



Innovative Technologies in Teaching directors and Specialists of Industrial Enterprises on "Labor Protection"

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ANNOTATION: *The article clearly illustrates the information on innovative pedagogical technologies and interactive methods of teaching directors and specialists of enterprises, organizations and institutions labor protection course, and provides a classification defined by the authors. The course of labor protection covers modular teaching technology and ways of using interactive methods in teaching. In order to make sure that the course does not directly affect the work and save the time of specialists, it is recommended to conduct training of directors and specialists on labor protection on the basis of online digital modular technology.*

KEY WORDS: *course study, innovative pedagogical technology, modular teaching, interactive method, digital technology, online teaching.*

INTRODUCTION

Developing the qualification skills of directors and specialists on labor protection in accordance with the "Standard Regulations on training and knowledge testing on labor protection" approved by the Ministry of Employment and Labor Relations of the Republic of Uzbekistan (Until 2017, the Republic of Uzbekistan is called a threat to labor and social security) and registered by the Ministry of Justice of the Republic of Uzbekistan on August 14, 1996 No 272. In order to achieve this, it is planned to organize seminars, lectures, courses, consultations in government agencies and enterprises with the involvement of specialists from state oversight bodies, labor protection research institutes and industry research institutes.

There is no doubt that these kinds of courses should be organized using modern innovative pedagogical [2] and digital technologies. In addition to that, the quality of teaching does not meet modern requirements, as the organization of such courses is inseparable from production.

In that sense, it is advisable to train course directors and specialists online [3] on the basis of modular technology. This will require the creation of a modular training technology and an online training platform for managers and specialists in the training course "Labor Protection". Of course, such training technology also requires the creation of e-learning resources [4], video and audio lectures, electronic modular training materials at the level required by the course of labor protection.

MAIN PART.

Contemporary labor protection of directors and productions will be effective to support innovative pedagogical technologies in production. This involves the choice of reading methods depending on the content of each interactive exercise. New pedagogical technologies are a set of modern teaching methods and techniques purposed at the formation of knowledge and the formation of a specific science (topic) for students (listeners) in the creation of education. Taking into account the above, the authors analyzed the innovative pedagogical technologies recommended for use in the training of managers and specialists in the course "Labor protection" and developed the following classification

Table 1 Classification of innovative pedagogical technologies

№	Name of innovative pedagogical technology	Brief description
1.	Developmental learning technology	Developmental education is a theory of education that, at a given time, enables a student to develop educationally, spiritually, mentally and physically, and to adapt to society and life in a rapidly changing world. In developmental education, the main focus is on self-development (independent learning) and self-assessment.
2.	Technology of step-by-step formation of scientific and creative movement	The authors of this idea are P.Ya. Galperin, D.V. Elkonin and N.F. Talyzins are. In this technology, the learning process is based on the organization of specific goal-oriented activities.
3.	Full mastering technology	The authors of this technology are American scientists J. Keroll and B. Blum. The end result differs from traditional teaching technology, i.e., the level of knowledge acquisition in students.
4.	Teamwork technology	The authors of the idea and those who developed it are A.G. Rivin, V.V.Arkipova, V.K. D'yachenko, A.S. Sokolovs. Organizational dialogue, collaborative dialogue, the collective method of teaching, working in pairs with students with alternating structures are the leading forms of this pedagogical technology.
5.	Adaptive teaching technology	Adaptive learning technology is characterized by a variety of different levels of learning technology. It involves the organization of a flexible system of training, taking into account the individual characteristics of students. It focuses on shaping students' learning abilities.
6.	Different levels of teaching technology	This technology involves the creation of a pedagogical environment and differential level teaching, taking into account the activities of each learner in accordance with the immediate scope of development.
7.	Programmed learning technology	The authors of the pedagogical technology are American scientists N. Crowder, B. Skinner, S. Pressi, and Russian P.Ya. Galperin, L.N.Lynda, A.M. Matyushkin, N.F. Talyzins. This technology is based on individual independent reading using pre-designed teaching

