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Innovative Pedagogical Technology in the Education and Training System: The Importance of Project Method Technology

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Abstract: *In the following article, the importance of education and upbringing in higher education institutions in the development of the state and society, the classification of innovative pedagogical technologies and the significance of one of the innovative pedagogical technologies - project method technology, the methodology of its implementation in the class, the main thesis of this technology in the training of specialists and their social and professional role in the formation of competence is demonstrated.*

Keywords: *education, upbringing, quality, innovation, pedagogical technology, project method, scientific and creative thinking, independent education, competence.*

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Introduction

Statesmen and philosophers stated that education is an extremely significant concept in all times of the history of human civilization, and great amount of attention was paid to it. In Abu Nasr Farabi's (870-951) work "The City of Virtuous People", it is pointed out that every citizen of the society is a virtuous person, regardless of his position and social status. A virtuous person is a person who knows and follows all the laws and regulations of his country and also he is a master of his profession, and sacrifices his life for the Motherland when necessary [1] .

As the great enlightener A. Avloni stated, "Education is a matter of life or death, salvation or destruction, or happiness or disaster" it was as important and relevant at the beginning of the last century as they are today.

In accordance to G. Spencer's chapter on education, "The process of self-improvement should be given a large place in education as humanity has progressed only through independent learning. Disterverg states that "Teach the student to work, accustom him not only to love work, to adapt to it in such a way that work is absorbed into his body, teach him that it is unthinkable for him not to learn something without his own strength." It shows that the main point in education should be directed to the development of thoughts and thinking in students, the formation of feelings of confidence in their abilities, their knowledge, and teaching them to study independently.

Problem setting and it`s actuality.

The education quality is primarily defined in accordance to the quality, level and qualification of knowledge distributors. They are the teaching staff of a particular higher education institution and their scientific potential. They impart knowledge to learners using various pedagogical technologies and methods. Because of that, the modernity of the technology of knowledge transfer, the level of qualifying students with its help, the strength and validity of the acquired knowledge also play an important role. It is also significant for the graduate to know how important the acquired knowledge is after employment in production. This, in turn, requires the development of the integration of education and production. Scientific and technical progress creates new tools and weapons. For this reason, in order to introduce modern technologies and technical means into production, to organize the production of competitive products suitable for the world market, the graduate is required to continuously study new innovative technologies and techniques in his production work, that is, there is a need to gain knowledge.

The technology of developmental education used in the modern education system, the technology of gradual formation of mental movement, the technology of social pressure, the technology of absorbing knowledge fully, the technology of different levels of teaching, the technology of adaptive teaching, the technology of programmed teaching, the technology of problem-based teaching, the technology of modular teaching, the creative activities of future specialists. innovative technologies, such as development technology, project method technology are aimed at this.

Innovative pedagogical technologies are a set of modern teaching methods and technical tools aimed at educating students (audiences) in a certain field (subject) and forming a person in the educational process [2].

There is no doubt that the application of these kinds of technologies in the existing educational environment will assess to truely absorb the knowledge, skills and qualifications of students, to clearly determine the level of professional competence in them, to ensure the competitiveness of trained personnel and leads to more precise and effective work in production enterprises. One of the such technologies is project method technology.

Research methods. In the following paper, methods such as analysis of scientific and teaching-methodical literature, pedagogical observation, comparative analysis, generalization, pedagogical experiment-test, mathematical-statistical analysis were applied.

Research outcomes and discussions.

The project method is considered a complex method and incorporates all the innovative pedagogical methods currently used in the educational process.

Currently, the project method is widely used in the educational process of the United States, Russia, Great Britain, Belgium, Israel, Finland, Germany, Italy, Brazil, the Netherlands and many other developed countries as the most common pedagogical technology in the world.

From the origin of the projects style to the development period, many clear and complete opinions have been expressed about this project. For example: labor training (K.V. Woodward, N.K. Krupskaya, S.T. Shatsky), vocational training (N.E. Erganova, G.V. Rogova, F.M. Rabinovich), differential training (N .P. Guzik, E.A. Yunina, I.E. Whit), person-oriented teaching (I.S. Yakimanskaya), pedagogical cooperation (V.F. Shatalova, V.A. Sukhomlinsky, I.P. Volkov, L.S. Vygotsky.) The research work of such scientists as I.G. Voronchikhina, M. Knoll, V.N. Sternberg are devoted to the history of the emergence of the project method technology.

