Pedagogical Cluster- Journal of Pedagogical Developments
PCJPD: Volume 2 Issue 2, February 2024, online: ISSN 2956-896X

PEDAGOGICAL CLUSTER
JOURNAL OF PEDAGOGICAL DEVELOPMENTS

Website: https://euroasianjournals.org/index.php/pc/index

Digital Technologies in The Technological Education of The Future Technology Teacher

Sayidova Muxtaram Xamidullayevna
Chirchik State Pedagogical University,
Teacher of the "Technological education" department

Annotation. The article describes the competencies of the future technology teacher, the importance of using modern electronic, digital and information technologies in technological education by future teachers

Keywords. Teacher of technology, competence, digital technologies.

Introduction

In accordance with the newly adopted Law "On Education" in 2020, teacher training is carried out taking into account the State educational standards of higher education.

According to the Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan, technology teachers are currently being trained in 15 higher educational institutions, where about 8,000 students study. In particular, in the academic year 2022-2023, a total of 1120 students were admitted to HEIs with a technological education direction. After that, 195 students were admitted to full-time education on a grant basis, 450 students were accepted to study on the basis of a contract, and 475 students were admitted to part-time education.

In our country, training of specialists in the field of 60112300 - Technological education bachelors is carried out in full-time, part-time and evening forms of education. Today, students of technological education are studying in the credit-module system. The standard duration of the full-time bachelor's program is 3 years.

Pedagogical Cluster- Journal of Pedagogical Developments
PCJPD: Volume 2 Issue 2, February 2024, online: ISSN 2956-896X
PEDAGOGICAL CLUSTER
JOURNAL OF PEDAGOGICAL DEVELOPMENTS
Website: https://euroasianjournals.org/index.php/pc/index

Analysis of literature on the topic

U.N. on problems such as improving the training of technology teachers, their development in a digital educational environment, the role of digital technologies in improving the quality of education. Nishonaliyev, A.R. Khodjabayev, N.SH. Shodiyev, N.A. Muslimov, Kh.I. Ibragimov, E.I. Roziyev, O'.Q. Tolipov, N. Saidahmedov, D. Ergashev, Sh.S. Sharipov, O. Abduquddusov, E.T. Choriyev, O. Torakulov, J. Hamidov, A. Jorayev, U. Jumanazarov, O. Koysynovlar and many other scientists of our country carried out research work.

Research methodology

The methodology of the article analyzes the professional activity of future technology teachers, technological potential, the importance and role of using digital technologies in training future teachers, starting with the analysis of scientific and increasingly popular sources.

Methods of analyzing the content of digital technologies in improving the quality of technology lessons, working programs and manuals for improving the quality of education, scientific generalization on the use of modern web tools, future technology teachers on this research problem interview methods were also used.

Analysis and results

Future technology teachers should be able to perform the following professional tasks in their future pedagogical activities:

- **planning the educational process:** developing a curriculum in accordance with the goals of DTS and educational programs, adapting educational programs based on the needs and interests of students, planning subjects according to the principles of correlation and integration, the specific purpose of the lesson and developing a lesson plan according to the results, planning lesson forms and methods based on a differential approach, planning the use of educational, demonstration and distribution materials;

- **ensuring the effectiveness of education:** assigning tasks based on the students' abilities according to the goals of the lesson, using demonstrations and handouts suitable for the topic of the lesson, correctly planning the time

allocation in the lesson, effective use of ICT in the educational process, to analyze the effectiveness of lesson organization and teaching approaches according to the results of students' learning, to choose teaching methods and approaches that match the educational goals and age characteristics of students, to use active methods of teaching, using methods aimed at developing students' basic competencies and life skills, organizing students' collective and project work, using self-control skills, providing differential assistance to students, theory and to ensure harmony of practice, to create opportunities for students to think independently, to achieve motivation in the lesson, to achieve effective communication in the classroom;

- **assessment of mastery and provision of feedback:** use of various methods and tools for evaluation of educational results, use of various methods and tools for diagnosis of educational results, analysis of educational results, adaptation of lesson plans and methods from analysis results use, know and apply assessment criteria, identify and analyze existing problems;

- **organization of educational activities:** use of modern, interactive forms and methods of educational activities in training and extracurricular activities, taking into account the gender, age, cultural and individual characteristics of students in educational activities, according to the charter and internal rules of the educational institution establish clear rules of conduct for appropriate students, create a socially healthy environment, develop cognitive activity, independence, initiative, creative citizenship, work ability, healthy and safe lifestyle culture in students;

