

## THE ADVANTAGES OF PROJECT-BASED TEACHING TECHNOLOGY.

**Mustafoyeva Sarvinoz Xolmurodovna**

*trainer-assistant teacher, Department of Languages,  
Samarkand State Medical University,*

**Keywords:** *Teaching technologies, learning methods, education, improvement, self-realization and etc...*

**Anntation:** *At present, the education system in our country is in a situation where there is a necessity to review approaches to the training and education of young people. Improving the quality of education in Uzbekistan proceeds from the need to prepare graduates for active participation in society, professional and personal self-realization and an ability to solve the challenges and problems that confronts them with contemporary reality. Development and improvement of professional competence of a person is considered at all levels of education as the most important task. Competence - a word that has already firmly established in the description of the results of education. The modern world demands to increase the amount of knowledge and the quality of their learning and ability to apply them in practice and to create something new on the basis of the information received. These goals virtually impossible to achieve without the use of teaching methods that would make students not passive listeners, but active participants in the learning process. Such an opportunity came with the use of modern interactive teaching technologies, the scope of which is very wide.*

The world of education has undergone dramatic changes over the last few decades that can be described in theory, if not always in practice as a paradigm shift. This paradigm shift can be defined as the shift from traditional teacher- and subject-centered teaching to a student-centered approach in which the needs, interests and learning processes of students are the main focus. Two main sources underpin this change: research that has discovered or sometimes rediscovered the importance for learning of intrinsic motivation and autonomy, social and constructivist processes and active life experiences; and the technological changes that led to the communication and information revolution, which greatly expanded the scope of human communication and interaction and largely made the old way of learning focused on the transfer of redundant knowledge.

According to one of the most popular definitions, project-based learning is a learning method that engages students in the exploration of knowledge and skills through an enhanced research process built around complex, authentic questions and carefully designed products and tasks. The purpose of this method is to promote the acquisition of knowledge, skills and aptitudes by increasing student participation in

learning processes and focusing on the practical dimension of learning and its relevance to the lives of students and the society in which they live. PBL has similar characteristics to other teaching methods such as problem-based learning and inquiry-based learning. Like these methods, it is based on the independent research learning of learners and transfers much of the responsibility for learning processes and outcomes to learners. PBL has several key traits that unite to shape its unique character. This includes:

1. In-Depth Investigation. The requirement to apply a rigorous academic approach to research and to participate in the entire research process, including the formulation of questions, the search for sources, the collection of information, the analysis and synthesis of results and the application of information.

2. Authenticity. The project should include realistic components that go beyond simulations or hypothetical exercises and link the project to the real world. These components include, for example, the final product, the quality criteria of the project, the tools used throughout the project, or the audience to which the project is presented.

3. Active learning. Students are creative partners in the creation and application of knowledge.

4. Freedom and autonomy. Part of the decisions regarding the content and means of training and the implementation of the project, students make on their own.

5. Difficult questions or problems. Learning is based on questions or problems and finding answers motivates the learning processes and the project. In order to meet the requirements of in-depth research and authenticity, questions and tasks must be structured in a way that allows for thorough study, be interesting to students and relevant to their world. For these reasons, it is desirable that students participate in the formulation of questions or problems.

6. Cooperative learning. Although in theory work in PBL can be carried out individually, co-education in small groups is preferred. This preference is related to the notion that learning is a social process and suggests that working together encourages students to be more involved and responsible and also helps them improve their social skills.

7. Product and product presentation. Every project should yield a final product and the final product should be presented and explained to an audience, preferably one that has an interest in the project and that goes beyond the confines of the classroom. The possible range of products is large and includes, for example, presentations, short films and exhibitions, programs for enhanced efficiency, games and instruments. While the learning generated throughout the process is the main goal of the project and not the end product, the latter is certainly an important component of the method, giving it a unique task-oriented and hands-on quality and helping to distinguish it from its pedagogical relatives.

There are many universities where PBL is introduced as a central teaching method, but in many universities it is completely absent and in others it is used on a limited and uneven scale. The limited use of PBL in academia is contrary to the expectations of proponents of this method, especially in light of the benefits it offers. Among the most notable benefits noted by the researchers are the following:

- Increased student motivation by being able to choose topics and working methods that they prefer. The authenticity of the work, that is, its connection with the real world, also contributes to motivation.

- Learning a variety of skills through in-depth study, independent work (individual and group) and tangible results. All of this requires students to integrate and develop their abilities for learning, collaboration and productivity.

