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ICT IN PROJECT-BASED ENGLISH LANGUAGE LESSONS IN UKRAINIAN TERTIARY EDUCATION

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Introduction. Humanity has entered a new era that, in contrast to the outgoing "industrial age," is called the "information age." This new era also poses a new challenge for education – to prepare students for life in a rapidly changing information society, in a world where the process of the emergence of new knowledge is accelerating, the need for new professions and continuous improvement of qualifications is constantly looming. And a key role in solving this problem is played by the ability of modern men to own information and communication technologies [40]. New information technologies have become an essential part of modern man's life. Computer Assisted Language Learning (CALL) has been promoted by national/international educational documents in Europe, the USA, and Asia, and endorsed by international organizations, including the Council of Europe and UNESCO [38].

ICTs are increasingly used in the educational process every day. In today's knowledge-based world, it is very difficult to imagine teaching any subject without the use of information and communication technologies. The use of computer equipment and technology capabilities has become a real need because it allows us to create conditions for the formation of such socially significant personality qualities as activity, independence, creativity, and the ability to adapt to the conditions of the data society, as well as for the development of communicative abilities and the construction of information culture in the individual [41].

Information is currently the main resource, and informatization has penetrated all spheres of society. With the increase in the number of computers in educational institutions, their role as an actual means of improving the effectiveness of learning increases.

The development of ICT has been a solution to many problems in education, since the use of computers in the lesson serves as a source of information for the development of creative projects, operational control over the assimilation of knowledge and skills by students, providing a differentiated approach to the training of students who have diverse levels of readiness to perceive the material [50].

Moreover, the use of digital innovations in education has made extraordinary responses in exceptional times, especially valuable for teaching and learning in the period of COVID-19 and beyond [52]. We observe how the adaptation of effective digital models and methods brings unique solutions to educational challenges supporting learners and teachers in critical times.

Our study is based on the effective strategies and approaches used in the enhancement of online second language learning in some world's famous educational institutions. Here we want to name but a few of them as examples of sharing global perspective experience from a network of educators, researchers, administrators, policymakers, and instructional designers:

- 1) Florida State University's Innovation Hub and interdisciplinary project-based approach;
- 2) remote synchronous delivery (RSD) and blended learning approaches used in Yorkville University's, General Language Studies, and Philological programs;
- 3) University of California's strategies for making resources affordable to students;
- 4) resilient online assessment measures recommended from Qatar University;
- 5) strategies in language teacher education from the University of Toronto/OISE to develop equity and collaboration in the classroom;

6) speaking simulation use in second language education, gamification strategies, imaginative teaching, and assessment methods developed for online adult learners and teachers in the Nordic pedagogical university colleges [21].

These unique insights will sustain education during and beyond the COVID-19 era.

ICT in education: theoretical background

Information and communication technology (ICT) is “a wide range of digital technologies used to create, transfer and disseminate information and provision of services (computer hardware, software, telephone lines, cellular communications, email, cellular and satellite technologies, wireless and cable communication networks, multimedia tools, as well as the Internet)” [51]. But, as our research has demonstrated, the term “information” is not new. It has entered permanent use in the middle of the twentieth century. The field of “information and communication” was originally established by the works of Harry Nyquist and Ralph Hartley, in the 1920s, and Claude Shannon in the 1940s. Claude Shannon introduced this term in a narrow technical sense, in relation to the theory of communication or transmission of codes, called “Information Theory”. Information theory is based on the method of calculus proposed by C. Shannon the amount of new (unpredictable) and excess (predictable) information contained in messages transmitted through technical channels connections [46].

In the present situation awareness of the fundamental role of information in social development and the huge information technology growth rate necessitated the formation of a special information culture of the individual. For use of new computer technologies in life requires new thinking, which should be brought up by a child from elementary grades. For a current student who will live in the information society of the future, computers should become an integral part of his life [53]. Therefore, the use of information and communication technologies (ICT) in the educational process is an urgent problem in modern education.