In his analytical works, M. Knoll emphasizes that the project method did not originate in American pedagogy. This project originated in Italian architectural workshops in the 16th century [3].

E.S. Bolat divides the history of the origin and development of the project method into the following five stages [4]:

1. 1590-1765 years. European school of architecture (workshop) the beginning of design activities:
2. 1765-1880 years. Using the project as a teaching method in systematic pedagogical activity and its development in the American contingent;
3. 1880-1915 years. The period of using the project method in production education and general education schools;
4. 1915-1965 years. Reconsidering the method of projects and applying it in the European education system;
5. From 1965 to the present time, new inventions in the project style and the third period of the spread of this style in the international education system.

The reason why the method of projects is used in the current period is that it allows to analyze problems according to the developmental period using innovative pedagogical technologies. It should be noted that until the beginning of the 20th century, this method was mainly used in schools from the point of view of production, i.e., to obtain knowledge related to production. R. Stimson, a teacher at the University of Massachusetts, teaches his students about the basics of growing agricultural crops while teaching, he relied on the ideas of the American philosopher and pedagogue Dj. D'yu, and taught his students first theoretical education, and then the application of this theory in practice. V. Kilpatrick, compared with D. Dew, was more influenced by E. Thorndike. According to E.Thorndayko's "laws of teaching", it is said that actions performed by the student in accordance with his ability and personal desire bring him more satisfaction than activities based on a certain assignment. According to this law, V. Kilpatrick concludes that the student's psychology, his desire, his ability play a decisive role in the educational process.

In modern pedagogy, various comments and explanations are given to the method of projects. Including E.S. Bolat, G.M. Godjaspirova, N.Yu. Pakhomova [5], M.L.Serdyuklar [6], V.N.Sternberg [7], in their scientific works revealed the didactic aspects of project style and gave their definitions.

In practice, V. Kilpatrak's article "Project Method" (1918) was used before the publication of the style of projects. Especially this method is widely used as the most effective method in the sciences of practical importance. In the USA, the idea of constructivism, the problem-based approach to learning, and research methods have a strong place in educational institutions. In Russia, the style of projects has been known since 1905. A small group led by pedagogue S. T. Shatsko promoted this method. Although the method of projects has historically been used in the educational process for a long time, its essence, content, and pedagogical technologies for its use have not been fully revealed.

In practice, the difference between creative work, partially practical activity and project is almost not detected. Of course, looking at a creative work or a project in the same context does not allow the wide use of the project method in practice, on the contrary, it reduces its effectiveness. Therefore, it is necessary to analyze the content and essence of the project method, the fields of application and the experiences of using this method in practice.

The use of the project method in the educational system demonstrates a key role in fully solving the following tasks:

- ✓ teaches the student to think independently and work on information;
- ✓ teaches to think and draw reasonable conclusions based on clear evidence and laws of science;

- ✓ teaches to make independent decisions based on clear evidence;
- ✓ forms the ability to work in a team by performing various social roles.

The above intellectual and socially important skills and qualifications are included in the activity and competence group that determine the impact of a person with the professional and social environment. Of course, project activity is different from creative activity. Because any scientific research and intellectual activity relies on creative thinking and it cannot be imagined without creative thinking. When thinking about creative activity, the ideas of creative authorship and the ways of its implementation defined by the author are understood. For example, someone may like the creative work of an author, and someone may not prefer it. Because it is considered a single author`s idea and work. And the case is different in project method. There the scientific methods of research are used and there will be objective conditions for its implementation, clear evaluation criteria. The chosen method is based on clear evidence, theory, knowledge, observation and experience [8].

Students learn to work in a group (team) on a specific example of work on a project, that is in the role of a leader who is responsible for all the results of the project, makes the final decision by agreement, distributes tasks among the group, or listens to his partners, is able to see alternative decisions, and is an employee who fulfills the task assigned to him and they should gain experience by playing the role.

