

УДК 377.3:687.4

DOI <https://doi.org/10.33989/2519-8254.2019.6.205701>

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APPLICATION OF PROBLEM-PROJECT TECHNOLOGY IN EDUCATIONAL ACTIVITIES OF FUTURE TREASURES IN PROFESSIONAL (PROFESSIONAL-TECHNICAL) EDUCATION INSTITUTIONS

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У статті проаналізовано основні методологічні підходи до організації процесу підготовки майбутніх кравців із використанням проблемного, проектного, проблемно-проектного навчання, що забезпечує реалізацію у професійно-технічній освіті ідей продуктивного навчання, за якого освітній процес має результатом індивідуальний досвід продуктивної діяльності. Це дозволяє досягти формування і розвитку «компетентностей вищого рівня»: вміння проявляти ініціативу, брати на себе відповідальність, переконувати колег і аргументувати свою позицію; виявляти вольові зусилля при досягненні довгострокових цілей; правильно ставитися до труднощів, проблем, відсутності знань працювати в команді; шукати й використовувати інформацію, публічно презентувати результати своєї роботи.

Визначено передумови застосування проблемно-проектної технології навчання: динамічні зміни у професійній діяльності кваліфікованих робітників легкої промисловості (кравців), які потребують підвищення рівня конкурентоспроможності та мобільності на ринку праці, що зумовлює вдосконалення змісту професійної освіти у професійно-технічних навчальних закладах.

Розкрито доречність використання елементів проблемного та проектного навчання для організації пізнавальної самостійності учнів, яка реалізує парадигму навчання в діяльності, передбачає інтеграцію знань з різних навчальних дисциплін навколо певної загальної проблеми, позитивно впливає на засвоєння всіх компонентів змісту освіти на кожному занятті.

Обґрунтовано необхідність поєднання проблемного та проектного методів у єдиний – проблемно-проектний – у закладах професійно-технічної освіти при проведенні теоретичного та практичного навчання, що активізує навчальну діяльність майбутніх робітників (кравців), забезпечує баланс між теоретичними та прикладними знаннями, поглиблює дослідницький, пошуковий характер освітнього процесу, робить ефективним формування ключових, загальнопрофесійних та професійних компетентностей, дозволяє сформулювати програмні результати навчання та підвищити їх практичний статус.

***Ключові слова:** професійна підготовка, професійно-технічна освіта, майбутні кравці, проблемний підхід, проектне навчання, проблемно-проектна технологія.*

Formulation of the problem. The main priority of VET institutions today is to provide training for skilled workers in various fields. Thanks to a wide selection of offers, everyone can choose a profession that is fully in line with his / her abilities and interests and will help him / her to further find an interesting job.

Teachers working in educational institutions within the field of vocational education provide their students with all the necessary knowledge to develop their chosen profession. work on the development of competence and professionalism, create all conditions for the

education of general and professional culture. You can also take pre-vocational training, retraining and advanced training in such institutions. Vocational education makes it possible to obtain a profession that is in line with the interests and abilities of the students, but the quality of vocational training of future skilled workers in these educational institutions has recently not fully met the requirements of modern production and services and the prospects of socio-economic development of the state.

Modern institutions of vocational education should inevitably take into account that technological development of industry, constant increase of requirements of employers to the professional-qualification level of workers, crisis phenomena in the socio-economic development of Ukraine necessitate constant updating of the content of vocational training of production personnel, wide technological introduction. Solving this problem is a priority direction of the state strategy of reforming the vocational education system. At the same time, dynamic changes in the professional activity of skilled workers working in light industry enterprises, such as tailors, require increasing their competitiveness and mobility in the labor market, improving the content of vocational education in vocational schools. The purpose of modern vocational education is not only to give knowledge and skills to future workers, but also to form an independent personality, ready for creative activity. The formation of such a personality of the worker involves the formation certain outlook, characteristic features, value orientations, among which creativity is given the main place, so one of the most important tasks of modern education is mastering the means and methods of creative activity, gaining experience of their successful application in professional practice.

The foregoing leads to the recognition of the active role of students, the development of their creative potential, requires widespread introduction into the pedagogical practice of progressive ideas of complex training, which in turn, implies a reorientation from the traditional paradigm of education to use system-activity and competent scientific approaches. Such changes help to create conditions for the cultural and personal development of students on the basis of the formation of universal educational actions, which provide the formation of competences in the required subject areas of knowledge, and also contribute to a holistic view of their own life trajectory. Teachers need a constant search for pedagogical innovations, holistic introduction to the professional (vocational-technical) education of the latest pedagogical technologies, in particular - problem-design. The most important advantage of such technologies in the process of professional training of skilled workers is their developmental function - formation of research skills of self-education ability, promotion of professional development, emergence of professionally important qualities.