So, with the appearance in the process of education of such component, as informatization, it is advisable to reconsider its tasks. The main ones are the following:

- 1) improving the quality of training specialists based on the use of modern information technologies in the educational process;
- 2) application of active teaching methods and, as a result, increased creativity and intellectual components of the educational process;
- 3) integration of different types of educational activities (educational, project, research, etc.);
- 4) adaptation of information technologies learning to individual characteristics of trainees;
- 5) ensuring continuity in education;
- 6) development of distance learning technologies;
- 7) improvement of the program and methodological support of the educational process;
- 8) the need for a fundamental change in the roles of teacher and student [36].

Taking into account all these tasks we will analyze the procedure of English language teaching and learning based on the example of one project-based topic.

New aims in language teaching

In the contemporary knowledge-based society, foreign language capabilities are seen as the primary area for change, and it is impossible to change society as a whole without gradual changes in the area of foreign language teaching and learning [48]. We are aware that Ukraine is joining the European educational community, thus a large transition and significant renewal are required throughout the entire system of higher education in Ukraine, including foreign language teaching.

It is crucial to comprehend how professional training must be updated in order to give Ukrainian society specialists whose skills would satisfy the demands of the modern labor market. The social framework in which specialists in the European dimension work demands, on the one hand, national identity and, on the other, transnational consciousness within the European community [39].

As a result, the “European dimension” emerged as a key element of the curriculum for lifelong learning. It should help the regional countries’ educational policies strike a balance between national and global principles. We deduced from these findings that foreign language proficiency is a fundamental requirement for professional competence for European specialists, including Ukrainians.

European professionals speak more than one European language, as is indicated in European treaties. They pick up language skills through the system of lifetime professional education. They would need to spend some time in a different country in order to interact with native language speakers [37]. Moreover, the ability to assess complex issues and phenomena in one or more professional areas within the specialty in the global context can be enhanced by having a foreign language competency.

If we speak about quality education, we must stress that contemporary postmodern society dictates new rules, especially in language education. First of all, in this part of our research, it is necessary to formulate foreign language learning goals such as practical language acquisition, linguistic and philological development of students, familiarization with cultural (regional) knowledge, training in situational communication (communicative side), development intercultural competence and cultural learning through telecollaboration [47]. Our analysis shows that the primary aims of studying the subject “Foreign Language for Specific Purposes” in the Ukrainian tertiary dimension are to develop the abilities of practical knowledge of a foreign language in a variety of speech activities within the range of topics necessary for professional needs; to use oral monologue and dialogue in the context of domestic, sociopolitical, and professional subjects; and to translate texts in the professional field [43].

An interesting chance to expand our understanding of how the general program content is associated with the development of professional competence areas is presented by the examination of the “Foreign Language for Specific Purposes” programs in the majority of the state Ukrainian universities. Our research indicates that the “Foreign Language for Specific Purposes” program has the following learning outcomes that students have to achieve as the result of studying the course:

- 1) to know the rules and norms of foreign business communication;
- 2) to be able to effectively communicate in a foreign language orally and in writing;
- 3) to influence the applicant’s general educational results, and help to lead the educational trajectory in a proper direction [45].

Therefore, based on the results of our survey, the fundamental topics for practical foreign language instruction can be separated into two categories: ordinary language and business communication. But we must stress that these categories are not isolated. They are taught interrogatively in connection with each other.

So, we think that to receive better results from learning, and solving the above-mentioned tasks to achieve the main goals, the contemporary foreign language lesson in institutions of tertiary education should be designed as a project-solving using information technology [35]. In recent years, there has been an increasing focus on this type of learning, which stimulates the intellectual and creative development of the student’s personality, activates his potential, and forms critical thinking. This type of learning corresponds to the personal-based and activity-based communicative approaches in teaching a foreign language.

The concept of a project-based learning environment

The experience of project-based teaching, accumulated by foreign universities is of undoubted interest nowadays. Analysis of the practice of foreign universities, especially in highly democratic societies such as Denmark, Sweden, and Finland indicates widespread use in the educational process of problem-based and project-based learning, which have proven themselves as effective methods of stimulating the educational, cognitive and creative activity of students.