- **creation and provision of a safe and developing educational environment:** creating an atmosphere of mutual respect among students, creating equal opportunities for students in classroom life, being able to make optimal decisions in conflict situations, conducting individual work with students, be able to help work safely in the modern media world;

- **self-development and professional growth:** taking regular training courses, familiarizing with scientific literature and applying new knowledge in practice, participating in and organizing seminars and trainings related to

professional activity, passing participation in cross-classes, analysis of classes, conducting open classes, making necessary changes in professional activity;

- cooperation with colleagues and parents of learners (persons who substitute them): involvement of parents of students (persons who substitute them) in the educational process in school life, students involving parents (their substitutes) to participate in decision-making about the development and educational environment of students, other pedagogical staff and specialists in solving educational problems and preparing students for life, public cooperation with organizations and departments.

The future technology teacher should have the following general cultural competencies:

- to have systematic knowledge related to worldview; to know the basics of humanities and natural sciences, current issues of state policy, to be able to independently analyze social problems and processes;

- to have a comprehensive idea of the processes and events taking place in nature and society, to acquire knowledge about the development of nature and society, and to be able to use them in life and professional activities on modern scientific bases;

- to know the legal and moral criteria that determine the attitude of a person to another person, to society, to the environment, to be able to take them into account in professional activities;

- use of methods, methods and means of obtaining, sorting, storing and processing information and media literacy; having the skills to work with global computer networks;

- pedagogical design of the educational process in the electronic information educational environment;

- taking into account the ethnocultural characteristics of the participants of education when engaging in social interaction;

- to have competitive general professional training in the relevant bachelor's field;

- able to independently acquire new knowledge, work on oneself and organize labor activities on a scientific basis;

- having mastered one foreign language at the level of free speech;

- should have a scientific imagination and belief about a healthy lifestyle and the need to follow it, as well as the training and skills of physical training;

- the ability to form healthy lifestyle skills in accordance with the requirements of the rules of hygiene, labor protection and protection from external influences.

The future technology teacher is required to have the following professional competencies:

- preparing to use the knowledge of modern problems of science and education in solving general professional tasks, as well as acquiring the skills of creating and applying informational and didactic support for successful implementation;

- the ability to use tools to take into account the characteristics of human behavior and activity management, special laws of mental and psychophysiological development, and individual characteristics at different age periods;

- being able to communicate with parents (or their substitutes); ability to use methods of diagnosing development, communication, activity of children of different age groups;

- understanding that the profession of pedagogy is of high social importance, observing the principles of professional ethics; to understand changes in the scientific field of professional activity, to have the ability to analyze, generalize, and make clear conclusions;

- development of professional knowledge based on primary sources, provision of opportunities for professional formation and socialization, inclusion of personnel attitude to inclusive education;

- study of materials and their properties, characteristics and information on technical objects and technological processes; knowledge of special and general labor operations in technical objects and technological processes;

- formation of technical and creative thinking, intellectual abilities; to be able to analyze the technological process and the sequence of execution of prepared products, as well as product quality;

- to be able to make conclusions about the execution of processes and evaluate labor operations, product quality;

- to have the skills to guide the choice of profession; formation of knowledge, skills and competences about psychology, personality, activity, communication, cognitive processes, volitional qualities, emotional states, individual characteristics, as well as modern education about the conditions, periods, mechanisms, factors and conditions of mental development by future pedagogic specialists organizing the transformation of scientific knowledge;

- solving Olympiad and competition issues in technology science of general secondary education; formation of competencies of aesthetic culture and creativity, self-development and preservation, development of practical activities among general secondary school students;

- to develop the technical creativity, ability, and thinking of students in the technology classes of general secondary education, to direct them to the profession by teaching methods of processing natural and artificial, metal and non-metal materials on the basis of technology during the course of the lesson, people to acquire knowledge, skills and abilities in the basics of crafts, basics of agriculture, business science, electrical engineering work and to apply them in life.

The following competencies of future technology teachers are:

- understanding the peculiarities of technological education, mastering the means of implementing coherence in teaching students in different types of educational institutions;

- acquisition of modern knowledge of the theory and practice of technological science;

- the ability to apply knowledge, skills and abilities related to science and to convey acquired basic knowledge to students;

- to have thoroughly mastered the theoretical foundations of the field and to be able to use it effectively in related fields, to have the skills and qualifications to perform practical actions;

- Development, history, pedagogical technologies, teaching methods, effective application of teaching tools in practice, organization of education according to DTS standards, educational programs, evaluation criteria to understand, to have knowledge of international assessment studies and to have the skills and abilities to effectively use modern educational technologies in the activities of developing students' natural-scientific literacy (PISA contexts).