Analysis of research and publications. The ideas of the problem of education are traced in the pedagogical concepts of Socrates, J.-J. Rousseau, A. Disterweg, L. Tolstoy; in the first. gender Twentieth century. they were found in the writings of J. Dewey and J. Bruner; principles of the concept of problematic learning at different times were developed by T. Kudryavtsev, I. Lerner, A. Matyushkin, N. Menchinskaya, V. Okon, M. Skatkin, N. Talizina, I. Yakimanskaya and other scientists.

The issues of selection and content of project assignments, as well as the methods of performing creative projects have become a subject of study in national and foreign pedagogical literature. The historiography of the method of projects is traced in the works of D. Dewey, W. Kilpatrick, E. Collings, S. Shatsky and others. In domestic periodicals we find publications by A. Avramenko, V. Berbets, A. Vdovychenko, A. Kaspersky, O. Kobernik, V. Sidorenko, A. Tereshchuk, L. Khomenko, S. Yashchuk. In recent years, interesting and promising developments of modern researchers on project activity have appeared (V. Gargin, V. Denysenko, I. Kolesnikov, S. Xionz, Z. Kurland, M. Pelageychenko, O. Pehota, L. Savchenko, O. Sagan, A. Semenova, N. Tverezovskaya, A. Tereshchuk, R. Khmelyuk,

V. Yurzhenko and others). In the works of T. Berbets, O. Beloshitsky, V. Vdovchenko, V. Vyshnevsky, N. Dubova, P. Levin, N. Matiash, T. Machachi, V. Symonenko, B. Tereshchuk, V. Titarenko, V. Tutashynsky, S. Yaschuk and others. The essence and importance of the use of design-technological training in the work preparation of pupils and students are substantiated.

The purpose of the article. Teachers' ability to develop and apply in their own professional activity of problem-design training requires appropriate training. Our study is dedicated to solving this problem. Modern teachers of vocational education, realizing their right to copyright approaches, their own choice and design of teaching technologies, should realize that the future is due to problem design pedagogy, which implements the paradigm of learning in activity; its development is connected with the implementation of problem and design methods (complex methods), which involve the integration of knowledge from different disciplines around the tasks of the professional preparation. To ensure the cognitive independence of students in vocational schools requires the use of elements of problem and project training, which has a positive impact on the assimilation of future skilled workers, such as tailors, all components of the content of education at each lesson.

Presenting main material. Problem education is focused on the formation of the foundations of the creative activity of the individual, influences the development of his creative thinking. Problem-based learning is based on a personalized approach to organizing the process

teaching. In pedagogical literature, there are a number of attempts to define problematic learning: V. Okon understands problematic learning as "a set of actions such as organizing problematic situations, formulating problems (gradually learners learn it themselves), providing them with the necessary assistance in solving problems, testing these solutions. and, finally, to guide the process of systematization and consolidation of the acquired knowledge" (Okon V., 1968, p. 68). I. Lerner sees the essence of problematic learning in that the student, under the guidance of the teacher, "participates in the solution of new cognitive and practical problems for him in a certain system that meets the educational goals" (I. Lerner, 1980, p. 82). T. Kudryavtsev understands the advantages of problem learning in mastering "generalized knowledge and principles of problem solving" (V. Kudryavtsev, 1991, p. 23). Offered the definitions reflect the essential features of problematic learning (specifically organized self-directed activity of students; tailored to determine the purpose and principle of problematic activity of the teacher; specificity of the content of learning).