Our comparative analysis of the contemporary European context showed that there have been a substantial number of studies on the topic of project-based English language teaching.

The findings demonstrate that Danish and Nordic academics are increasingly researching the topic of pedagogical practices employing projects and issues as crucial tools in the process of ESP training [3].

Furthermore, according to our assessment, European universities have gained significant positive experience in developing an efficient, non-authoritarian, democratic system of teaching a foreign language, with project-based learning (PBL) as its distinguishing characteristic and a key interactive learning strategy that is used in the majority of high educational institutions [44].

Through historical retrospection, we investigated that the project method was developed by an American educator W. Kilpatrick in the 20s of the twentieth century as a practical implementation of the concept of instrumentalism, first formulated by J. Dewey [2]. According to W. Kilpatrick, the main goal of the project method was to provide students with the opportunity to independently acquire knowledge in the process of solving practical projects or problems that required the integration of knowledge from different subject areas [5]. If we analyze this definition in a postmodern situation, we should rather change the term “acquire knowledge” to “develop evidence-based information”, with a strong focus on its incorporation into the process of expansion of the following three categories: skills, adaptability, and creativity [30].

European specialists in the field of language teaching methodology Clausen H. B., Andersson V., Borhan M. distinguish three types of projects:

1. Group project, in which the study is carried out by the whole group, and each student studies a certain aspect of the chosen topic.

2. A mini-study, consisting in conducting an individual sociological survey using questionnaires and interviews.

3. Literature-based project that involves selective reading on a topic of interest to the student and is suitable for individual work [1; 4; 6].

So, the student's educational process is organized over the specific, both theoretical or practical project, which is the starting point of the topic. Learning projects can in much wider meaning also be called tasks, triggers, and statements. All of these terms describe a particular learning scenario. In the ESP context such problems should be relevant to real-world situations, “comprehensible and may be analyzed and solved, taking an interdisciplinary approach” [8].

Very interesting experience in this respect has Scandinavian universities. In the Nordic environment, project-based learning first appeared as a derivative of problem-based learning (PBL) about 40 years ago and was extensively used first in engineering and medical professional education. In language training, it was originally used only as a thought-provoking and worthy experiment in pre-service pedagogic courses [7].

Our research has shown that nowadays Aalborg University (AAU) in Denmark holds a strong position in problem-based learning, and many universities around the world and in Europe are looking for support and collaboration with this institution on this topic. Since 2002, Aalborg University has been introducing interactive, project learning techniques into its foreign language programs [33]. Consequently, in the postmodern age, PBL became preferable in a tertiary branch of the Nordic system of education and was widely used in a wide range of philologic fields and interdisciplinary courses. Moreover, within the last decade, Aalborg and Roskilde Universities have developed new interdisciplinary programs transmitting “Psychology” and long-established “Teaching and Learning” into “Foreign Language for Specific Purposes” [42]. We must press the point here that problem- and project-based learning in contemporary European educational dimensions are used as synonymic and interchangeable notions [14].

Our special interest was in investigating the implementation of the project-based learning practice in a second foreign language course in a technical Aalborg University. Thus, according to PBL-model principles outlined in 2015 by Aalborg University the ideal learning situation for students is to work with an authentic project: “the Aalborg model assumes that students learn best when applying theory and research-based knowledge in their work with an authentic project.

At the same time, the model supports students in the development of their communication and cooperation competencies, and in acquiring the skills required when taking an analytical and result-oriented approach” [1, p. 4].

Table 1 gives the major characteristic of project-based learning taking into account all components of the educational process.

Table 1

Project-based learning characteristics

Problem-based learning				
Orientation	Meaning	Content	Methods and techniques	Results
Authentic practical activities	Development of creativity, but within certain controlled limits	1) solution of a real problem, practical task; 2) sequential solution of a series of well-defined, algorithmic steps	1) drawing up a search trajectory; 2) formulating a problem; 3) developing real hypotheses; 4) testing them in accordance with the practical situation, etc.; 5) active use of ICT	1) may be predicted; or 2) may be unpredictable

If we now turn to the foundation of contemporary European language education, we should be able to formulate the idea that problem-based learning technology is a set of strategies designed to structure the educational process in a way that encourages students to obtain knowledge through their trajectories and develop creative skills and competencies during active cognitive activity or in the metacognitive process. Planning and controlling, then completing various educational tasks and putting the solutions into practice are the goals of metacognition [26].