- Good preparation for a professional career through the experience of authentic situations and the opportunity to connect with the public and professional partners that make up the future work and career environment of students.

- Suitability for a wide range of students and learning styles due to relative autonomy in the choice of teaching methods and the ability to share work among group members.

- Compliance with the information age. PBL encourages students to use the full range of modern communication and information technologies. These technologies offer access to information and data, provide the basis for a range of possible products and enhance communication between groups, between group members and between students and teachers.

The introduction of PBL in higher education has been accompanied almost from the beginning by the integration of technology. This integration is natural for the reasons outlined above. The degree of technology integration in PBL varies; in some courses it is only integrated into part of the training, while in others the training and the project are entirely technology-based. While the successful integration of technology into PBL teaching can increase the effectiveness of the method, help achieve its goals and facilitate its implementation, it should be remembered that the use of technology does not guarantee the success of the teaching; technology should be used in an informed manner and adapted to pedagogical goals and educators should resist the path that leads to technology becoming a major issue and goal of learning. The integration of technology into PBL teaching is sometimes done through the development of specific and specialized learning tools, such as computer programs designed to improve the efficiency of dividing students into groups or dedicated websites designed to facilitate collaborative and estimates. However, much of the integration of technology into PBL teaching occurs through the use of existing technology tools. In what follows, I explore the most prominent of these tools and how they can contribute to the implementation of PBL and its underlying pedagogical principles in higher education.

Almost all higher education institutions in the world now use learning management systems to assist in the teaching and learning process by creating a computerized environment that can be organized in accordance with pedagogical goals and needs. At higher education it is used a wide range of LMSs such as Moodle, Blackboard and Canvas; however, most of these systems have similar characteristics and the differences between them are how different LMSs use these characteristics and the support system for each product.

The LMS provides an answer to the basic needs of a computerized work environment in PBL. They provide a virtual space for managing discussions between students, for coordinating work and for organizing sources, thus encouraging collaboration between students and facilitating group work. Two LMS tools to maximize PBL performance and to offer an answer to the problems associated with its implementation are a peer review evaluation and a blog, both of which support the formative assessment system required in PBL. For example, a lecturer can track blogs (individual or group, private or public), give feedback to authors as they work and monitor their actions and progress on a project. Another important tool is the wiki, which allows you to create information and content pages together. Wiki is particularly suited for PBL as it encourages the independent structuring of knowledge while developing skills such as critical thinking, collaboration and communication. Wikis can be used in many ways and to varying degrees to promote learning and projects. For example, the wiki can be used to summarize group discussions and create an archive of group activities. In addition, the wiki can be implemented to build a knowledge base as a part of the final product consisting of a literature review and a class presentation.

Google also offers a wide range of tools, for example, store content (Google Drive); independent research (Google Books, Google Scholar); collaboration (Google Groups, Google+, Google Docs); and creation of virtual products (Google Docs, Google Slides, Google Sites). Two important advantages of Google tools are their accessibility to any user from any Internet-enabled device and the fact that they are part of the real world in which students operate and will operate in their non-academic lives. As with LMS, Google tools can be used to various degrees and in different combinations depending on the learning objectives. Some instructors simply use Google Drive to upload materials, providing students with some preliminary information about the course, while others use Google Docs to monitor student learning progress and provide feedback (the ability to view each member's personal contributions, even in a group documents allows you to combine individual and group assessment). Thus, in practice, elements of group and independent work, formative assessment and an authentic product might be implemented.

The term mobile technology is a general term for technology tools such as tablets, laptops, portable drives and smartphones that can be easily carried from one place to another and provide immediate access to information. Despite tremendous

progress being made in the capabilities and accessibility of mobile technologies, these tools are less used in academic learning, including teaching using the PBL method. However, some studies have shown that students in PBL courses use mobile technologies, in particular smartphones, even if they have not been instructed to do so. For this reason, mobile technology expands and empowers the technological elements that integrate so successfully with PBL, it is recommended to use this technology in a structured way to promote and implement the method. Mobile devices can be used to document learning processes. Such documentation can also be useful in project management and evaluation. Apps like Evernote and Voice Thread make it easy to document, save and share different types of media, as well as plan learning and manage projects. The instructor may ask students to collect evidence in a portfolio as part of the assessment process, or may provide students with feedback at various stages of the process to guide and improve their work. Applications such as WhatsApp and Google Diary, which are easy to use and popular with students, allow quick messaging and coordination among group members. The mobility of the devices involved contributes to the authenticity of learning, that is, its integration into the real world. Students can use the apps to meet with community partners, check locations and collect data from the field. The range of applications for mobile devices is huge. However, their uncontrolled use, such as the requirement to use several applications at the same time or learn several new applications at once, can cause confusion. Therefore, the lecturer of the course must make sure that all students know how to work with the applications used in the course and must suggest specific applications. However, in keeping with the spirit and purpose of the PBL, students should be given the opportunity to choose some of the applications they wish to use.

