them in solving the problem of cognitive development.*

**Keywords:** *Student, personality, development, knowledge, book, lesson, teacher.*

Since activation of thinking is a key link in the development of cognitive activity, we will discuss the tools of this group in more detail below. As for the formation of certain qualities of the student's personality, in this case, the means of independence, activism, creativity, passion and other personality traits are used.

The second group of cognitive development tools is to mobilize the cognitive abilities of the learner to solve specific actions.

There are basically two ways to do this. The first is to help students complete assignments through a variety of means, and the second is to stimulate students' interest in reading by influencing the motivational aspects of the student's personality. These include creating an emotional state for students in the classroom, presenting the learning material with problems, demonstrating experiences at the beginning of the lesson, and other tools.

Teaching by forcing students without any interest can stifle a student's inclination to learn.

The third group of tools that activate students' cognitive abilities is to prevent wasted time in education, in return for activating the cognitive process by allowing the mind to work with optimal tension. This group can include a variety of didactic tools (computers, drawing tools, etc.) that facilitate student work.

The use of ready-made handout didactic materials in drawing education can significantly save time. In particular, it takes twice as long to solve a graphical problem. From this point of view, ready-made handouts used in teaching drawing can also be included in the list of activating tools. These tools create a wide range of opportunities and conditions for students to change their learning activities from time to time, taking into account the time saved during the lessons.

Problem-based learning has a special place in the organization and management of independent learning activities of students. However, in recent years, the method of problem-based learning in schools seems to be declining. The main reason for this is, on the one hand, the difficulty of solving the learning problem on a phased basis within a given time budget, and, on the other hand, the lack of scientifically based recommendations for teachers on this method of teaching.

It is well-known that in order for thinking to be active, it is necessary to set a learning problem for the student and demand an answer to it. However, it should be noted that no task can ensure

the active functioning of thinking. This is because the typical exercises used in education are different from the exercises that require research. Therefore, not all learning tasks are a problem.

Typical problem-solving exercises are widely used in drawing practice. For example, the exercise of making a third view of a detail in two views for reading drawings is not a research task. A learning problem that requires research must contain the problem condition and its missing elements. In addition, the solution must be acceptable.

As you know, the concept of spatial exchange is considered in detail in the teaching of mathematics, physics and engineering. In the dissertation, this concept is explained in terms of the subject of drawing.

In the science of drawing, methods such as central projection, parallel projection (especially orthogonal projection), and axonometric projection are used to represent objects in space (three-dimensional Euclidean space) in a plane. Also create a projection of the object in two or three planes; draw a clear image based on the three projections of the object; make cuts and shears in the drawing; to create projections of an object in space, changing its shape, replacing some parts, removing part of it; there are actions such as combining spatial objects, spreading the surface of the object on a plane. All this was taken as a spatial substitution in the drawing.

Below we analyze the types of spatial problems that develop students' qualities such as spatial imagination and logical thinking in the learning process and the types of activities related to solving them.

The types of graphic and practical activities that highlight the types of problems associated with reading and completing a drawing can affect students' thinking to varying degrees (Figure 2.2). We categorize the exercises and issues considered according to the level of impact on students' thinking as follows.

As mentioned above, in the first group of exercises and activities, students are required only reproductive activity.

Theoretical analysis and the content of the problems show that the second group-productive problem-solving can be divided into two types, depending on the nature of the activity: the first is low-level and the second is exercises and activities that activate students' cognitive activity.

In order to summarize our next statements, we call low-level activation of the first thought (TPDF), high-level activation (TPYUF), and actions that only involve copying the drawing.

The first criterion for dividing problems into groups by level was the graphical changes in the process of solving problems. Consequently, a key factor in the development of spatial imagination is the ability to make spatial substitutions.

The second criterion for division is the presence or absence of an analytical element in the image. An additional condition for division is:

This type of activity includes the ability to reconstruct, to transform information into clearly schematic definite forms, and to control invisible processes and events in figurative-symbolic models. Drawing involves a variety of substitutions.