Combination of ICT with project-based learning

The essence of project-based learning using ICT is that students in the process of working on a specific project using educational resources of the Internet comprehend real processes, live in specific situations, join the penetration into the depths of phenomena, and construct new processes and objects. The educational process when using project technology and resources of the global network is built in the logic of activities that have a personal meaning for the student, increasing his motivation to learn [10].

From the perspective of the ICT context in European language education the project-based classes should be:

- 1) inductive and motivating, requiring the student to solve a problem or make judgments based on actual actions, rather than based on abstract conclusions;
- 2) energetic, promoting practice-based learning in students;
- 3) relevant, modeling learning activities after actual events that occur in the classroom;
- 4) interactive, involving debate and the consideration of various points of view from those involved in the learning process;
- 5) critical, promoting independent thought, examining various strategies, and reaching conclusions based on data that has been established;
- 6) participatory, which lets students help shape their own educational paths;
- 7) collaborative, bringing together teachers and students [12].

In university evidence-based lessons, an integrated approach to the development of educational projects contributes to the balanced progress of the basic physiological, mental and philological (language use) functions of the student. Deep, conscious mastering of basic knowledge is ensured through their universal use in different situations in theoretical and practical classes [16].

Moreover, we should emphasize the humanistic meaning of project-based learning, which lies in developing students' creative potential. In the lessons, the tasks of implementing project technology using ICT are as follows:

1) to provide a mechanism for the development of critical thinking, the ability to independently search for ways to solve the task (for example, with the help of information on the Internet) and draw conclusions;

2) to develop students' research skills (identify problems, select information from literature and the Internet), as well as observation and attentiveness, and the ability to build hypotheses, generalize and think analytically;

3) to increase the student's confidence in their abilities, which means the need: – to allow each student to see himself/herself as a person capable and competent, – to develop in everyone a positive image of himself/herself and others, – to develop in students the ability to adequately assess themselves and their activities;

4) to develop a "team spirit", to inspire students to develop such necessary social skills as sociability and the ability to communicate and cooperate [13].

Actually, speaking about the European environment, project-based learning is heavily incorporated into regular "Foreign Language for Specific Purposes" classes. Depending on the didactic requirements and the stage of the lesson, creative approaches are taken to the selection and creation of alternatives for technology as well as ways to organize the students' work in a group [20].

The main features of the organization of project-based activities in the lesson are as follows:

- interdependence;
- personal responsibility of each member of the team for their own successes and the successes of their groupmates;
- joint educational, cognitive, analyzing, and creative activities;
- implementation of socializing functions, and successful communication;
- overall assessment of the team project results;
- changed role of a teacher into a coordinator, expert, and additional supplier of information [22].

The technology of foreign language learning based on project is standard and consists of a series of logically combined procedures, such as:

1) the tutor's invention of an educational project;

2) the student's awareness and analysis of the project environment, which leads to independent search and mastery of new data;

3) the student's independent formulation of the general approaches that lead to the problem-solving or the evidence of project issues;

4) the application of the proposed ideas and approaches in particular practical situations [14].

We see that projects are closely connected with computer technologies, so as a rule, in project activities the following ICT may be used:

1) application programs for collecting data, recording results of research, their processing, and preparation of product presentations. Usage of ICT, especially in foreign language teaching, is associated with the need that arises in the course of project activities for something to analyze, and built a model;

2) programs for organizing collaborative interaction between participants. ICTs are used to discuss problems or critical issues during project development;

3) programs for setting up the working environment for the project. Internet resources are applied intentionally, methodically, and as a single environment for participant interaction and the creation of project outcomes [18].

