

"Branch" Nazarbayev Intellectual School of Physics and Mathematics "Taraz
AOE" Nazarbayev Intellectual Schools

Integration of educational research and metacognitive knowledge in teaching students artistic and visual skills

Pak Elena Lvovna,
Teacher-expert "Art", NIS
Taraz, Kazakhstan

The topic, purpose and questions of this study were born from five-year observations of the students' achievements and difficulties in the process of their research and project activities in the study of the subject "Art" at Nazarbayev Intellectual School of Physics and Mathematics.





Problem:

Why do our students brilliantly carry out practical tasks at the research stage, but cannot use their skills in the practice of creating creative design works of a large format?

Purpose of the study:

determine the content and structure of the system of educational tasks,

designed to integrate the research process and metacognitive knowledge into the development of subject-specific knowledge and student skills.

Consequently, based on the received materials, improve the practice of teaching "Art" lessons at school.

Research questions:

- What is a didactic research task?
- What are the research tasks in the lessons of "Art" (their classification)?
- What actions are prescribed for students to complete with modern teaching aids?
- What objects should students use?
- How can the role of research tasks in fulfilling the program objectives of the subject "Art" be strengthened?

The theoretical basis of the study

- theory of knowledge;
- constructivist theory of learning;
- doctrine of metacognitive knowledge;
- psychological provisions on the laws and mechanisms of the formation of mental actions;
- pedagogical provisions on the methodology of research activities of teachers and methods of organizing research activities of students;
- provisions on research as part of the content of the Kazakhstan school curriculum