Technology alone cannot guarantee the introduction of PBL in higher education. As a method that deviates from the generally accepted teaching-learning pattern, PBL creates many problems inherent in its implementation. To cope with these challenges, the institution needs to mobilize so that to provide the infrastructure to implement the method and address its challenges. This mobilization must take place at several levels:

1. Ideological level. The institution must recognize the importance of PBL and the principles it represents. Without such recognition, it will not be possible to carry out additional levels.

2. Remuneration level. The institution must take into account the extra time and effort required by both teachers and students in PBL courses.

3. Level of support and training. As already noted, most of the difficulties that students and teachers face in implementing PBL are related to the changes that the method requires in their roles and functions. Research has repeatedly demonstrated the need for preparatory training for PBL lecturers, especially in facilitation and assessment skills.

It is clear that technology can also be used to improve the efficiency of these methods. Today, institutions of higher education interested in promoting PBL are dedicating a website to the method, which includes materials and links intended for use by both educators and students. Similarly, educators can use the LMS websites available to them at their institutions to educate students about the method, courses and objectives and provide support upon request. Finally, another important method of promoting and maximizing the benefits of PBL is through networking with other organizations in the community. These can be commercial, voluntary, private or public bodies. Integrating students and the project into such bodies outside the academic world will immerse students in real life situations and, as can be expected, increase their interest and motivation. Moreover, such collaborations can promote students' careers and at the same time contribute to community and society. Thus, two essential elements of PBL emerge: the integration of the personal and the social and the combination of the theoretical and the practical content.

Restating the conditions of the requirements of new standards of teaching foreign languages in Uzbekistan, the teaching should be considered to be moved to a fundamentally new stage. Because innovation in this sphere is always actual and important for the formation of new linguistic methodology. The volumes of information are growing rapidly and modern methods of their storage, transmission and processing are no longer effective and computer technology provides a wide range of opportunities to increase learning productivity. In order to reach these objectives, learning process should be arranged in the way that a student becomes the subject of this process and is always ready to learn with great interest. Therefore, utilizing interactive methods in order to create interactive environment in foreign languages lessons has always an undeniable advantage. In conclusion, using interactive learning technologies in teaching foreign languages might be expected to solve the methodological problems than traditional teaching aids do. However with the help of computer technology, it is done faster as they have following facilities: ICT's have a significant amount of memory and high speed; they provide an opportunity to analyze the responses and requests of students that are very important to work independently. As a result, interactive learning technology assists students to do self-education and teachers to improve their way of approaching to an individual learner and to the class. Furthermore, interactive learning technologies which contain cultural and didactic potential are currently used on a worldwide scale. However, for the efficient and effective use of interactive learning technologies in teaching foreign languages scientific research is always required to be done, the results of which allow us to define general and specific trends to control material selection, as well as significantly update methodological tools and methods of instruction. All of the above is aimed at the fact that foreign languages are studied as an instrument of information exchange, cooperation between national cultures, mastering the individual human values and

therefore, increasing the country's need for specialists who are capable of speaking foreign languages for effective communication on different topics. In this regard, we concluded that most important tasks any teacher does is to use interactive learning technologies for the following purposes of teaching: creating conditions for practical language learning for students; selection of such teaching methods that make each student show his or her activity and creativity while learning; developing student's educational activity in the process of learning a foreign language. Overall, innovative educational technology in foreign language learning requires teachers to use a student-centered approach which has already been proved to be an actual part of educational psychology.

#### **LIST OF USED LITERATURE:**

1. Cerezal, F. (1996): "Foreign language teaching methods", in McLaren, N. and Madrid, D. (eds.): *A Handbook for TEFL*. Alcoy: Marfil, p. 161-185
2. Crandall, J. (1994): "Content-Centered Language Learning", in *CAL Digest*, January 1994: p. 1-6
3. Curtain, H. (1995): "Integrating Foreign Language and Content Instruction in Grades K-8", in *CAL Digest*, April 1995: p. 1-7.