International Journal of Pedagogics
(ISSN – 2771-2281)
VOLUME 04 ISSUE 10 PAGES: 212-219
OCLC – 1121105677

Publisher: Oscar Publishing Services

Journal Website: https://theusajournals.com/index.php/ijp

Research Article

FORMATION OF STUDENTS' TECHNOLOGICAL COMPETENCE IN PROFESSIONAL EDUCATION

Submission Date: October 15, 2024, **Accepted Date:** October 20, 2024,
Published Date: October 25, 2024
Crossref doi: https://doi.org/10.37547/ijp/Volume04Issue10-37

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ABSTRACT

In the article, the search for ways to improve the quality of training of junior specialists, the organization of the educational process at a high level, the creation of new forms of education and upbringing, the use of modern teaching tools, the clarity of didactic goals; teaching within the framework of future professional activities, the comprehensibility of the material being taught, the basis in the management of students' cognitive activities, the formation of the technological appearance of the specific aspects of the teaching process of the teacher of a professional educational institution in accordance with the content of the subject being taught, the trend of technology, the introduction of innovative educational technologies, the mass use of information technologies and society requirements for the teacher's professional qualities, high professional activity, communicative interaction skills, persistence, development and implementation of innovations, forms, methods, teaching technologies, and the use of innovations that help to achieve high-quality results of education are interpreted.

KEYWORDS

Technology, trend, teaching, learning, process, goal, activity, science, accuracy, foundation, formation, education, knowledge, quality, result.

INTRODUCTION

Education, which is an integral part of human life, creates the need for him to acquire personal knowledge and skills that ensure the well-being of life in society. Based on the requirements of the labor market, it is necessary to fundamentally reform the education system by creating effective mechanisms for the training of qualified personnel, the implementation of innovative scientific achievements based on

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international educational standards [1]. Each educational institution was established in order to fulfill a specific task of training qualified labor specialists of the society, and their activities are aimed at deepening and developing the knowledge of the individual and satisfying his needs. Along with other areas of the educational system, serious changes are taking place in the professional education system. The development of students' initiative means the ability to solve problems that arise in professional activity, to show the skills to quickly adapt to the changes that are taking place. Professional education, innovative education and training system has a complex structure. For this, it is necessary to understand and use innovative changes in education. The importance of innovative activity for a person is also related to the possibility of self-expression, use of intellectual and creative potential. Difficulties that arise in the process of innovative activity appear before the individual as a perspective of the possibility of solving them independently. Thus, every teacher uses innovative educational technologies in his work [3].

Main part. The search for ways to improve the quality of training of specialists requires the creation of new forms of education and training, the use of modern teaching tools, the organization of the educational process at a high level. After mastering the methodology of designing and creating vocationally oriented teaching technology for the teacher of professional education, a new pedagogical thinking begins: clarity of didactic goals; teaching within the framework of future professional activity, comprehensibility of the taught material, comprehensibility of methodical language; reasonableness in managing students' cognitive activities [7]. This implies the formation of the technological view of the teaching process of the teacher of the professional educational institution, its specific aspects in accordance with the content of the subject being taught.

Another complication of training future pedagogues in pedagogical colleges is that they should acquire the following technological character of their professional activity [8]:

- development of different options of teaching content;

- use of modern didactics to increase the effectiveness of teaching;

- application of new ideas and technologies in practice.

For this reason, students of professional education should try to be the author themselves when designing each subject project during the educational process, its application in practice will be important in the formation of the student's professional ability. In the formation of this, a large-scale activity of teachers of professional education is also necessary [9]:

- first of all, to create conditions for the student to consciously choose the field of study;

- clarification of the students' goals;

- helping students to plan their activities;

- use of specific teaching tools, methods, teaching methods.

The specific features of the use of innovative technologies in the educational environment of professional education are as follows [5, 13]:

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OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
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- the trend of reconstruction, updating to the required standards;

- a new look at the traditional;

- requirements for material and modern teaching methods;

- use of active methods;

- formation of competencies;

- modernity of information and communication technologies in the pedagogical process.