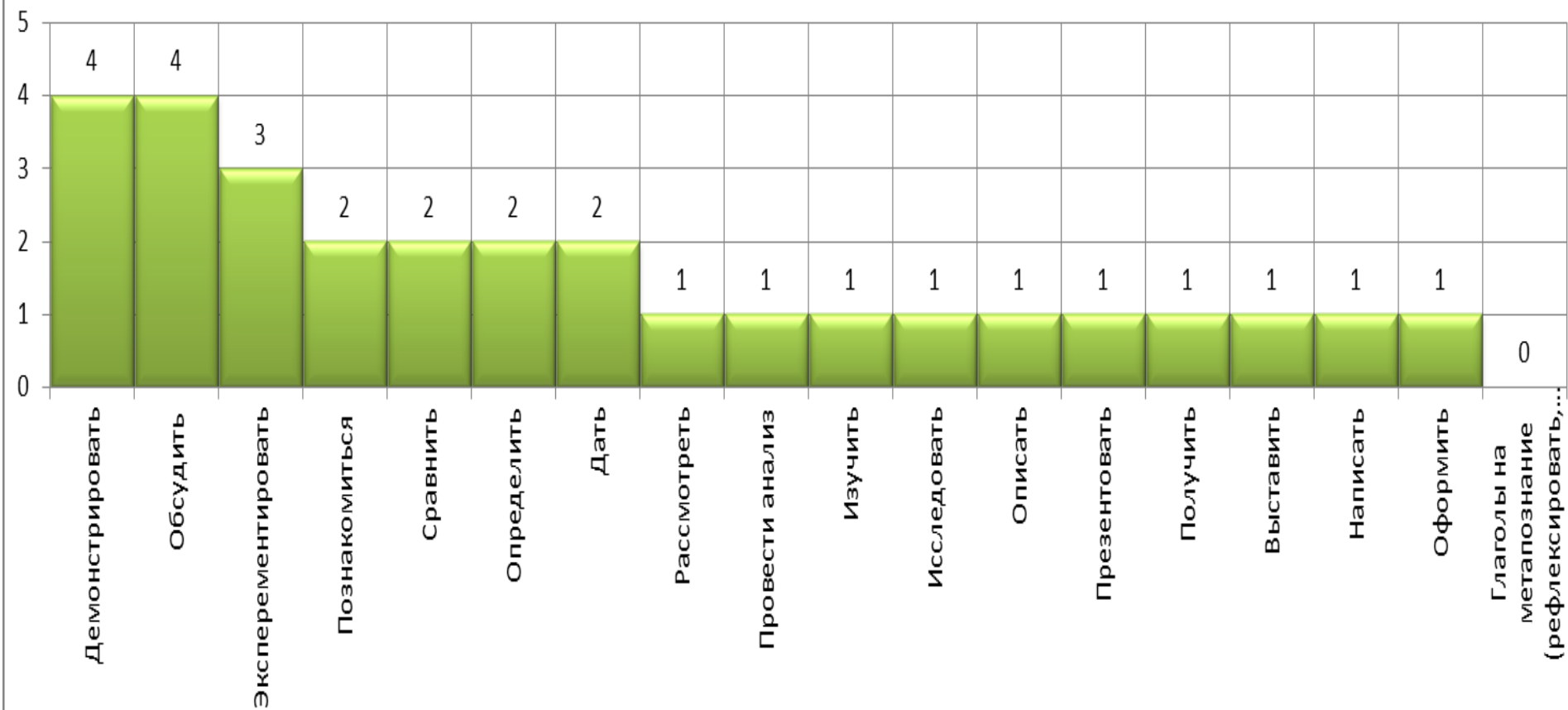
Методология

ИССЛЕДОВАНИЯ

The study was conducted using theoretical methods such as analysis and synthesis, comparison, classification and generalization, as well as empirical methods of collecting and accumulating data (observation, conversation, studying the products of students and teachers, studying school documentation, studying scientific literature), graphic and tabular data processing methods.

The research has undergone:
program, methodological manuals on the subject "Art",
author's experience in setting research tasks,
experience in completing research tasks of 48 students of
Nazarbayev Intellectual School of Physics and
Mathematics in the city of Taraz.

Анализ исследовательских заданий раздела «От Микро к Макро: Дизайн продукта» предмета «Искусство» с точки зрения предписываемого действия (8 класс)



During the study, the data obtained were systematically discussed with colleagues.



Results and conclusion:

1
The research training task in the modern “Art” programs teaching and methodological aids are educational tasks that require the student to complete a research, perform research activities. This is an assignment for students that requires research action.

Training tasks in the system of normative documents of our school are classified for various reasons:

Classification

```
graph LR; A[Classification] --- B[1) according to the place in the structure of the lesson in the traditional aspect (setting the stage for repeating previously learned material, setting the stage for studying new material, setting the stage for consolidation and the formation of skills in practical artistic activity)]; A --- C[2) in place in the model of the development of critical thinking (setting the stage of the call, setting the stage of reflection, setting the stage of reflection)]; A --- D[3) by the activity that the student must carry out. Research tasks are also considered in the framework of the third classification,];
```

1) according to the place in the structure of the lesson in the traditional aspect (setting the stage for repeating previously learned material, setting the stage for studying new material, setting the stage for consolidation and the formation of skills in practical artistic activity)

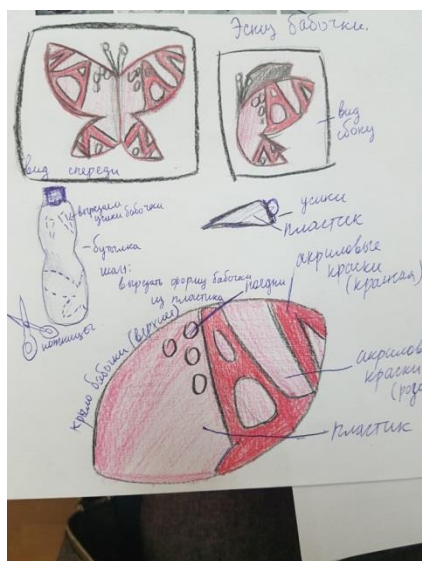
2) in place in the model of the development of critical thinking (setting the stage of the call, setting the stage of reflection, setting the stage of reflection);

3) by the activity that the student must carry out. Research tasks are also considered in the framework of the third classification,

Research tasks

Solvable task

To improve the quality of students' design work, purposefully teaching to consciously apply the knowledge and skills acquired at the research stage



Discussion with colleagues



Иллюстрация цвета, активности, настроения.



Критерии: плавность перехода, активность, контраст цвета.
Ввод: Формула О'Киф получит только формулировку части
ки, поэтому от нее исключается плавность перехода и
мудрствованию все отливов. 3D форма получается.

Results and conclusion:

The entire set of research tasks of the “Arts” program as a whole is aimed at developing among students:

- knowledge and understanding of the natural world;
- knowledge and understanding of the created world;
- knowledge and understanding of history, culture and traditions;
- the ability to research and work with information sources;
- skills to use art materials and tools;
- the ability to express creative ideas;
- the ability to create a product design of creativity;
- knowledge of materials and their properties.

