International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 02, 2020
ISSN: 1475-7192

# Effective Methods of Training Vocational Education Specialists in Higher Education Institutions

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***Abstract---*** *This article is devoted to the problem of pedagogical technologies as one of the factors affecting the quality of training of specialists in higher educational institutions. The article discloses the theory and methodological requirements of pedagogical technologies, the conceptual foundations of pedagogical technologies, the concepts of pedagogical technologies in three aspects. And also the essence of the role in the training of specialists of personality-oriented, subject-oriented pedagogical technologies is examined.*

***Keywords---*** *Pedagogical Technology, Theory, Methodological Basis, Personality-oriented Technology, Subject-oriented Technologies, Conceptual Basis, Training of Specialists.*

## I. INTRODUCTION

In modern conditions of the comprehensive development of the Republic of Uzbekistan, the vector of modern state policy and strategy in the development of the national education system is aimed at its further adaptation to the conditions of a socially-oriented economy, transformation and integration into the world t. At the beginning of 2017, the President of the Republic, Sh.M. Mirziyoyev, approved the program of the Strategy for Action in five priority areas of the development of the Republic of Uzbekistan in 2017-2021, in which the fourth sector paid special attention to the development of education, culture, science, literature, art and sports. [1]

Based on this program, a Decree of the President of Uzbekistan “On measures for the further development of the higher education system” was adopted, which noted the following:

- The establishment by each higher educational institution of the country of close promising partnerships with leading specialized foreign scientific and educational institutions, the widespread introduction of advanced pedagogical technologies, curricula and teaching materials based on international educational standards in the educational process;

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**DOI: 10.37200/IJPR/V24I2/PR2020797**
**Received: 20 Jan 2020 | Revised: 04 Feb 2020 | Accepted: 20 Feb 2020** 

- Further improvement of the educational process, curricula and higher education programs based on the widespread use of the latest pedagogical technologies and teaching methods, high-quality updating and implementation of modern forms of organization of the scientific and educational process of the magistracy.

As we see, currently in higher education institutions work is underway to establish partnerships with leading universities in developed countries. On the basis of the above resolution, young scientists and teachers completed internships in higher educational institutions of developed countries such as Russia, Korea, China, Turkey and other countries.

From the analysis of the exchange of experience in organizing and conducting the educational process, we can say that education is a powerful factor in the development of the spiritual culture of the Uzbek people, the reproduction of the productive forces of society. This humanitarian sphere is aimed at providing fundamental scientific, cultural, professional and practical training of the individual, the formation of the intellectual potential of the nation and the comprehensive development of the individual as the highest value of society.

Reform in the system of lifelong education of the Republic of Uzbekistan poses a challenge for the teaching staff of both qualified and competitive specialists. The reform strategy is based on a systematic approach, which we see transforming the system of secondary specialized vocational education into vocational education, which will be carried out in three types of educational institutions, these are vocational schools, colleges and technical schools.

From secondary schools after the ninth grade, schoolchildren have the right to choose, continue to study until 11th grade or choose to go to a vocational school or academic lyceums in which the duration of study is also 2 ears. [2]

Both colleges and technical schools can enter only after the end of the 11th grade, aim addition the duration of study is at least 2 ears and is prepared for professions.

Such transformations are always based on the development of new technologies as a combination of traditional and innovative methods and techniques. I want to emphasize: neither calls for the modernization of the educational process nor the development of regular programs for improvement and development updates the school. It is updated by a teacher who has mastered modern educational technologies of training and education.

The modern organization of the educational process should guarantee the possibility of mastering the educational material by each student at a high level, ensure his willingness to carry out effective activities in complex, variable, constantly changing conditions.

The concept of pedagogical technology came into the consciousness of teachers gradually: from the initial idea of pedagogical technology as learning with the help of technical means to the idea of pedagogical technology as a systematic and consistent implementation of the previously designed educational process, i.e. pedagogical technology offers the most rational ways of learning. The design of pedagogical technology consists in the development of a program for influencing the intentions and activities of participants in the pedagogical process by

**DOI: 10.37200/IJPR/V24I2/PR2020797**
**Received: 20 Jan 2020 | Revised: 04 Feb 2020 | Accepted: 20 Feb 2020** 

identifying during the training stages that are presented in a special sequence of procedures and operations, the implementation of which is consistent with the goals and ensures the achievement of the intended results.