Technology (Greek: "techne" - skill, art, "logos" - understanding, teaching) is the organization of certain (production, social, economic, etc.) processes at a high level of skill and art [22].

An attempt to comprehensively study the concept of "technology" is reflected in the research works of N.A. Muslimov [15]. He considered technology as a philosophical category, which refers to the process of transforming the individual and the particular into the universal and vice versa. Technology is a philosophical, socio-cultural, psychological and pedagogical category that requires further study.

Educational technology (see "an educational technology") - the organization of the educational (teaching) process at the level of high skill, art [14].

Local scientists define the concept of educational technology as follows:

Educational technology is the general content of the process of achieving the educational goal, that is, the step-by-step implementation of the planned educational process on the basis of an integrated system, the development of a system of specific methods, methods and tools to achieve a specific goal, their effective and efficient use, and high-level management of the educational process. [14].

The above allows us to conclude that there have been significant changes in the way of understanding technology, and these changes are objective in nature and reflect changes in reality. This, in turn, sets new tasks for the science and practice of pedagogy. There is a contradiction between the availability of various technological materials in various general education and special subjects and the need to study modern technologies as a whole, master general methods of changing human activity. Comprehensive technological training as an independent problem is practically not considered in our pedagogical science.

Results and Discussions. The trend of technologization (introduction of innovative educational technologies, mass use of information technologies) and society's demands on the professional qualities of the teacher (high professional activity, communicative interaction skills, persistence) draw the attention of modern scientists to the innovative activities of the school. Thus, the tasks of N.N. Manko's innovation are the development and implementation of innovations (forms, methods, teaching technologies that help to achieve high-quality results of education), the development of innovations (designing authoring methods and teaching technologies), conducting pedagogical experiments (new education technology testing), transfer of their innovative experience (dissemination of innovations at pedagogical councils, methodical associations, seminars and roundtable discussions) [17]. Accordingly, innovative activity is the process of developing, introducing and popularizing innovations in teaching practice.

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Yu.K.Babansky connects this approach with the understanding of the terms "pedagogical technology" and "educational technology" in the educational process in a broad sense for pedagogical practice. In this regard, technological competence is characterized by conceptuality (reliance on scientific concepts of modern education: philosophical, psychological, didactic and socio-pedagogical foundations), consistency (logic and integrity of the educational process), manageability (ability to design), diagnosis and correction of the educational process are professional and pedagogical is the efficiency of achieving activity goals [2].

In our opinion, this approach is also valid for the continuous technology approach. The process of preparing students for a technological approach is a continuous process of creating and mastering new knowledge based on a system of methods and means of transforming activities to achieve optimal results. In the pedagogical aspect, technological culture is understood as a specific characteristic that includes the technological abilities and needs of a person. Technological competence combines a person's technological and intellectual potential expressed in changing activities, aesthetic instructions and attitude to activities.

Society (vocational educational institutions, industry, family) needs not scholars and talkers, but graduates who are ready to join the next life activities, who can practically solve the life and professional problems before them. And this largely depends not on acquired knowledge and skills, but on some additional qualities, which are more relevant to the understanding of modern educational goals, the concepts of "competence" and "competence" are used [16].

The English concept of "competence" literally means "ability". The content serves to illuminate "the effective use of theoretical knowledge in the activity, the ability to demonstrate high-level professional skills, skills and talents" [19].

Competence is a person's ability to possess, including his personal relationship to him and the subject of reality [18].

The term "competence" (translated from Latin - conformity, proportionality) has two meanings: technical tasks of an institution or a person; the range of issues in which a person has knowledge and experience [12].

Competence is the interrelated qualities of a person (knowledge, abilities, skills, methods of activity) that are established in relation to a certain range of objects and processes and are necessary for quality and effective action in relation to them [19].