So far, however, the changes have not been clearly and systematically identified. This prevents it from being incorporated into the educational process in an acceptable manner and from developing a methodology for formulating work methods that ensure optimal transfer in students. Theoretical research and incorporation of a set of substitutions into the learning process requires experimental training.

In the dissertation, we state our position on the exchange complex and describe it as follows. Substitution is a graphical activity associated with changes in the spatial properties and relationships of objects in a drawing.

Based on the analysis, the following graphical changes were identified:

- Scale changes;
- Change the projection method;
- Change the imaging method;
- Simplify the drawing by adding symbols and conditions to the image;
- Change the spatial position of the described objects in the drawing;
- Change the shape of objects in the drawing;
- Spreading the surface of the object;
- Combination of flat shapes;
- Combination of spatial objects;
- Changes in design content.

1. Zoom switches are used to enlarge and reduce images. This type of activity is manually copied from the image by resizing it to its own size or scale. No mental effort is required to copy an image without modification. Reproductive activity related to scaling is more complicated than the first. This type of graphic substitution is used to develop graphic skills and competencies in the early stages of drawing training.

Change the projection method. If the imaging method is changed, one image is replaced by another. For example, if a sharp image is replaced by a rectangular projection method, the sharp image is replaced by a graph, or conversely, if the right-angled projection method is replaced by a sharp image, the graph is replaced by a sharp image.

2. Modifications to the method of depicting details are mainly substitutions for cuts and shears. Cutting and shearing is one of the topics of polytechnic importance in the course of drawing, in which it is necessary to abstract the object, regardless of the real properties and relationships of the object. This means that, first of all, a spatial object is represented in the form of straight lines in the planes of two or three projections according to the laws of rectangular projection.

The study of sections is based on abstract drawings, as well as shears.

3. Simplify the drawing based on the addition of symbols and conditions to the description of details. By adding different conditions to the drawing, the number of images is reduced. This activity is related to research and abstraction, the solution of the second of which is based on a high degree of abstraction of the real nature of the object.

4. Changing the spatial position of the objects in the drawing is carried out by moving the object in a plane. In this process of changing images, movement plays an important role in shaping the excitability of the spatial imagination.

5. Changing the form of the subject in the drawing, even if it is a type of activity related to the technology of machine-building production, in education it is intended only to make graphic changes. Object reshaping is the graphical replacement of a design activity, such as filling a detail with certain structural elements, removing some elements from it, pushing some structural elements in a drawing into a drawing, or moving them.

6. There is no need to comment on changes in the spread of the surface of the object. Because this activity is widely used in the teaching of subjects such as mathematics, design, labor, drawing.

7. Combining flat (flat) forms is a new practical work introduced in the school drawing course, and its didactic value in combining activities is incomparable. In the process of doing such work, students' inquisitiveness, creativity, and qualities are formed in their practical activities

8. Combining spatial forms. In contrast to the above, it is associated with the activity of interconnecting spatial objects, which creates new objects. Developed by A.Umronkhodjayev and included in the school textbook.

9. Changes in the content of the project require the active work of thinking, depending on the nature of its solution, and as a result of solving the problem, the student creates a subjective or objective innovation.

The subjective novelty is that the device, instrument, etc., invented by the student, may have been developed by someone in practice and used in various fields of technology. However, it is not necessary to create an objective innovation in solving this problem. The most important thing is to create something new for yourself based on your knowledge and life experience.

Objective "innovation" means the creation of structures and devices unknown to science, technology and society, and such creative substitutions are used at the school, district, city, regional and national levels of the drawing Olympiads.

One of the most difficult didactic tasks facing the drawing methodology is to decide which of the above substitutions can be used in the educational process, in what proportions and in what combination. In particular, finding a solution to this problem is one of the tasks of our work.

