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## FORMING TECHNOLOGICAL COMPETENCE USING VISUAL TOOLS IN TECHNOLOGY LESSONS

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### ABSTRACT

*The article reveals the concept of "technological competence", the possibility of the formation of technological competencies of students using visual aids. The types and significance of the use of visual aids in technology lessons are presented.*

**KEYWORDS:** *Technological Competence, Visibility, Instructional And Technological Map, Educational Area "Technology" Educational System, Structure, Competence.*

### INTRODUCTION

A technologically competent student must have a specific program of actions and management procedures, be able to apply them in real conditions of the organization of the educational process, aimed at implementing mechanisms of interaction, cooperation, to develop creativity, creativity; own a set of technological methods, operations, exercises, practical actions carried out in a certain way in a certain sequence at all stages of the work of consolidation and training, improvement and control. The main role in this belongs to the educational field "Technology".

The task of vocational training is to provide schoolchildren with a vocational education, equip them with available technical and technological knowledge, professional skills and abilities that are necessary to work in a particular specialty.

In technology lessons, the initial acquaintance of the student with the basics of transformative activity takes place, various technical objects are mastered. It is the educational field "Technology" that plays a leading role in the formation of the technological competence of students.

The main purpose of the educational field "Technology" in the general education system is the formation of technological literacy, technological competence, technological worldview and technological culture of a student, a system of technological knowledge and skills.

Technological competence is defined as a complex of properties and personal qualities of a subject, which provides the ability to organize transformative activities of various subject areas in accordance with technological principles, to master and effectively use modern technologies in their activities.

Technological literacy includes the ability to understand, use and control technology, the ability to solve problems, the development of creativity, consciousness, flexibility of thinking, and entrepreneurial spirit. Technological competence is associated with mastering the skills to master various methods and means of transforming materials, energy, information, to take into account the economic efficiency and possible environmental consequences of technological activities, to determine their life and professional plans.

Technological learning requires that students directly perceive all the main aspects of the specific technology being studied: the technological process and the technical means of its implementation, as well as the labor process in which this technology is implemented.

The perception of each of these sides is distinguished by certain features that require appropriate means of visualization.

For the successful formation of technological competencies in students, an important role is played by the use of visibility technology in the classroom, which activates the cognitive activity of students and ensures their conscious and lasting assimilation of the studied material.

Visibility in teaching technology plays an extremely important role, since technology presupposes not only theoretical knowledge of the subject, but also the ability to work with hands, and without visualization it is impossible. It acts both as a teaching principle, and as a teaching method (demonstration of working techniques, etc.), and as a teaching tool (posters, models, real objects, etc.). The role of visibility in teaching technology is largely due to the practical nature of the content of this training. In order for students to be able to master technological skills and abilities, they must figuratively and concretely represent the structure of labor movements and working methods by which these skills are formed. The essence of the principle of visibility is to build the educational process based on the sensory and practical experience of students, on the direct perception of technical devices and technical phenomena or their models, layouts, as well as images in the form of real (drawing, photograph, painting) and conventional (drawing, sketch, diagrams) images. What are the ways to implement this principle in teaching technology? The first is the obligatory demonstration by the teacher of working techniques and labor movements when instructing students to perform practical work. The second is the use in the learning process of a variety of visual means: natural objects, models, layouts, posters, etc., that is, the use of so-called external visualization. The third is the reliance in the educational process on the figurative presentation by students of technical objects, phenomena and processes that they have already observed earlier. These representations are called internal visibility.

One of such visualizations is instructional and technological maps, which reflect the main stages of manufacturing a product, and consist of subject samples and operations performed. The use of

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a technological map allows you to more consciously start practical work and contributes to the development of the ability to navigate the task, plan your actions, act according to the algorithm, instructions, and the ability to use technical terms.

Instructional cards have two sides: technological, which determines what to do and in what sequence to obtain the desired result, and educational and instructional, containing instructions on how to do it.

Instructional and technological maps include graphic and textual material, information about the nature of the task being performed, the requirements for it, materials, tools, equipment and devices, work operations and their sequence, as well as about methods of organizing work, possible errors and ways to eliminate them.

In the process of practical activity, children perform work without being confused, because there is an algorithm for performing labor operations.

Instructional technological maps contain subject samples with the name of technological operations. Such cards allow students to more accurately imagine the upcoming practical work, to assimilate a more detailed plan for the manufacture of a product, they make it possible to perform more options for exercises in the process of drawing up a work plan.