The main element of problem learning is the "problem situation", which has its functional characteristics. A problem situation is a situation in which the subject wants to solve complex tasks for himself, but he lacks the relevant information (knowledge) and he must find it independently (Okon V., 1987, p. 229). The main element of the problem situation is the unknown, the new, what needs to be opened, the knowledge to perform the task correctly, to take the necessary action. The problematic situation has three main components: the need to perform such an action that creates a cognitive need for a new one; the unknown to be revealed in the problem situation that has arisen; students' abilities in accomplishing the task, opening a new one in the analysis of conditions (Matyushkin A., 1972, p. 60). From historical and pedagogical researches it is known: at the end of XIX - beginning. Twentieth century in European pedagogy began to develop a research approach to learning. on the basis of which a number of new approaches to teaching were built: "laboratory-heuristic" (F. Wintergalter), "experimental-research" (A. Gerd), "heuristic" (Armstrong), "natural-science" (A. Pinkevich) " method of projects "(W. Kilpatrick), "Dalton plan "(D. Dewey). The research method was used mainly in the teaching of subjects of the natural cycle, the essence of it was to build such learning technologies, under which the one who was taught, took the position of the discoverer of new knowledge. Feature of ideas research activation of the training was that their supporters focused on the external stimulation of cognitive activity, which was achieved by asking

new questions, demonstrating empirical facts and more. It was important to provide a situation of difficulty, to cause cognitive interest, then - to plunge into the element completely independent, not controlled by the teacher search (because any control was perceived as a return to the positions of authoritarian-dogmatic teaching). Thus, scientists have realized the need to destroy the foundations of the dogmatic system of education and to build a theory and practice of education of a fundamentally new type. The method of projects became a practical embodiment of the ideas of pedo-centrism, which put the interests of the learners at the center of the educational process. In the beginning of the last century in the USA a whole project movement emerged: the schools of the future were characterized mainly as project training (U. Kilpatrick, J. Dewey). In parallel, interest in project training arose in Russia (S. Shatsky); the use of the project method was based on the idea that in the process of certain projects, students will be able to it is most interesting and effective to acquire knowledge of the basics of the sciences and the skills of their practical application. On the basis of the theoretical ideas of J. Dewey, his followers laid the foundations of a project-based learning system, during which the students, with the help of the teacher, created useful products of activity. Such training fulfilled the goals of advance development, autonomy and activity.

Project activity today means purposeful activity in the creation of educational, educational, pedagogical, cultural, technical or industrial product (scientific research, creative work, publication, software) security, etc.). Educational project activity is a specially organized activity of students, aimed at solving a learning task (problem), which implies the achievement of a real practical result (product).

In modern professional education, project technologies provide the realization of productive learning ideas, in which the educational process results in individual productive experience; in this case, the formation and development of "higher level competencies": the ability to take the initiative, take responsibility, persuade colleagues and argue their position, to show willpower in the achievement of long-term goals, properly treat difficulties, problems, ignorance, work in a team, seek and use information, publicly present the results of their work, etc. (Theory and practice of project training in vocational schools, 2019, p. 126). No less important feature of project training is the ability to demonstrate their values, to try individual styles of behavior, to participate in research.

In the process of research it is found out: project training provides students with the opportunity of real activity, in which they can show their personality, enrich it. Application of project technologies in vocational education according to the well-known classification is the dominant activity of future specialists. The results of the research show that teachers use information projects most often. In particular, the rating of project technologies by the frequency of their development and use by teachers of institutions of vocational (FE) and vocational-technical (VET) education (hereinafter, FE (PA) O) is as follows:

- (1) - information projects;
- (2) - research projects;
- (3) - practice-oriented projects;
- (4) - creative projects;

(5) - role-playing projects (Preparation of pedagogical staff of vocational schools for the development and application of design technologies of vocational training: training course, 2019, p. 7-8). A separate assessment was related to the use of internet projects (in particular, web quests that may be different in content), and was the lowest. Therefore, T. Gerland is most often found in the professional training of future skilled workers educators use information projects, the product of which is educational information, which may have a variety of presentation (abstract, essay, dictionary, multimedia presentation, etc.). They have also used research projects that involve the study of students or other phenomena using empirical

methods (such as questioning, interviewing). Rarely, in the course of the training of future skilled workers, pedagogical workers use Internet projects, in particular, web-based quests that provide problematic tasks with elements of role play (Gerland T., 2016).

Analyzing problem and project technologies of learning, we note that problem-based learning, as well as project-oriented, is oriented towards development of creative activity, influences the creative thinking of those who are taught; these technologies are based on a person-to-person approach to organizing the process of vocational training in the AP (PA).