### Literature

1. Alisher, Abrorov, and Sobirova Sharofat. "IN ARCHITECTURAL CONSTRUCTION DRAWING USE OF TRADITIONAL TEACHING METHODS." *International Engineering Journal For Research & Development* 5.Conference (2020): 2-2.
2. Mamurova D. I., Shukurov A. R. Scientific And Methodological Bases Of Development Of Creative Activity Of Students In Drawing On The Basis Of Computer Animation Models //International Journal of Psychosocial Rehabilitation. – Т. 24. – №. 4.
3. Islamovna M.F., Umedullaevna S.S. SHADOW FORMATION IN PERSPECTIVE //International Engineering Journal For Research & Development. – 2020. – Т. 5. – №. 4. – С. 5-5.
4. Umedullaevna, Sobirova Sharofat, and Karimova Ruxsora. "INNOVATIVE TECHNOLOGIES IN THE EDUCATIONAL PROCESS." *International Engineering Journal For Research & Development* 5.CONGRESS (2020): 3-3.
5. Шомуродов, Ойбек Норкулович, et al. "МЕТОДОЛОГИЯ ИСПОЛЬЗОВАНИЯ ЦВЕТОВ И КРАСКИ ПРИ ОБРАБОТКЕ ИЗОБРАЖЕНИЙ." *Наука и образование сегодня* 5 (64) (2021): 80-82.
6. Khodjayeva N. S., Mamurova D. I., Nafisa A. IMPORTANCE IN PEDAGOGICAL TECHNIQUES AND EDUCATIONAL ACTIVITY //International Engineering Journal For Research & Development. – 2020. – Т. 5. – №. CONGRESS. – С. 5-5.

7. Ширинов, А. Л., Батиров, Д. С., & Шомуродов, О. Н. (2021). ВАЖНОСТЬ ЦВЕТОВЕДЕНИЯ В ИЗОБРАЗИТЕЛЬНОМ ИСКУССТВЕ. *Наука и образование сегодня*, (5 (64)), 83-85.
8. Сулаймонова, Мухиба Болтаевна, et al. "ДОСТИЖЕНИЕ ЭСТЕТИЧЕСКОЙ И ПРАВСТВЕННОЙ ЗРЕЛОСТИ ОБУЧАЮЩИХСЯ ИЗОБРАЗИТЕЛЬНОМУ ИСКУССТВУ." *European science* 3 (59) (2021): 53-56.
9. Аминов, Акмал Шавкатович, et al. "ПРОБЛЕМЫ ОРГАНИЗАЦИИ САМОСТОЯТЕЛЬНОЙ РАБОТЫ СТУДЕНТОВ В ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЯХ." *European science* 2 (58) (2021): 77-79.
10. Собирова, Ш. У., Ядгаров, Н. Д., Мамурова, Д. И., & Шукуров, А. Р. (2021). ОСНОВЫ, ЦЕЛИ И ЗАДАЧИ ОБУЧЕНИЯ ИЗОБРАЗИТЕЛЬНОМУ ИСКУССТВУ. *European science*, (2 (58)), 62-65.
11. Мамурова Д. И. и др. УЧЕБНАЯ ДЕЯТЕЛЬНОСТЬ СТУДЕНТОВ ПО РЕШЕНИЮ РАЗЛИЧНЫХ ДИДАКТИЧЕСКИХ ЗАДАЧ В РАЗВИТИИ ПРОСТРАНСТВЕННОГО ВООБРАЖЕНИЯ СТУДЕНТОВ //European science. – 2021. – №. 2 (58). – С. 29-31.
12. Latipovich, Shirinov Alisher. "TEACHING OF FOLK APPLIED ART ON THE BASIS OF TRADITIONS" TEACHER-STUDENT". *Euro-Asia Conferences*. Vol. 1. No. 1. 2021.
13. Ibadullaeva Shaxnoza Ilhamovna. Avlikakulova Nafisa Muzafarovna., Sobirova Sharofat Umidullayevna. HARMONIZATION OF TYPES OF FABRIC ART PROCESSING TO STUDENTS..INTERNATIONAL JOURNAL OF PSYCHOSOCIAL REHABILITATION, 1-7 ISSN:1475-7192
14. Ibadullaeva, Sh I. "The Role of Art in the Development of Junior Schoolchildren." *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION* 2.2 (2022): 130-133.
15. Азимов, Б. Б., Азимова, М. Б., Тухсанова, В. Р., & Сулаймонова, М. Б. (2021). ПЕДАГОГИЧЕСКИЕ, ПСИХОЛОГИЧЕСКИЕ И МЕТОДИЧЕСКИЕ ОСНОВЫ ПРОВЕДЕНИЯ БЕСЕД ОБ ИСКУССТВЕ. *European science*, (2 (58)), 38-40.
16. Sulaimonova, M. B. (2021). The World of Still Life is a World that is Motionless or that Has Become Motionless.
17. Мамурова Ф. И., Мамурова Д. И. КОМПЬЮТЕР ГРАФИКАСИ ФАНИНИ ЎҚИТИШ ҲОЛАТИ //TULAGANOV AA. – С. 145.
18. Азимов, С. С. (2022). Элементы логических возможностей сочетания стабильного и мобильного начал в композиции изобразительного искусства. *Science and Education*, 3(2), 895-900.
19. Djalolovich, Y. N., Kodirovich, M. D., Ruziboevich, S. A., & Islomovna, M. D. (2021). IMPROVING THE PROFESSIONAL TRAINING OF FINE ART TEACHERS. *European science*, (2 (58)), 44-46.
20. Kodirovich, M. D., Umedullaevna, S. S., & Shavkatovich, A. A. (2021). PSYCHOLOGICAL AND PEDAGOGICAL ASPECTS OF DEVELOPMENT OF ARTISTIC AND CREATIVE ACTIVITY OF STUDENTS. *European science*, (2 (58)), 80-82.