Competence is expressed by the future specialist's acquisition of knowledge, skills and abilities necessary for the implementation of personal and socially significant professional activities and their ability to apply them in professional activities [10].

The student's technological competence is a necessary condition for the successful socialization of a person in modern society. Therefore, we note technological competence as the student's ability to effectively use the system of knowledge, skills, and qualifications in production processes in specific situations.

In our opinion, "technological competence" is mastering advanced technologies that enrich professional-pedagogical knowledge and skills, the

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ability to use modern tools, techniques and technologies.

Technological competence is an integral and professional quality of a person, which includes attention to the development of new educational technologies, their design and dissemination in the professional community. Innovative activity serves as a basis for the development of the student's technological competence, because the innovative process includes the activities of creating an innovation related to technological components, putting it into practice (innovation) and spreading innovation (dissemination) [17].

The problem of the development of technological competence is the subject of many studies that highlight its important features and the features of development in post-higher education. From the point of view of technologicalization of the educational process, researchers B.A.Slastenin, I.F.Isaev, E.N.Shyanov distinguish technological competence as a method of implementing innovative activities and is a leader in the formation of innovative and technological components of professional activity [20].

Research in the field of technological competence development, as a rule, is related to one thing - considering the development of the studied phenomenon in the conditions of innovative activity or considering the introduction of innovative educational technologies [4].

Professional in scientific research conducted by academician R. Kh. Djuraev in the field of pedagogy

methodical aspects of training students for professional activities in education and issues of technological approach to education were researched [6]. In the research conducted by Sh.E. Kurbanov, issues of professional competence, technological approach, quality of education were scientifically examined [11].

Technology implies a goal, stages (activities of the teacher and the student in each of them) and result. The gradual complexity of the content of the educational material and the nature of the activity leads to an increase in the knowledge activity of students, the development of their subjective position, as well as the formation of professional competences at a high level. The areas of development of the student's technological competence include the following innovative activities in pedagogical colleges:

- technological improvement and optimization of innovative activities from the point of view of enriching the organizational-methodical means of activating the learning activity of students;
- relying on modern information technologies in terms of technical equipment of the educational process;
- striving for technologyization of pedagogical cooperation, personal and professional development [21].

The development of the student's technological competence in professional education includes the implementation of the following tasks [9]:

- educational and professional sphere - the teacher models the innovative activity of students in the lesson, analyzes, designs and organizes pedagogical situations, diagnoses and predicts the development of important qualities of the student's personality;

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- research direction - organization of students' scientific-research works in innovative activities, formation of students' creative abilities, use of innovations in scientific-research activities;
- field of education and design - educational goals and tasks, content of educational material, innovative teaching methods (styles, methods, forms, tools) are designed;
- organizational-technological field - the educational process is organized in an innovative educational environment.

Technological competence is dynamic and flexible in relation to educational technologies, and it is being changed in the conditions of the emergence of new technologies that meet the requirements of the educational standard. Therefore, an important basis for the justification of technological competence in the teacher's innovative activity is a characteristic of innovative educational technologies [23]. Based on technological competence, they distinguish having the following educational technologies:

Stage 1 – organization of theoretical seminars on the justification of innovative educational technologies.

2nd stage - conducting master classes using innovative technologies.

3rd stage - observation of lessons using innovative educational technologies, assessment of technological competence.

Conclusion. Technologies used in working with educational, scientific, professional and other information occupy a special place in the educational environment. This explains the relevance of information technology as a means of improving the quality of educational activities. Today, one of the most popular ways to improve the quality of education is additional education organized through information technologies.

The analysis of the content of the concept of technological competence shows that it is determined by students' independent and creative search for educational efficiency, the ability to use various pedagogical tools, methods, techniques and technologies in the selection of information and the organization of the educational process, as well as in achieving the planned result.

Thus, the development of technological competence is related to the technological provision of educational activities and the organization of innovative activities in pedagogical colleges. The use of modern educational technologies serves to increase not only the quality of the educational process, but also the results of the teacher's innovative activity.

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