The Internet's tools practiced almost in all project-oriented computer-assisted language learning (PrOCALL) classes can be different blogs, webpages, libraries, Web 2.0 resources,

and even (for the development of speaking competencies) social networks that facilitate distant and collaborative work forming the core of this environment [19]. Consequently, in many ways, contemporary computer technologies provide great opportunities to access high-quality resources for language learning, in such a way they have enormous potential to support English language education [28].

English for specific purposes: speaking project with ICT

The algorithm for constructing English language lessons with the use of ICT in project-based activities is described below. In this part of our research, we must stress that one lesson may be composed of several mini-projects depending on the aim and structure of the learning material. As an example, we take the project topic “Modern technologies in our life”.

The first step is to formulate the general task. For this purpose, the general project theme is divided into several subthemes. Students work in collaboration. The second step is to organize students into mini groups to work on this subtopic educational material. The basic principle of students' division is the same knowledge level in the whole group. Very often students with higher levels are combined with lower levels students. In the course of this part of the lesson, each group receives one task, which is an integral part of a joint project the whole class is working on. Moreover, one of the stages of the project can act as a separate task [27].

So, the basic topic “Modern technologies in our life” consists of five major questions, each student group's mini projects. They are the following: 1) What is “technology”?; 2) What are modern educational technologies?; 3) Can communication be called a technology?; 4) What is artificial intelligence?; 5) Is it possible to live without modern technologies? As a result, each group is involved in problem-solving the chosen question.

Within the group, students independently determine the roles of each in the performance of a common task. In this case, the implementation of any task is explained aloud by the student and is controlled by the whole group. During this period students may use Internet resources to formulate an evidence-based answer to the received question. Then, during the third step, each student tells the rest of the group everything new that he learned himself. Thus, the group performs a double task: academic and social.

The group may break down the project into separate tasks for each student. In the fourth stage, based on the discussion within the group, a general action plan and a project map are drawn up, which are to be presented in the lesson using ICT. During the fifth phase of the project work, each student individually and the whole team report on the entire development. This refers to the ability to competently use sources of information, assess their reliability, correlate new information with previously acquired knowledge, the ability to correctly organize the information process [29]. With group research development of the practical part of the creative project, the product can be performed one for all and can be individual for each. As the result, all mini-projects are assembled into general research.

Furthermore, the so-called circle of decision-making makes it possible to return to the unsolved questions. After offering one helpful suggestion, the student can either return to the earlier phase to explain the overall strategy or delve further into the problem situation analysis to gain a more thorough understanding of it. As a result, the most useful concepts are chosen, and both the student and the tutor critically assess them to determine which ones are the most potent. The most promising concepts are typically improved upon and applied in the actual practice of education at the final stage. We should point out, though, that even the final step in a problem-solving process leaves open the potential of going back and revisiting earlier steps if necessary [31].

Advantages of project based on ICT foreign language teaching

This part of our study explains why technology-mediated project-based language learning (PBL) can be an important component of language instruction and what this means for teachers and students. PBL encourages effective learning techniques and critical thinking abilities

in addition to allowing for a practical and meaningful approach to teaching and measuring language learning success [18].

Project-based learning has several advantages for both teachers and students:

1. Students can move in researching a problem at their own pace.
2. Teachers may have more knowledge of pupils' skills.
3. Teachers can update and modify the curriculum more easily.
4. Teachers can be more effective in the use of class time.
5. Use of technology is appropriate to the 21st century.
6. Situational language simulation and gamification strategies improve imaginative teaching.
7. Rising levels of learning, interest, and motivation among students [17].

The project-based learning method in English lessons is constructed on the idea that makes up the essence of the concept of "project" – its pragmatic focus on the result that can be obtained by solving a particular practically or theoretically significant problem [24]. This result can be seen, comprehended, and applied in real practical activities. These activities in an English language lesson are to communicate in English. Moreover, through successful communication and the use of ICT, our students accomplished a double goal, comprising not only speaking practice but also reaching evidence-based information. To achieve such a result, it is necessary to transform the technologically-mediated relationship between teacher and learner [49]. When moving towards teaching online, teachers are confronted every day with issues such as online moderation, establishing a social presence online, transitioning learners to online environments, and giving feedback online [23].

