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The Content and Essence of Teaching Primary School Students to Produce Items from Natural Materials in Technology Education Lessons

Radjabova Shahrizoda Olimjon kizi
Theory and Methodology of Primary Education, Tashkent International University of Chemistry
radjabovashahrizoda55@gmail.com

Abstract. *This article is devoted to the development of the education system through the effective use of innovative technologies in primary school technology lessons. The article analyzes the integration of modern information and communication technologies, interactive teaching methods, robotics and other innovative approaches into technology classrooms. The possibilities of developing students' creative thinking, practical skills and independent work skills through the use of innovations are considered. It also highlights the need to improve teachers' digital literacy and provide them with modern pedagogical technologies to improve learning efficiency.*

Keywords: *innovative technologies, independent thinking, methods, science of technology, educational process, teacher, students, animation.*

In the process of working with natural materials, the objectives of technology education and upbringing may include the following:

- fostering in students an aesthetic attitude toward objects and phenomena in nature and their surroundings; developing their ability to perceive and understand beauty and to apply these perceptions and understandings in real life;
- cultivating systematic and purposeful observation skills, color perception, compositional culture, imagination through visual representation and combination, and the ability to solve creative tasks through concrete imagery;
- familiarizing students with the specific characteristics of working with natural materials;
- developing emotional perception toward nature, creative abilities, taste, imagination, and aesthetic and emotional sensitivity;
- teaching students to create diverse toys and visual aids from various natural materials;
- developing creative technical skills through the process of working with natural materials.

One of the primary objectives of practical activities involving natural materials is to provide students with aesthetic, artistic, and creative education. Aesthetic education refers to the development of students' ability to fully perceive beauty in life, nature, art, and human relationships, and to create in accordance with the laws of beauty. Beauty influences a child's intellect, emotions, and will, enriching their spiritual and moral world.

At present, one of the main tasks of schools is not only to cultivate students' need and capacity for creative engagement with reality, but also to nurture the ability to perceive and reinterpret reality through the principles of beauty. Every member of society, regardless of their professional field, should be able to perceive and appreciate beauty and elegance. In order to cultivate students

aesthetically, teachers demonstrate the beauty of nature and the diversity of shapes and colors during technology lessons. The impressions of natural beauty that evoke joy and excitement in children often remain in their memory for a long time as vivid and indescribable color combinations and forms.

Drawing landscapes, trees, leaves, and flowers from observation and studying their distinctive features increase students' interest in nature. Such lessons help children develop a broader and more comprehensive perception of the world, expand the scope of their visual impressions, and form clear and complete concepts about their surroundings.

The technology education curriculum defines the scope and content of scientific-technical knowledge, as well as the labor skills and competencies that students are expected to acquire during practical lessons. The program reflects the goals and objectives set for educating youth through labor education at the current stage of societal development.

The technology education curriculum is developed on the basis of the general educational plan. Teachers are required to follow this program in their daily professional activities. At the same time, teachers may introduce certain modifications in consideration of local conditions, provided that specific requirements are met.

The content of the curriculum must fully comply with didactic principles, be scientifically sound and ideologically grounded, be presented in a consistent sequence with gradually increasing complexity, and be connected to real-life experience in accordance with the selected didactic system of labor education.

Equipping students with labor skills and competencies plays a crucial role in their upbringing and preparation for future practical activities. One of the key tasks in primary technology education is to develop a range of labor skills and competencies in students. Labor skills and competencies are not merely outcomes of instruction; they also involve performing tasks with appropriate speed and accuracy. Otherwise, the work may be poorly executed. The refinement of labor actions occurs through systematic practice during lessons, where students consciously focus on individual actions and integrate them into coherent processes.

A skill (malaka) is the individual's ability to effectively perform an activity under changed or new conditions based on existing knowledge. It involves understanding information, planning to achieve goals, and managing and controlling the process of activity. A skill represents consolidated experience formed through practice. When sufficiently practiced, simple skills may become automated and transform into habits or proficiencies (ko'nikma).

The ability to perform assigned tasks quickly and accurately as a result of practice reflects the development of proficiency. If exercises and methods are properly structured, proficiency may develop into well-formed skills. However, the level of skill development varies at different stages of instruction, and its structure may change. As students engage in increasingly complex activities, simple skills gradually integrate into more complex ones.

The formation of labor skills and competencies consists of the following main stages:
a) initial understanding;
b) trial performance of labor actions;
c) execution of work actions;
d) drawing conclusions.