As you can see, project activity is closely related to the problematic and is inherently creative. Based on this, H Matthias rightly states that creative project activity is the activity of creating products and services that have an objective or subjective novelty, have personal or social significance (Matiash N., 2000, p. 37). Project training is sometimes seen as a form of problematic where the teacher only sets the task and determines the end goal, and activities to gather the necessary information, the selection of research methods, the analysis of the results obtained, perform students. This training is based on important problems taken from real life, familiar and important for mastering the future profession, addressing what future tailors need to learn to use the theoretical knowledge they have learned. The teacher can point out new sources of information, but can simply direct the opinion to the desired direction of self-search, to stimulate interest in the problem, which involves the possession of a certain knowledge base and through a project activity that solves one or a number of issues, to show the possibility of practical application of the acquired professional knowledge. The implementation of project-based training, usually based on problematic situations, takes a long time, the main work is carried out mainly in the afternoons, and the teacher acts as a consultant. The result of such work (study project) will be similar to a diploma project, coursework, laboratory or creative work. Therefore, problematic and design teaching technologies in vocational education have common aspects: involve real problems and situations in the educational process; based on real educational goals; contain intermediate (step-by-step) and final evaluation of the work; the student is in the center of professional activity, and the teacher directs educational or creative research; the training environment becomes intrinsically attractive and motivational, providing close cross-curricular communication; the teacher as a mentor provides collaboration, students learn how to solve problems and apply critical thinking.

As the experience of problem-professional training of the future testifies tailors in domestic vocational education institutions, it is focused not only on the assimilation of future knowledge specialists, but also on understanding, the use of what has been learned in practice, promotes the excitation of mental activity, a significant increase in the level of mastering the educational material. In addition, during research, students have a need for and interest in learning new information that determines the independent choice of methods and methods for the processing of nodes, taking into account the properties of materials, as well as the independent search for alternative methods of solving professional problems that are the key to further becoming a person as a professional. Working on a training project, solving problem-solving tasks increase the independence of future tailors, contribute to the formation of cognitive interest, personal motivation, the development of mental abilities, which positively influences the growth of professional skills, the ability to compete in the modern market.

Conclusion. So nowadays, problem-design technologies are gaining widespread adoption in vocational (vocational-technical) education, as they intensify the educational activities of future qualified workers (tailors), provide a balance between theoretical and applied knowledge, research, search character of the educational process, the formation of key, general professional and professional competences, allow to form programmatic learning outcomes and improve their practical status. At the same time, despite the attention of teachers of vocational (vocational-technical) educational institutions (PA) on problem-design activities

of application of problem-design training technologies in such institutions have not yet acquired a systemic character. In the broad sense, the universal criterion for the quality of the development and application of problem-design technologies is their practical use, which is manifested in the creation of socially useful products of activity, but nowadays the preference is given to the application of certain types of problematic issues, situations, lack of cross-curricular projects, the project activity does not sufficiently apply the opportunities of information and communication technologies. Contemporary teachers, realizing their right to copyright approaches, their own choice and design of learning technologies, should realize that the future is in problem-design pedagogy.

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APPLICATION OF PROBLEM-PROJECT TECHNOLOGY OF FUTURE TAILORS' EDUCATIONAL ACTIVITY IN VOCATIONAL (PROFESSIONAL-TECHNICAL) INSTITUTIONS

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The article analyzes the main methodological approaches to the organization of the process of training future tailors using problem, project, problem-project training, which ensures the implementation of ideas of productive learning in vocational education, in which the educational process results in individual experience of productive activity. This allows to achieve the formation and development of "higher level competencies": the ability to take the initiative, take responsibility, persuade colleagues and justify his/her position; show strong-willed efforts in achieving long-term goals; to treat correctly the difficulties, problems, lack of knowledge to work in a team; look for and use information, publicly present the results of his/her work.

The prerequisites for the application of problem-based learning technology are defined: dynamic changes in the professional activity of skilled light industry workers (tailors), who require increased competitiveness and mobility in the labor market, which leads to improving the content of vocational education in professional technical institutions.

The appropriateness of using elements of problem and project learning for the organization of cognitive independence of students is revealed, which implements the paradigm of learning in activity, provides the integration of knowledge of different academic subjects around a certain common problem, has a positive effect on learning all components of the content of education at every lesson.

The necessity of combining problem and project methods into a single – problem-project method – at the institutions of vocational and technical education in conducting theoretical and practical training, which intensifies the educational activities of future workers (tailors), provides a balance between theoretical and applied knowledge, deepens research, exploratory nature of educational process, makes effective the formation of key, general and professional competences, allows to form program learning outcomes and increase their practical status.

Keywords: *vocational training, vocational education, future tailors, problem approach, project learning, problem-project technology.*

Надійшла до редакції 3.09.2019 р.