In pedagogical science, an unambiguous definition of the term “pedagogical technology” has not yet developed. Here is some of them: “Pedagogical technology is a systematic method of assimilation of knowledge, taking into account the entire process of technical and human resources in their interaction, which aims at optimizing the forms of education” (UNESCO). “Pedagogical technology - a set of psychological and pedagogical settings that define a special set and layout of forms, methods, methods, teaching methods, educational tools; it is an organizational and methodological toolkit of the pedagogical process. ” (B.T. Likhachev);

“Pedagogical technology is a well-thought-out model of joint pedagogical activity in designing, organizing and conducting the educational process with the unconditional provision of comfortable conditions for students and teachers.” (V.M. Monakhov);

“Pedagogical technology is a substantial technique for the implementation of the educational process.” (V.P. Bespalko) [7].

“The technology of education is associated with the emergence of a technological approach to learning, the theoretical basis of which was the idea of programming learning; ... are feedback tools, training machines, language laboratories, exercise machines. This is a process of interaction between teachers and students, guaranteeing the achievement of the goal ”(M.P. Sibirskaya).

For many years, the role of pedagogical technology was played by the methodology - scientifically based methods, rules and techniques of teaching a subject, achieving a specific goal. What is the difference between methodology and technology?

A number of authors see the difference between pedagogical technology and methodology in the "guaranteed achievement of pedagogical goals" (D.V. Levitas, G.Yu. Ksenzova, L.A. Baikova). As a result of the discussions of scientists, the following conclusions were drawn: the technology differs from the methodology by the predicted universality, diagnostic results under any conditions. The technology, as a rule, is composed of standard methods and techniques, repeated many times under different conditions and giving the same result, which saves the teacher’s time for creative work with students. Pedagogical technology does not apply the methodology but is based on it. [4 ]

The concept of "methodology" is broader than the concept of "pedagogical technology", which allows you to effectively design the learning process, to obtain results that meet the planned goals. The methodology depends on the pedagogical skill of the teacher, on the content of the subject, composition and level of assimilation by students, etc. The methodology includes tasks - “why teach, what and how”, technology - answers the question of “how” to teach?

- Compared to training, built on the basis of the methodology, the learning technology has serious advantages:

**DOI: 10.37200/IJPR/V24I2/PR2020797**
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- The technology is based on a clear definition of the ultimate goal. In traditional pedagogy, the problem of goals is not leading, the degree of achievement is determined inaccurately, "by eye". In technology, the goal is considered as a central component, which allows us to determine the degree of its achievement more accurately.
- A technology in which the goal (final and intermediate) is defined very accurately allows you to develop objective methods of monitoring its achievement.
- The technology allows minimizing situations when the teacher is forced to switch to pedagogical imprompt in search of an acceptable option.
- An analysis of the literature shows that scientists consider the concept of "pedagogical technology" in three aspects:
- scientific - as part of pedagogical science that studies and develops goals, content and teaching methods and designs pedagogical processes;
- procedural - as a description (algorithm) of the process, a set of goals, content, methods and means of achieving the planned learning outcomes;
- Activity - the implementation of the technological (pedagogical) process, the functioning of all personal, instrumental and methodological pedagogical tools.

Any pedagogical technology must satisfy the basic methodological requirements - the criteria of manufacturability, which are:

Conceptuality is a support for a certain scientific concept, including the philosophical, psychological, didactic and socio-pedagogical substantiation of the achievement of educational goals.

Consistency - the logic of the process, the interconnection of all its parts, integrity.

Controllability - implies the possibility of goal setting, varying means and methods in order to correct the results;

Efficiency - the guaranteed achievement of a certain training standard, be effective in terms of results and optimal in laboriousness;

Reproducibility - the possibility of use in other similar educational institutions, by other teachers.

The listed criteria of manufacturability determine the structure of pedagogical technology, which includes three parts:

The conceptual part of pedagogical technology is the scientific basis of technology, those *psychological and pedagogical ideas that are laid in its foundation.*

The content of the technology consists of goals - general and specific, as well as the content of the educational material.

The procedural part is represented by a combination of the following elements: organization of the educational process; methods and forms of educational activity of students; methods and forms of work of the teacher; the activities of the teacher in managing the process of mastering the material; diagnosis of the educational process. [4]

**DOI: 10.37200/IJPR/V24I2/PR2020797**
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The new educational paradigm, which puts the development of the learner's personality at the centre of the educational pyramid, aims at new learning technologies. By "new" pedagogical technologies, we do not mean the temporal aspect: new ones that have just appeared or have recently appeared, but new ones that differ from the usual, traditional ones.

