

USING VARIOUS MATERIALS IN FORMING STUDENTS' CREATIVITY**Khodiyeva Dilrabo Pirimova.**

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Annotation: This article analyzes the importance of using various materials in technology lessons for primary school students to develop their creativity. Working with diverse materials contributes to the development of creative thinking and practical skills among students. The article discusses the necessary abilities for processing different materials and aspects of their development. Additionally, it examines methods to enhance creative thinking through innovative approaches and the use of multimedia technologies in technology lessons. The article also highlights the role of teachers and the significance of modern pedagogical technologies in fostering students' creative activities.

Keywords: Primary School Technology Lessons, Creativity Development, Utilization of Various Materials, Students' Creative Activities, Innovative Pedagogical Technologies, Multimedia Technologies, Development of Practical Skills, Methods of Material Processing, Role of the Teacher, Modern Educational Methods.

Аннотация: В данной статье анализируется значение использования различных материалов на уроках технологии в начальных классах для формирования творческих способностей учащихся. Работа с разнообразными материалами способствует развитию творческого мышления и практических навыков у школьников. В статье рассматриваются необходимые умения для обработки различных материалов и аспекты их формирования. Кроме того, обсуждаются методы усиления творческого мышления посредством инновационных подходов и использования мультимедийных технологий на уроках технологии. В статье также освещается роль учителей и значение современных педагогических технологий в формировании творческой активности учащихся.

Ключевые слова: Уроки технологии в начальных классах, Формирование креативности, Использование различных материалов, Творческая деятельность учащихся, Инновационные педагогические технологии, Мультимедийные технологии, Развитие

практических навыков, Методы обработки материалов, Роль учителя, Современные методы обучения.

Annotatsiya: Ushbu maqolada boshlang'ich sinf o'quvchilarida texnologiya darslarida ijodkorlikni shakllantirishda turli materiallardan foydalanishning ahamiyati tahlil qilinadi. Turli materiallar bilan ishlash o'quvchilarning ijodiy tafakkuri va amaliy ko'nikmalarini rivojlantirishga xizmat qiladi. Maqolada o'quvchilarning turli materiallarga ishlov berish usullarini egallashida kerak bo'ladigan qobiliyatlar va ularni shakllantirishga doir jihatlar keltirib o'tilgan. Shuningdek, texnologiya darslarida innovatsion yondashuvlar va multimedia texnologiyalaridan foydalanish orqali ijodiy fikrlashni kuchaytirish shakllantiriladi.

Kalit so'zlar: Boshlang'ich sinf texnologiya darslari, ijodkorlikni shakllantirish, turli materiallardan foydalanish, o'quvchilarning ijodiy faoliyati, innovatsion pedagogik texnologiyalar, multimedia texnologiyalar, amaliy ko'nikmalarni rivojlantirish, materiallarga ishlov berish usullari, o'qituvchining roli, zamonaviy ta'lim usullari.

Today, the development of students' creative thinking skills is of great importance in the educational process. Especially, technology lessons with primary school students provide a convenient opportunity to form children's aesthetic taste, creative thinking, and independent work skills. We will consider the issues of forming students' creative activity in technology lessons by using various materials in primary school students. Creativity is the ability to create new ideas, find new approaches, and solve problems. Although primary school students have not yet fully demonstrated their creative abilities, creativity can be developed by directing them correctly. Technology lessons play an important role in this process, because in them children have the opportunity to work with various materials. In technology lessons, the following materials can be used, not limited to the use of paper and cardboard: Using natural materials (leaves, twigs, stones, shells, cotton), students learn to create useful products from it, while studying nature. Recycled materials (plastic bottles, newspapers, paper scraps, pieces of fabric) are important for forming ecological awareness and developing creative thinking. Glue, clay and paper pulp help develop children's fine motor skills. Using fabrics and threads, children learn to work with their hands. To develop students' creative activity and strengthen their abilities, it is recommended to use the following methods: free-form work - children are given the opportunity to choose materials according to their wishes and express their ideas. Organizing group work - through teamwork, children exchange ideas and develop creative ideas. Creating problem situations - for example, questions such as "How can you create a useful object from used materials?" encourage children to find new solutions.

Experiential learning – experimenting with different materials, studying their properties is interesting and useful for children.

Advantages of using different materials:

- Develops students' creativity;
- Supports their natural interests;
- Forms ecological awareness;
- Develops fine motor skills and manual labor skills;
- Increases independent work and solution-finding skills.