Tasks for the development of children's metacognition are very rarely presented in current local methodological works and textbooks on “Art”,

Flavell defined the basis for the analysis and monitoring of child metacognition

Are the result of thinking second and higher order, which includes the function of control over cognitive processes

Are being considered as a body of knowledge of cognition

Area of study how to study

Meta - above, general, integrating .. META ... (from Greek meta - between, after, through), a part of complex words, meaning intermediateness, following something, moving on to something else

Meta-knowledge

Meta-knowledge is a method, a process of obtaining meta-knowledge

Receptions, methods of cognition (cognitive skills)

METACOGNITIVE TASK - task, requiring research, awareness of metacognition

Understanding and controlling cognitive processes

Children develop ability to understand, control and follow his learning experience

About knowledge in general, knowledge of one's own (personal) specificity of cognition

About cognitive and practical strategies of solving problems and making decisions

About the conditions and contexts of solving problems

about the causes and mechanisms of one's own thinking (self-knowledge, reflection)

through the processes of meta-cognition

Results and conclusion:

In connection with the data obtained in the lessons of "Art", we began to systematically raise questions for students

- on cognitive and practical strategies for solving problems and making decisions;
- about your understanding of the conditions and context of problem solving;
- about the causes and mechanisms of their own thinking;
- about the motives for choosing a particular decision, the commission of an action;
- about how confident or unsure they could be in the course of practical work, discussion of the results.

The result of our practice of experimental implementation of tasks for horizontal and vertical transfers and the development of students' metacognition was an increase in the quality of educational creative work



Results

began to recognize their development opportunities, more successfully began to control, plan and evaluate personal strategies for teaching artistic and visual skills. began to experience more pleasure in understanding the ways of artistic knowledge began to rejoice in finding their own ways of constructing knowledge, the characteristics of their reactions to situations in the classroom.

Students

difficulties began to decrease in transferring the skills of creative use of art techniques and techniques from research lessons to the area of final project activity, and the quality of products of art projects began to improve

The lessons of "Art" in Nazarbayev Intellectual School of Physics and Mathematics the city of Taraz



Grade 8 Nazarbayev Intellectual School of Physics and Mathematics the city of Taraz, 2017-2018.

Thank you for your attention



Reference list

1. Большой толковый словарь русского языка. /Сост. и гл.ред. С.А.Кузнецов. – СПб.: Норинт, 2000. – 1536 с.
2. Гальперин П. Я. Метод планомерного формирования в истории советской психологии //Актуальные проблемы возрастной психологии /Под ред. А.Г.Лидерса. - М.: Изд-во МГУ, 1986. - С. 49-58.
3. Джадрина М.Ж. Логико-дидактический подход к определению ожидаемых результатов обучения в школе □Текст□ / М.Ж.Джадрина // Творческая педагогика. - 2005. - №2. - С. 3-13.
4. Образовательная программа АОО «Назарбаев Интеллектуальные школы» – NIS-Program. Учебная программа по предмету «Искусство». Основная школа (6-10 классы). Для реализации учебного процесса в 7-9 классах в 2017-2018 учебном году. Версия: 2. Май 2017. – Астана, 2017.
5. Педагогический энциклопедический словарь /Гл.ред. Б.М.Бим-Бад; Редкол.: М.М.Безруких, В.А.Болотов, Л.С.Глебова и др. – М.: Большая Российская энциклопедия, 2003. – 528 с.
6. Программа курсов повышения квалификации педагогических работников Республики Казахстан. Руководство для учителя. Третий (базовый) уровень. Третье издание. – Астана: АОО «Назарбаев интеллектуальные школы», 2012. – 306 с.
7. Таубаева Ш. Т. Введение в методологию и методику педагогического исследования. – Туркестан: Туран баспасы, 2007. – 190 с.
8. Чокушева А.И. Развитие компетенций учащихся средствами учебных дисциплин: автореф. ... к.пед.н.: 13.00.01. – Алматы: Институт дошкольного и среднего образования Национальной академии образования им. Ы.Алтынсарина, 2012. – 24 с.
9. Mercer, N. (1995). The guided construction of knowledge: talk amongst teachers and learners [Получение знаний под руководством: беседы между учителями и учениками]. Clevedon: Multilingual Matters.