Traditional teaching methods to a greater extent contribute to the assimilation of factual material, the assimilation of reproducing knowledge in a familiar situation. However, the modern world puts forward quite certain requirements:

- The ability to adapt flexibly in changing life situations, independently acquire the knowledge he needs, skillfully apply them in practice to solve a variety of emerging problems;
- Independently think critically, being able to see problems that arise in reality and using modern technologies, look for ways to rationally solve them; clearly understand where and how the knowledge acquired by him can be applied in the reality surrounding him; be able to generate new ideas, think creatively;
- Competently work with information (be able to collect the facts necessary to solve a particular problem, analyze them, put forward hypotheses for solving problems, make the necessary generalizations, comparisons with similar or alternative solutions;
- Be sociable, contact in various social groups, be able to work together in different areas, in different situations, it is easy to prevent or be able to get out of any conflict situations;
- Independently work on the development of their own morality, intelligence, and cultural level.

The main direction of modernization of the education system is to solve the problem of personality-oriented education when the development of the personality of the student is in the centre of attention of the teacher when the organization of active cognitive activity becomes the main task of the teacher.

Of course, modern pedagogical technologies, based on reasonable expediency, tend to take into account as many factors as possible that affect the learning process and under these conditions, the place and role of the teacher in the learning process significantly. World pedagogical science today considers the teacher as a manager, managing the active developmental activities of the student. In this situation, the teacher must possess all the tools of teaching methods, and the role of technology in achieving the modern quality of education under these conditions is significantly increasing.

If in the traditional education system the teacher and textbook were the main and most competent sources of knowledge, the teacher supervised the students' learning of the teaching material, then in a personality-oriented education, the teacher acts as the organizer of the student's active cognitive activity, as a competent consultant and assistant. His professional skills should be aimed not just at controlling the knowledge and skills of students, but at diagnosing their learning activities in order to help qualified actions to eliminate the emerging difficulties in cognition and application of knowledge. This role is much more complicated and requires a higher level of skill from the teacher.

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Personally-oriented education provides, in fact, a differentiated approach to student learning, taking into account the level of the intellectual development of the student, the degree of his training in the subject, his abilities and inclinations. For this, first of all, it is necessary to involve each student in the active cognitive process, i.e. not the process of passive mastery of knowledge, but the active cognitive activity of everyone, their application of this knowledge in practice and a clear understanding of where, how and for what purposes this knowledge can be applied. The purpose of such training is to create the conditions for providing students with their own educational activities, accounting and development of individual characteristics. A personality-oriented lesson is not just the creation of a benevolent creative atmosphere by a teacher, but a constant appeal to the subjective experience of students as they experience of their own life. [7]

**Subject-oriented technologies** are based on didactic improvement and reconstruction of educational material (primarily in textbooks). In modular-rating technology (P. Jacevičienė, K. Vazina, I. Prokopenko, etc.), the main emphasis is placed on the types and structure of modular programs (enlargement of the blocks of theoretical material with the gradual transfer of cognitive cycles into activity cycles), rating scales for assimilation assessment. In the technologies "Ecology and Dialectics" (L. Tarasov) and "Dialogue of Cultures" (V. Bibler, S. Kurganov) - to redesign the content of education in the areas of diazotization, culturalization and integration. [9]

The technology of differentiated teaching (N.Guzik, I.Pervin, V. Firsov and others) also provides for the differentiation of setting learning goals for group training and its various forms, which ensure the specialization of the educational process for various groups of students.

The technology of developing education includes all stages of activity, each of which makes its own specific contribution to the development of personality. What is important in this case is the motivational stage, by the method of organization of which subgroups of technologies for developing education are distinguished, based on cognitive interest (L. Zankov, D. Elkonin-V. Davydov), individual personality experience (I. Yakimanskaya), creative needs (G. Altshuller, I. Volkov, I. Ivanov), the needs of self-improvement (T.Selevko). This group also includes the so-called nature-friendly technologies (literacy education - A. Kushnir, self-development - M. Montessori); their main idea is to rely on the developmental forces inherent in the child, which may not be realized if there is no prepared environment, and when creating this environment, it is necessary to take into account primarily sensitivity - the highest susceptibility to certain external phenomena. [10]

Pedagogical technologies based on the personal orientation of the educational process include technology of developing learning, pedagogy of cooperation, technology of individualization of learning (A. Granitskaya, I. Unt, V. Shadrikov); based on the intensification and intensification of students 'activities - gaming technologies, problem-based learning, programmed instruction, the use of schematic and iconic models of educational material (V. Shatalov), computer (new information) technologies (I. Robert and others). The latter, using programming languages to present information, translate it into an electronic language.

Professional training of specialists in the higher education system is carried out using various means in a holistic educational process. In recent ears, significant work has been done in the republic to update the content and technology of training specialists of the new formation.

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One of the reasons for the emergence of pedagogical technologies is the deep-rooted traditional system of training, which is aimed mainly at training obedient performers without their own activity in training, further labourer activity, which does not meet the challenges of modern life, the requirements of a market economy.