21. Шукуров, А. Р., Ядгаров, Н. Д., Маматов, Д. К., & Аминов, А. Ш. (2021). МЕТОДИКА ИСПОЛЬЗОВАНИЯ КОМПЬЮТЕРНЫХ ПРОГРАММ НА УРОКАХ РИСОВАНИЯ В СРЕДНЕЙ ШКОЛЕ. *European science*, (2 (58)), 47-50.
22. Yadgarov, N., & Sadikova, M. R. (2021, November). HISTORICAL OUTLINE OF THE DEVELOPMENT OF FINE ARTS TEACHING METHODS AT SCHOOL. In *INTERNATIONAL CONFERENCE ON MULTIDISCIPLINARY RESEARCH AND INNOVATIVE TECHNOLOGIES* (Vol. 2, pp. 8-10).
23. Djalolovich, Y. N., Kodirovich, M. D., Ruziboevich, S. A., & Islomovna, M. D. (2021). IMPROVING THE PROFESSIONAL TRAINING OF FINE ART TEACHERS. *European science*, (2 (58)), 44-46.
24. Mamurova, F. T., Abdullayeva, N. K., & Mallaboyev, N. (2019). USING THE «ASSESSMENT» METHOD IN ASSESSING STUDENTS KNOWLEDGE. *Theoretical & Applied Science*, (11), 80-83.
25. Mamurova, F. I., & Mustafоеv, E. (2021, October). Aksonometrik Proyeksiyalarning Asosiy Teoremasi. Dimmetrik Aksonometriya Qurish. In " *ONLINE-CONFERENCES" PLATFORM* (pp. 100-103).
26. Mamurova, F. I., & ugli Mustafayev, E. I. (2021). SHADOWS IN A PERSPECTIVE BUILDING. *Conferencious Online*, 16-18.
27. Mamurova, F. I., & oglu Akmalov, J. O. (2021). ORGANIZATION OF GEODESIC WORK. STATE GEODESIC NETWORKS. *Conferencious Online*, 21-23.
28. Olimov, S. S., & Mamurova, D. I. (2021). Graphic Information Processing Technology and its Importance. *European Journal of Life Safety and Stability* (2660-9630), 10, 1-4.
29. Umedullaevna, S. S. (2021). Problems of Computer Technology Integration With Drawing. *Middle European Scientific Bulletin*, 9.
30. Sobirova, S. U. (2021, October). A Brief History of the Science of Perspective. In " *ONLINE-CONFERENCES" PLATFORM* (pp. 64-67).