		programs using special technical means (computers, etc.) and it is organized taking into account the individual characteristics of each student (reading speed, level of mastery, etc.).
8.	Problem-based learning technology	The authors of the idea of pedagogical technology T.V. Kudryavtsev, A.M. Matyushkin, V. Okon and M.I. Makhmurov. The goal of pedagogical technology is to develop students' independent creative inquiry skills aimed at solving learning problems under the guidance of a teacher. The application of pedagogical technology leads to the formation in the student of new knowledge, learning and skills, developing cognitive abilities, erudition (knowledge, intelligence), love of knowledge, other important personal qualities and abilities such as creative thinking. In this technology, the educator does not convey knowledge in a ready-made way, but creates a problem situation for the student on the topic and creates conditions for the awakening of thoughts and ideas in him on the solution of the problem.
9.	Technology for the development of creative activity.	This technology is aimed at activating creative thinking in students, the formation of problem-solving skills, the formation of competencies to develop the ability to consciously seek solutions to problems.
10.	Project style technology	The project method is a complex method that combines all the innovative pedagogical methods currently used in the educational process and is a flexible model of teaching and learning with practical, subjective and objective innovations aimed at the full use of individual abilities through the development of independence and creativity system [5].
11.	Modular teaching technology	This teaching technology emerged in the late 1960s as an alternative to traditional teaching technology in the United States and Western Europe. In Russia, this technology was developed by P. Yutsyavichene and T.I. Shamovs. In this technology, the learner achieves specific learning objectives independently (or with the specific help of the teacher) while working with the module.

In choosing these innovative pedagogical technologies, it is recommended to take into account the knowledge of the audience, the level of knowledge previously acquired, the field, the number of students in the course.

From the above innovative pedagogical technologies, the most effective in online training of leaders and specialists is modular training.

The concept of expressing the components that make up the modular-pedagogical technology. Modules can be represented as large modules, medium modules, and small modules. For example, a separate chapter of science or chapters of several contents close to each other can form a large module, separate topics in it a medium module, and topic plans a small module. Modular teaching

technology is an alternative to traditional teaching technologies, which combines all the theoretical and practical progressive technologies in existing pedagogical technologies.

The basics of modular training were developed and fully described by P.Ya.Tsyavichene.

The key point of modular learning is that the learner achieves the learning objective independently (or through a certain level of support) through the process of working with the modules. The educator develops a program based on a certain sequence, which complicates the didactic tasks and consists of a set of modules. The program allows the student to self-manage the learning process in collaboration with the teacher through access and intermediate control. Therefore, modular training is one of the promising systems. Modular learning technology represents a holistic approach. A set is a set of parts that are in a functional relationship and form a whole. Complex theory and integrated approach do not represent the concept of "complex". In modular teaching, through the full, abbreviated and stratification of curricula, it is possible to teach step by step, that is, it is possible to individualized teaching. Modular training requires the presentation of problem-based and instructive lectures that provide generalized information on the main issues of the training course "Labor protection". The lectures should focus on expanding the theoretical knowledge of managers and specialists on occupational safety.

The module practical sessions should be structured with lectures, supplemented by new material that explores the content of the lectures. This technology will focus on creating a reserve of learning time for listeners (leaders and professionals) to work individually and independently. Therefore, modular teaching-methodical and scientific-information complexes prepared by the teacher on the curriculum play an important role in modular teaching. Properly organized modular training allows to save 20% or more of study time, and effective mastering of the subject is achieved through step-by-step teaching of the training material.

Because each topic of occupational safety has its own characteristics, the use of interactive teaching methods not only enhances the quality of the lesson, but also enhances the interest of the audience, making them an active participant in the training rather than a passive listener. Lectures should be modern [6], based on problem situations using interactive methods, such as mental attack..Interactive teaching - the specialist actively participates in the learning process, using previous experience, plays a personal role during the lesson, gaining new experiences, analyzes the lesson on the basis of their experience, receives important materials and connects them with their daily activities. The word "interactive" is derived from the English language, "inter" - mutual, "act" - to act. Interactivity means being interactive, reading in dialogue mode.

This is why interactive teaching means dialogue teaching . Dialogue is also available in traditional teaching methods, including in the form of "teacher-student", "teacher-student group". In interactive teaching, the dialogue takes the form of "student-student", "student-student group", "student-audience", "student group audience" (group presentation), "student-computer". The student participates in the lecture not only as a "passive" listener, but also as an "active" participant. Interactive teaching methods are very diverse, and their use in the learning process should be chosen depending on the type of lesson, the age and education of the audience in the classroom, as well as the number.