The problems of pedagogical technologies, the vast experience of pedagogical innovations, copyright schools and innovative teachers constantly require generalization and systematization. The variety of approaches to the definition of the term "pedagogical technology", the multiplicity of their varieties, conceptual foundations and characteristics make it necessary to focus on the analysis of the essence of this phenomenon, both in theoretical and practical terms.

The theoretical and practical analysis of the use of pedagogical technologies in a continuous education system allows us to conclude: the modern education system requires training specialists not only for today but will prepare requirements that can be provided after tomorrow. Since currently in all areas of industry, the country's economy is developing in a minute, the education system must also timely prepare specialists who are ready to meet all the requirements of the labor market. It depends on the teachers armed with all types of educational technology and mastered the teaching skills of conducting modern lessons.

The use of educational technologies in higher education when teaching special disciplines requires careful preparation by the teacher. First of all, the teacher must choose the content, means, form of organization and teaching methods. When teaching in the higher education system often used methods and effective methods are problem lecture methods, a blitz survey, a brain attack, insert, SWOT analysis, a VENN diagram, a cluster, and a presentation method.

**Presentation is one of the popular methods of** lecture classes. Some scholars consider presentation to be a learning tool, if this serves to make learning effective, presentation is considered a method. When preparing a presentation, the teacher must observe the following rules:

1. The presentation should be prepared in accordance with the content of the lesson;
2. In each slide, materials should be prepared on more than 6-7 lines and in each line no more than 6-7 words;
3. The colors of the slides should be chosen in such a way that does not affect the mood of the students, it is advisable not to use carrot colour since this color has a bad effect on the mood of the students;
4. In presenting the presentation, the teacher should prepare in such a way as if he would no longer have the moment to show himself.

Compliance with these rules serves to increase the effectiveness of the lecture.

The problem lecture method is also an effective teaching method that serves to increase student activity. The lecturer in preparation should prepare a problem on the topic of the lecture, at the beginning of the lecture this problem should be put before the students, at the end of the lecture this problem should have solutions in which students should participate.

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## II. CONCLUSION

When teaching technical disciplines, the project method is more suitable for practical exercises. Project activity forms students' skills in organizing work close to real conditions. When organizing practical exercises by the project method, students show the ability to work in a group, the learning process itself moves from student to teacher to the most objective form of teacher-group-student. In the learning process, students' activity increases; in the end, this affects the improvement of learning efficiency.

Thus, the use of active teaching methods serves to activate students and increase the effectiveness of each lesson and promotes the training of specialists whose qualifications meet the requirements of the employer.

## REFERENCES

[1] Mirziyoyev Sh.M. Critical analysis strict discipline and personal responsibility should become the daily norm in the activities of each leader. *T. Uzbekistan.* 2017 -103 pp.
[2] Decree of the President of the Republic of Uzbekistan of September 6, 2019, UK -5812
[3] Anarkulova G.M. Parpiev O.T. The use of pedagogical games in the system of secondary vocational education. *Toolkit. T.* 2007
[4] Anarkulova G.M. A model for the training of teachers of vocational education based on a systematic approach. *The scientific journal "Young Scientist"* No. 13 (93), July., 2015. -590-592.
[5] Anarkulova G.M., Ruzibaeva G.A. Modernization of the content of professional training and advanced training in the higher education system of the Republic of Uzbekistan. *Science Magazine. The problem of science and education.* No. 51 (125) 2018
[6] Anarkulova G.M., Radjapova D. Scientific and Methodological Aspects of the Formation of Creative Thinking in Future Teachers on the Subject of «Technology». *International Journal of Progressive Sciences and Technologies (IJPSAT).* ISSN: 2509-0119. – 259-261.
[7] Golish L.V., Fayzullaeva D. Innovative pedagogical technologies. T., 2012 - 154 s.
[8] Kuznetsov, M.E. Personally-oriented teacher training: theoretical and methodological aspect / M.E. Kuznetsov. - *Bryansk: From BSPU,* 2000 .--
[9] Selevko S. Modern educational technologies.- *M., Public Education,* 1998. - 130 p.
[10] Safin R.S. and others: Modern educational technologies in a technical university: monograph., Publisher: Izd. Kazan. *State architect builds University, Kazan, Russia,* 2014, - 217 p.
[11] Sharipov Sh.S. Personality model of the modern teacher. *Eastern European Scientific Journal – Germany,* 2017. Ausgabe 3-2017, ISSN 2199-7977 DOI 10. P-93-96

**DOI: 10.37200/IJPR/V24I2/PR2020797**
**Received: 20 Jan 2020 | Revised: 04 Feb 2020 | Accepted: 20 Feb 2020** 