The use of instruction cards for students to study the technology of manufacturing a product creates conditions for the formation of such important methods of activity as analysis, synthesis, systematization, highlighting the most essential, etc., as well as independence in work.

Instructional and technological maps teach students to be independent and adhere to technological and labor discipline, allow students to repeatedly, independently of others, refer to the instructions contained in the instructions at any time of need. Having an instruction card, the student can constantly monitor his actions and consciously correct them.

The use of instruction cards makes it possible to better resolve the issue of effective instruction for each student, increase the independence of students in the learning process, expand and strengthen the connection between theoretical and practical materials.

The use of visual aids in technology lessons is an important condition for the formation of creative potential, logical thinking for the creation of new models and self-realization of students, which contributes to an increase in interest in the subject, aims at the independent acquisition of certain skills and abilities, cognitive activity, enhancing the creative activity of students. Visibility enriches the range of students' ideas, makes learning more accessible, specific and interesting, develops observation and thinking.

## REFERENCES

1. O.N. Muhidova Methods and tools used in the teaching of teaching of technology to children // Theoretical & Applied Science, 957-960
2. O.H. Mukhidova Competence approach to the development of the teacher's professional activity // Bulletin of Science and Education 97 (No. 19 (97). Part 2), pp. 88-91
3. O.H. IS HE. Mukhidova Electronic Learning in Higher Education // Magistracy Bulletin, C43-44

4. R. I. Halimovna, K. S., Nurilloevna, M. O., Radzhabovna, K. D., Shavkatovna, R. G., Hamidovna The role of modern pedagogical technologies in the formation of students' communicative competence. // *Religación. Revista De Ciencias Sociales Y Humanidades* 4 No. 15 (2019): Special Issue May 261-265.
5. D.R. Kuliyeva *The American Journal of Interdisciplinary Innovations and Research*. "Cluster" Theory And Its Peculiarities In Increasing The Competitiveness Of The Economy. Bukhara Engineering Technological Institute, Bukhara, Uzbekistan.
6. D.R. Kuliyeva The use of innovative technologies in teaching sewing. *International Scientific Journal Theoretical & Applied Science*.
7. O.H.Uzoqov, D.A.Sayfullayeva Methods for assessing the knowledge of students when learning special subjects *Проблемы современной науки и образования*, S.36-39.
8. O.H.Uzoqov The emergence of chaos *International Journal of Advanced Academic Studies*.18-03-2020 221-223 bet
9. Kulieva Sh.Kh. Methodological foundations of a systematic approach to teacher training // *The Way of Science*. No. 5 (39), 2017. - S.66-67.
10. Kulieva Sh.Kh. The content of the effectiveness and quality of training future teachers of labor education // *Science without borders*. No. 7 (12) / 2017. - S. 95-98.
11. M.N. Karimova. *Manufacture of Modern Sewing and Knitting Products, Used by Mass Demand*. *Eastern European Scientific Journal*, 71-73
12. Sh.KhKulieva, M.Karimova, M.KhDavlatkulova. Organization of theoretical and practical classes in the process of training vocational education teachers based on a systematic approach. *Young Scientist*, 804-807
13. М.Н. Каримова. Тенденции обучения специальных предметов. *Наука и образование: проблемы и тенденции развития*, 22-25
14. Миржанова Н.Н. Инновационные технологии в образовании и их использование // "Вестник магистратуры" научный журнал (2020, №1-5 (100)), стр.41-43.
15. N.N.Mirjanova Methods of teaching technology and the meaning of the term of pedagogical technology// *International Scientific Journal ISJ Theoretical & Applied Science*. Vol.84, No.4, 2020, pp. 961-963.
16. Г.Ш. Рахмонова Интегрированные уроки как средство формирования студентов// *Научный журнал (Россия) "Вестник магистратура"*, 4-3(91) 2019 год 86-87.
17. Г.Ш. Рахмонова. Некоторые вопросы обеспечения взаимосвязи методов и средств обучения в развитии образовательного процесса // *Academy Научно - методический журнал* №10 (49), 2019 с 41-44
18. G.Sh. Rakhmonova *Improving Technologies To Develop Spiritual And Moral Competencies In Future Teachers* // *The American journal of management and economics innovations(TAJMEI) SJIF-5.307 DOI-10.37547/TAJMEI,2020*