In primary technology lessons, demonstrated actions must be purposeful and exemplary in all respects. The teacher should focus students' attention on the most essential aspects of the action, justify its appropriateness, and ensure its conscious acquisition. Therefore, demonstration should always be accompanied by concise explanation. Visual aids related to the topic must be actively perceived by students, and all materials should be clearly visible to each learner. Exercises aimed at developing labor skills and competencies yield positive results only when distributed over time and organized systematically.

The system of exercises should meet the following requirements:

1. Materials should be arranged in order of increasing difficulty.
2. Each subsequent material must fully build upon the previous one.
3. The level of independence should progressively increase.

The successful formation of labor skills depends on several conditions. If students do not independently plan their activities, their skills will never be fully developed. Lack of control often leads to the accumulation of errors and deficiencies during practice, resulting in the formation of incomplete or incorrect actions and methods.

In primary grades, practical work in technology education introduces students to the initial stages of preparation for socially productive labor. In the first grade, students become acquainted with materials encountered not only in technology lessons but also in other subjects, including paper and cardboard, basic textile processing, various natural and artificial materials, self-service activities, and household tasks.

During practical activities, students develop diligence, economical use of materials, creative approaches to work, careful attitudes toward nature, and labor culture. They also gain preliminary understanding of various professions. One of the primary objectives of labor education is to develop students' material-processing skills and provide them with relevant knowledge. This process is implemented gradually from the first grade, as students are not yet capable of memorizing complex sequences of operations.

Formed skills are improved through repeated practice. To prevent errors, students should be trained in self-monitoring. Completed work should not be accepted until students identify and correct their own mistakes and gain confidence in the accuracy of their performance.

In the course of practical assignments, new skills and competencies are developed. Knowledge of tool usage, material properties, and the characteristics of the product being created is essential. The teacher demonstrates production methods using instructional charts displayed on the board or technical tools. Subsequently, the teacher reviews the procedure through questions and proceeds with students to create the product.

Based on the above, the structure of practical work in technology education generally includes:

1. Presenting the objective and topic of the task:
   a) Emphasizing the practical significance of the product or task;
   b) Explaining the new knowledge and skills required.
2. Checking the readiness of the workplace, tools, materials, models, and board drawings; reviewing organizational rules.
3. Planning the work in advance:
   a) Analyzing the sample, components, required materials, and measurements;
   b) Studying the product design, reading dimensions and working lines, determining tools and sequence of actions.
4. Marking materials according to measurements and models.
5. Executing marking and production processes: preparing components, assembling parts, and mastering necessary skills during assembly and finishing.
6. Ongoing inspection, error correction, and evaluation.
7. Summarizing the lesson and assigning new tasks.

The teacher adapts this structure according to the specific characteristics of the product or task. A key requirement for maintaining students' interest is selecting appropriate and meaningful products. Students should understand the purpose and practical application of the items they create. In primary grades, manual labor activities also contribute to early career orientation.

Students must use materials economically, plan their work, manage time effectively, follow teacher instructions, maintain cleanliness in the workplace, and clean the classroom after lessons. The self-

service section of primary technology education includes caring for clothing and living spaces, and setting the table for meals. It is recommended that these lessons be conducted at the beginning of the academic year to allow teachers and parents to observe how students apply acquired skills throughout the year.

In conclusion, creatively fostering collaborative relationships that transform students into active learners and self-developing individuals is not only a prerequisite for effective teaching and learning but also a vital condition for nurturing well-rounded individuals. In the modern era of rapid development, teachers must integrate innovative teaching methods into their lessons to ensure quality and engagement. The use of international experience and educational programs from developed countries is strongly recommended.

References

1. Sanaqulov X.R, Xodiyeva D.P, Sanaqulova A.K .“Texnologiya” 2-sinf darsligi. T.: “Sharq”. 2018-yil;
2. Sanaqulov X.R, Xodiyeva D.P, Sanaqulova A.K Mehnat ta’limi 3-sinf darsligi.. T.: “Sharq”. 2016-yil;
3. Sanaqulov X.R, Xodiyeva D.P. Satbayeva “Mehnat va uni o‘qitish metodikasi”. Darslik. T.: TDPU. 2015-yil;
4. Sanaqulov X.R, XodiyevaD.P. Boshlang‘ich sinflarda qog‘ozdan amaliyishlar. O‘quv-metodik qo‘llanma. T.:Navro‘z. 2014-yil.