Elementary school students need practical activities to develop creative thinking in technology-based creative thinking classes. The following activities help to increase children's creativity:

The project “Giving new life to unnecessary items” - items that are not used or thrown away at home (plastic bottles, old fabrics, cardboard boxes) are collected and given the task of creating new useful items from them. For example, you can make a pencil case from a plastic bottle, flowers from old newspapers, or a house from cardboard. This activity also forms environmental education.

“Art from the Gifts of Nature” - students create works of art using materials collected from nature (leaves, branches, walnut shells, pebbles). For example, you can make paintings from autumn leaves, sculptures from stones, and toys from walnut shells. This increases children's observation and attention to nature. In modern technology lessons, it is recommended to use not only traditional materials, but also innovative approaches.

STEM approach (Science, Technology, Engineering, Mathematics). By linking technology lessons with mathematics and science, engineering and technological thinking can be developed in children. For example, creating models based on geometric shapes from plain paper.

STEAM approach (Science, Technology, Engineering, Arts, Mathematics). Helps to form children's creative thinking by combining art and technology. For example, making sculptures from wood in a technology lesson or creating decorative works of art from fabric and yarn. If possible, it is also useful to include simple programming elements in elementary school technology lessons. For example, by making paper robots or simple mechanical moving toys, children develop technological abilities.

In the process of forming creativity in technology lessons, not only the students themselves, but also parents and teachers play a big role.

- Recommendations for parents: Create conditions for children to work with various materials at home. Form environmental education by making objects from recycled materials together. Encourage children's creative work by showing interest in them.

- Recommendations for teachers: Use innovative approaches in the lesson process. Give students freedom for independent work. Give tasks that suit the creative abilities of each student.

The European Union (EU) has identified the development of creativity and innovation as one of the key areas in its education programmes. Erasmus+, Horizon Europe, and Creative Europe programmes aim to develop innovative thinking and practical skills in schoolchildren. The report "Creativity and Critical Thinking in Primary Education", published by the European Commission in 2018, states that the use of various materials in technology lessons develops students' problem-solving skills. In Scandinavian countries, especially in Finland and Denmark, creativity lessons are practice-based and include natural materials, recycled objects and digital technologies. In Finnish schools, independent creative work of students is very important in technology lessons. Through the "Phenomenon-Based Learning" method, children learn to solve real problems using various materials. For example, developing new products from paper waste to solve environmental problems.

The results of international studies show that creative thinking is one of the main indicators of the quality of education, according to research conducted by the Organization for Economic Cooperation and Development (OECD). PISA (Programme for International Student Assessment) studies also assess the level of creative thinking of students. Handicrafts and modeling play an important role in the development of students' creative thinking. The use of paper, fabric, clay and recycled materials in technology lessons strengthens students' independent thinking. In New Zealand and Australia, creative activities are an integral part of the curriculum, where the use of natural and ecological materials is widely used. Research conducted by UNESCO in the field of education shows that developing creativity in primary schools is an important part of the "20th century skills".

Strengthening environmental creativity in school programs - for example, creating art and technology projects using waste. Training teachers to use creative methodologies - that is, moving away from traditional teaching methods and directing students to independent project work. Creating a creative environment - creating open spaces in classrooms for students to experiment and work with different materials. The Reggio Emilia pedagogical approach (Italy) is aimed at stimulating children's natural curiosity and developing creative thinking. Students are given the

opportunity to work independently using different materials. Students choose the materials themselves, which increases their self-confidence.

The following international experiences can be used in Uzbekistan to develop creativity in technology lessons:

- STEAM (Science, Technology, Engineering, Arts, Mathematics) approach - teaching students to think creatively by combining art and technology.
- Using ecological materials - forming environmental awareness in technology lessons using recycled materials.
- Creation of creative laboratories - special corners for children to create independent projects using various materials.

• Teacher training - teaching creative methodologies for primary school teachers based on international experience. In conclusion, it can be said that the formation of students' creative abilities through technology lessons in primary grades is an important part of the educational process. The use of various materials expands the scope of students' thinking, encourages them to work independently, create new ideas, and learn with interest. Teachers, on the other hand, should develop students' creative thinking using modern methods. The formation of creativity in technology lessons creates the basis for students' future success not only in the fields of crafts and art, but also in engineering and science. Using various materials in technology lessons in elementary grades not only develops students' creative abilities, but also forms in them the skills of independent thinking, problem-solving, teamwork, and a conscious approach to the environment. In addition, it increases students' interest in learning, develops their manual motility, improves their ability to perform precise movements, and educates students to be environmentally conscious, because the use of recyclable materials teaches environmental protection, develops teamwork skills, and helps with social adaptation. Thus, developing creativity and using a variety of materials in technology lessons is an important factor for elementary school students, not only in the educational process, but also in paving the way for future life success.

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