The interactive methods recommended for use by managers and specialists in the training course "Labor protection" were studied and analyzed, and the following classification of interactive teaching methods was developed:

Table 2 Classification of interactive teaching methods

№	Interactive methods	№	Интерактив услублар
1.	Discussion	19.	Pierboardtechnique.
2.	Create a group discussion or problem list.	20.	Veertechnology
3.	Situation study, analysis	21.	T-schemetechnique
4.	Debate or arguments	22.	Delphitechnique
5.	Critical thinking.	23.	Blitzsurvey.
6.	Role-playing games.	24.	“Case study”
7.	Working in small groups	25.	“Assessment ”method
8.	Mental attack.	26.	“Conceptanalysis ”method
9.	Cluster method.	27.	VennDiagrammethod
10.	Fishskeletontechnique.	28.	Blitz-gamemethod
11.	(ERES) Technology of“Explain your idea, give a Reason, give an Example and Summarize”	29.	“Portfolio” method
12.	Mosaic method	30.	“Briefing” method
13.	Boomerangtechnology.	31.	Why? technique
14.	Инсертжадвали.	32.	Маъруза-анжуман.
15.	Скарабей технологияси	33.	“SWOT-tahlil” metodi.
16.	KWL (I know, I want to know, I learned) technique	34.	Make up questions (author O.D. Rakhimov)
17.	Conceptualtable.	35.	Sentence making methowith the participation of basic phrases (author O.D. Rakhimov).
18.	Seminar-trainingtechniques	36.	Foresight technology

Interactive teaching technology does not consider the traditional lecture reading method and at the same time does not contrast lecture lessons with practical lessons. In interactive teaching, speech and practice are considered to be part of a whole lesson, which is determined by the interaction between the teacher and the listener and the level of active participation of professionals during the lesson. It is known that if teacher activity is provided in traditional lecture classes, student activity is required in practical classes. Some educators use interactive teaching methods to use modern teaching materials (simple, multimedia and animated slides, handouts, lecture texts, mock-ups of models of technical means, etc.) and modern technical means (computers, electronic boards, etc.). presenting lecture texts to the student in advance to ensure that the student is ready for the lesson. Of course this is not the right idea.

Interactive teaching methods are a set of innovative pedagogical methods and a system of technical means aimed primarily at making the listener an active participant in the learning process. In an interactive session, the listener must listen, read, see, write, ask questions on the topic, express themselves freely, complete practical assignments and connect with their own life experience to develop theoretical knowledge and practical skills on the topic.

In an interactive style, the teacher is required to masterfully shift from one view of the level of interaction between course participants and the teacher during the lesson to another, depending on the topic.

The choice of interactive methods should be based on the purpose of the direct learning topic. For example, in the training of managers and specialists on occupational safety, special attention should

be paid to improving their knowledge of identifying the causes of accidents and predicting them. It is recommended to use Foresight technologies [7].

CONCLUSION

Humankind is living in the age of information. The use of innovative devices, smartphones and various gadgets, robots and remote control techniques in production is manifested as the driving force of modern civilization [8]. In such an environment, the training and testing of knowledge of managers and specialists on occupational safety requires the organization of online based on electronic educational resources [9] using digital technologies directly on the basis of innovative pedagogical technologies.

On the one hand, this will help professionals in the field of production to work on themselves on a continuous basis, to improve their knowledge and skills, on the other hand, it will save time spent on training during working hours. The organization of the course of labor protection on the basis of modern teaching on the basis of innovative pedagogical technologies stimulates creative thinking in managers and specialists [10,11], sees the importance of innovations in science and practice, the desire for innovation in creative fields, unusual approaches, competencies such as logical coherence in thinking, abandonment of stereotypes and stereotypes, breaking stereotypes in thinking, and a creative approach to every issue and problem are formed and developed. High knowledge and legal literacy in the field of occupational safety leads to a sharp reduction in accidents at the enterprise, and an increase in the morale of the community.

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