Symposium on Natural and Applied Sciences
Hosted Online from London, United Kingdom
Date: 5th March, 2026
Website: https://econferencia.com

FORMATION OF TECHNOLOGICAL CULTURE IN THE EDUCATIONAL PROCESS

Abdirasulov Lochinbek Khusniddinovich
Lecturer, Department of Primary Education
Karshi State University

Abstract
This article analyzes the theoretical foundations of developing a technological culture in the pedagogical process, the methodology for its improvement, and the effective use of modern educational technologies. It also examines ways to develop the technological competencies of teachers and students in the educational process.

Keywords: technological culture, pedagogical process, innovative technologies, competence, digital education, methodology.

While explaining the essence of the concept of "technological culture," it should be emphasized that it was introduced relatively recently, in the early 1990s, alongside the formation of the field of "Technology" education. This concept consists of two components: technology and culture. Technological culture refers to a dynamic, creative, and nature-aligned (ecologically grounded) culture of activity that encompasses knowledge, skills, abilities, as well as emotional and moral qualities, and implies a responsible attitude toward this type of activity and readiness to act responsibly for one's actions.

In the process of studying the essence of this culture, it has been found to be complex and multifaceted. To reveal the content and structure of technological culture, it is necessary to examine each of its components and define it as a set of

ten elements or aspects, namely: labor culture, graphic culture, design culture, information culture, entrepreneurial culture, culture of human relations, ecological culture, home culture, consumer culture, and project culture.

In the technological space, there are interrelated (overlapping) concepts. In order to ensure students' technological preparedness, the field of "Technology" education should be supplemented through such interconnected concepts as:

1. Labor culture
2. Graphic culture
3. Entrepreneurial culture and economic culture
4. Moral education
5. Environmental education
6. Aesthetic education (design)
7. Project culture
8. Information culture
9. Familiarization with the world of professions and selection of career plans
10. The history and social consequences of technological development

It is precisely through these intersecting lines that the system of technological education defines the pressing issues of today and tomorrow.

Technological culture is an integrative quality of an individual that reflects the understanding of modern technologies, their purposeful and effective use, and readiness for innovative activity.

It includes the following components:

* information and communication literacy;
* critical thinking;
* problem-solving ability;
* creativity and an innovative approach.

Symposium on Natural and Applied Sciences
Hosted Online from London, United Kingdom
Date: 5th March, 2026
Website: https://econferencia.com

The formation of technological culture serves as an important factor in improving the quality of education and preparing competitive specialists.

In the pedagogical process, the formation of technological culture depends on the following factors:

Teacher's professional preparedness — a teacher must have a strong command of modern technologies and be able to effectively integrate them into the teaching process.

1. Digitalization of the learning environment — the use of interactive whiteboards, online platforms, and electronic resources.
2. Methodological support — innovative teaching methods, elements of distance learning, and project-based learning.
3. Student engagement — encouraging independent inquiry, research skills, and a creative approach.

When studying the "Technology" course and the "Home Culture" section in primary grades, special attention should be paid to the culture of interpersonal relationships, respect for others, elders, and close people, as well as rules of behavior. In the "Home Economics and Fundamentals of Entrepreneurship" section, it is appropriate to address issues of conflict-free communication. These sections contribute to the formation of students' mental well-being and a balanced ecological environment within human society.

Project topics can vary, but they are often related to practical issues from everyday life [2]. The results of completed projects must be clear. First and foremost, all topics should include economic and ecological orientation, and the ecological assessment of the project is mandatory.

Engaging students in project-based activities is a new experience for both teachers and students. Introducing new elements always comes with challenges and certain psychological barriers. During the project process, schoolchildren

should learn to frequently use expressions such as "I think…", "I suggest this because…", "In my opinion, it should be like this…".

In technology lessons, students deepen and expand their understanding of the interaction between humans and nature, the artistic processing of wood, and the use of wood in all sectors of the national economy. In construction activities, attention is directed to the systematic ecological foundations of knowledge, including the use of industrial wood and the creation of ecologically sustainable natural landscapes. The curriculum emphasizes the importance of natural landscapes, the aesthetic impact of forested areas, their expressiveness, and their significance for aesthetics and health. However, excessive use of industrial wood, plants, and other natural resources can lead to the depletion of forest resources. Students should learn the methods and timing of collecting plants and industrial wood, and understand the need to handle bushes, forests, and other natural resources carefully. Forests are highlighted as the best places for recreation and tourism. The aesthetic appearance of forests contributes to a positive mood in humans [5].

To keep tree plantations healthy, students should understand that all wood waste can be used to make boards or sent for chemical processing. The branches of coniferous trees serve as valuable fodder for animals and are used to prepare vitamin concentrates. Preserving and restoring forest resources, while considering the recycling of wood waste, allows for their rational economic use [1].

Conclusion

The formation of technological culture in the pedagogical process is a continuous and complex process that requires the improvement of educational content, forms, and methods. The effectiveness of this process can be enhanced through

the integration of modern educational technologies, the professional development of teachers, and ensuring active student participation. Young people with technological culture play a key role in the innovative development of society.

List of References

1. Abduqodirov A., Pardayev A. Pedagogik texnologiyalarga oid atamalarning izohli lug‘ati. – Toshkent: “Fan va texnologiyalar”. 2012. – 44 b.
2. Mavlyanova R., Raxmonkulov N. "Boshlang'ich ta‘lim pedagogikasi innavotsita va integratsiya" Toshkent. "Voris -Nashriyot". 2013. -235 bet.
3. Tilavova M. Texnologiya va uni o`qitish metodikasi. O‘quv qo`llanma.- Buxoro: OOO “Sadriddin Salim Buxoriy” Durdona, 2021. - 312 b.
4. Ishmuxamedov R.J., Yuldashev M. Ta’lim va tarbiyada innovatsion pedagogik texnologiyalar.– T.: “Nihol” nashriyoti, 2013, 2016.–279 b.
5. Kamolov I.B., Yuldashev S.N., Abdirasulov L., Quvanov Z. Texnologiya ta’limi va uni o’qitish metodikasi. Darslik. – 2024. – Б.40.
6. Ibraimov X., Quronov M. Umumiy pedagogika (darslik). – T., “Sahhof”, 2023, 416 bet.