In our opinion, the emotional-volitional quality is the main characteristic of the personality of the future technology teacher, which is the ability to regulate one's own behavior, adequately express emotions and respond appropriately to the emotions of others. , defines external and internal emotional reactions, management of internal influences through self-organization - self-restraint, self-control and manifestation of voluntary qualities.

The emotional and volitional quality of the future technology teacher is a complex, integral and multidimensional professional quality, which requires consideration of the following components:

1) professional skills and abilities of the teacher (self-ownership, self-control, self-control, ability to organize one's activities, ability to limit oneself, ability to correct oneself, etc.);

2) professional and personal qualities of the teacher (stress tolerance, emotional stability, persistence, endurance, restraint, impressionability, tolerance, pedagogical empathy, optimism, discipline, etc.);

3) pedagogical abilities and qualities that provide a comfortable educational environment of the educational institution (creating situations of success in educational activities, general optimism and ease of the pedagogical process).

Conditional groups of professional-pedagogical and personal qualities, skills and qualifications of a future technology teacher are an important

component of the phenomenon we are studying. We consider them to be a factor that determines the direction of effective and successful pedagogical activity. Based on the structural analysis of the phenomenon under study, we identified the groups of pedagogical skills that a future technology teacher should acquire:

the ability to neutralize the strong negative impact of information flows, to increase the stability of the teacher's personality to negative information-aggressive factors;

the ability to overcome the consequences of negative emotional pressure on the teacher's personality, which is carried out due to a large workload and a low level of socio-economic support for this profession in society;

the effectiveness of actions in various pedagogical situations in the teaching of multidisciplinary subjects of the educational institution;

the ability to regulate one's emotional state, to give it a constructive rather than destructive character;

the ability of the educational institution to create and maintain a comfortable educational environment;

the ability to ensure the optimal emotionality of students' educational and cognitive activities during the educational process;

the ability to establish positive relations with colleagues, students' parents and the management of the educational institution, to create a comfortable emotional and psychological environment;

the teacher's ability to study the state of mental health and emotional well-being of his students;

the ability to correctly determine the emotional state of the child, to know the reasons and methods of the manifestation of negative emotions, to use the stock of knowledge about the emotional sphere of the student;

the ability to maintain a stable professional position, to understand the philosophical essence of one's profession, to realize one's own positive possibilities that contribute to the strengthening of the teacher's self-concept, etc.

Summary

Thus, it ensured a more detailed mastering of modern electronic, digital and information technologies by future teachers. This can be seen in:

- the specialty was excluded from pedagogical education and teacher training became possible only in the bachelor / master system;

- the standard of pedagogical education is the same for all profiles of educational programs, the profile of the main educational program is determined by the higher educational institution in accordance with the estimated programs;

- basic training programs developed in the form of competencies that should be acquired by a graduate of DTS were introduced;

- the requirements for the content of the basic educational programs created ample opportunities for universities to supplement the basic educational programs with subjects and modules.

References

1. O‘zbekiston Respublikasi Qonuni. Ta’lim to‘g‘risida. 2020 yil 7 avgust. www.lex.uz
2. Jo‘rayev R.X., Tayloqov N. I. Axborotlashgan ta’lim muhiti – o‘qitish samaradorligini oshirish vositasi // Uzluksiz ta'lim. IMJ. - T.: 2004. - №3. - 3-7 b.
3. Ishmuhamedov R., Abduqodirov A., Pardayev A. Ta’limda innovatsion texnologiyalar (ta’lim muassasalari pedagog-o‘qituvchilari uchun amaliy tavsiyalar). - T.: Iste’dod, 2008. - 180 b.
4. Taylaqov N.I. Ta’lim tizimida zamonaviy axborot texnologiya-larini joriy etishning istiqbollari // “Ta’lim va tarbiya”. IMJ.- T.: 2002. - №1-2.- 27-30 b.
5. Sayidova M.X. Talabalarda ijodiy va kreativ qobiliyatni shakllantirish masalalari / Xalq ta’limi. IMJ. –T.: 2023. - № 3. -13-16 b.
6. Sayidova M.X. Reflection of advanced technologies in the content of modern technological education in an educational institution / Web of technology: multidimensional research journal. Volume 1, Issue 7, October 2023. P.45-48.