Certainly, any specialist should know how to work with information in his field, be able to collect information on a given task, compare its indicators with previous ones, make reasonable conclusions, generalize, evaluate, use the acquired knowledge in developing problems, prepare or develop it as a drawing or a concrete object. It is necessary to be able to make an offer for the speech, prepare a scientific report, and confidently present the results of his/her evidence and activities.

Particularly in the modern conditions of innovative education, a scientific and creative approach is required from a science teacher in the creation of didactic support for distance education, which is widely developing, that is, in the development of electronic educational resources [9,10,11]. It is in such situations that the use of the project method is important. In order to solve a problem in project activities, it is required to use a set of knowledge in different fields in a generalized manner. This is a necessary and valuable competency for any future professional. The method of projects plays an important role in the formation of students' professional competence, as well as the culture of teamwork, social competence related to the organization of joint activities on the project.

Usually when working on a project, it is necessary to carry out additional research such as experimental, social (survey, questionnaire, interview organization, etc.), relative-comparison method, mathematical and sometimes static processing of the obtained results. In such circumstances, it is necessary to involve relevant specialists. Organization of such activities, finding other specialists, necessary tools and materials is the task of the project manager (leader), coordinator. It belongs to the sphere of communication culture and communicative skills.

Summary

1. "Project method" is an innovative pedagogical technology that responds to the current reforms in the field of education and displays an important role in improving the quality of education.
2. Project method technology is a flexible model and training system with subjective and objective innovations, gaining practical importance, and focusing on the full use of the individual's abilities through the development of the student's intellectual and physical capabilities, independent work and creative abilities under the supervision of the teacher.

3. Project method technology is not a universal method designed to solve any complex didactic task at once. It is a whole didactic system and is an element of organization of person-oriented education.
4. The practical application of the project method technology requires a lot of preparation from the teacher and students. It is necessary for the teacher to master various innovative methods of conducting educational activities, to have a strong speech culture, and to have a lot of experience in the practical application of interactive teaching technologies.
5. The application of project-based technology in educational performances involve students to have a great number of intellectual capabilities such as analysis, comparison, synthesis (connecting and verifying events), research, pre-assessment, information search, evaluation, and so on.

References

1. Rahimov O. D., etc. “Contemporary education technologies”. //T.:“Science and technology” Publishing House. – 2013. -page170.
2. Rahimov, O. D., etc. "Modern educational technologies." Tashkent," Science and Technology" Publishing House (2013).
3. Rahimov, O. D. Innovative pedagogical technologies: the project method as a technology that improves the quality of education //Karshi, TITU Karshi branch. – 2013. – T. 80.
4. Bolat E.S., Bukharkina M.Yu. Modern pedagogical and information technologies in the education system. M.: «Academy», 2008
5. Pakhomova N.Yu. Project based learning - what is it? //Methodist, №1, 2004.
6. Serdyuk M.L. The method of projects as a means of developing the creative abilities of students. (On the example of the educational field - Technology): dis. … candidate. ped. Sciences. Kirov, 2002.
7. Sternberg V.N. Theory and practice of the "method of projects" in pedagogy of the twentieth century: dis. candidate. ped. Sciences. Vladimir, 2002.
8. Rakhimov O.D.1, Ashurova L. Types of modern lectures in higher education, technology of their design and organization. // Problems of modern science and education. 2020. №12(157), part -1. page.41-46. DOI: 10.24411/2304-2338-2020-11203/
9. Rahimov O.D. Requirements and technology for creating e-learning resources //Contemporary education (Uzbekistan). 2016. T. 202. – Page. 45-50.
10. Рахимов О.D. Электрон таълим ресурсларини яратиш талаблари ва технологияси //Современное образование (Узбекистан). 2016. №. 2. – С. 45-50.
11. Doniyorova G. Sh, Sharipova N. Kh, “The Role of Visual Content in an English Class” Central Asian Journal of Philosophy and Literature. Volume: 03 Issue: 05 May 2022.