Such conditions challenge tutors to teach students to think independently, find and solve problems, attracting for this purpose knowledge from various fields of science and technology, including using modern ICT, developing the ability to predict the results and possible consequences of various solutions, and the ability to establish cause-and-effect relationships.

The current study supports the idea that during the organization of the PBL tutorials in the system of foreign language teaching, there are certain rules for working with students, namely:

- 1) not to restrict students in the process of formulating new ideas;
- 2) not to try to find the only right way to solve the problem;
- 3) to avoid intervening without reason so as not to disrupt group autonomy;
- 4) prematurely not to criticize the new ideas;
- 5) to give the students complete freedom in search of new theoretical and information sources for the assembling of their own approaches to problem-solving situations [13];
- 6) to engage students in the process of experience-centered learning [32];
- 7) to provide a vehicle to allow the transfer of control of learning from the teacher to the team and in this way to encourage and promote student autonomy [34].
- 8) to promote a 'game-changing' shift in student motivation to learn a foreign language.

Project activities while learning specific topics in ESP resemble the mini research work. Though some scholars see the difference between these two types of work we should say that both of them represent the so-called exploratory practice (EP) [16]. In fact, during the implementation of the project, the student not only realizes where and how he can apply the acquired knowledge, but also constructs his own knowledge on their basis through the prism of observations, experiments, and practical activities. Thus, learning is carried out on an active evidence-oriented basis, through the active motion of the student, in accordance with his interests in this particular knowledge, based on the following principles:

- student-centeredness. In the center of the creative activity is a student who shows his activity. In project-based learning, he has a wonderful opportunity to realize himself, to feel success, to demonstrate his competence to others;
- collaborative relations. In the process of working on the project, a wide interaction of students with the teacher and among themselves in small groups is organized and carried out;

- free choice. The members of the project teams may choose their project topics, sub-themes, partners in the development of the project, sources and methods of obtaining information, research method, form of presentation;
- problematic goal. This principle is important to consider since an easily achievable result is not a mobilizing factor for many students;
- connection of research with real life. There is a combination of knowledge and practical actions. It is assumed that the project work is to some extent aimed at improving the surrounding world; the project has a pragmatic focus on results and authentic language practices [44].

Technology-mediated project-based language learning is aimed at developing in students independent, critical thinking, the ability to work with information, to think, based on knowledge of facts, laws of science, to draw reasonable conclusions, make independent reasoned decisions, learn to work in a team, performing different social roles. So the process of teaching-and-learning occurs as an “interthinking” process between students themselves on one hand and students and a teacher on the other [11]. We emphasize that in our opinion, that language learning should not become a stagnant activity limited to a classroom and a single discipline. Nevertheless, language is dynamic and changeable regardless of the environment in which it is learned. In recognition of this, our study has investigated that PBL and community-engagement pedagogies combine educational objectives with ICT in ways that foster student development and support the acquisition of a second language in an interdisciplinary, multilingual, and multicultural higher education learning environment [22].

Teachers and students in PBL: changing of roles

It is important to discuss here that technology-mediated project-based language learning changed the roles of students and teachers drastically. Moreover, in the European academic community, there is sustained persuasion that educational learning problems are aimed at students' interest and inclusion in the active cognition process through the use of their experience, basic knowledge, participation in discussions, and encouragement of cooperation in a mini group [3].

All these factors in total promote the development of self-learning skills and lead to the accumulation of relevant knowledge in a project-solving process. The learner is placed in a position similar to that of a researching scientist [7]. When a task is offered to the students to initiate the scientific process, they begin to confront the problem using their initial knowledge. Questions that arise in the process of group discussion and require further in-depth study can guide students in their individual search. After a period of independent preparation, students are again going to discuss complex issues, share information and synthesize general answers to their questions formulated by the group, integrating new knowledge in the context of the relevant problem. As a result, students report their findings to the group and reflect on the learning process [17]. In general, on one hand, the process of project-based learning is directed more by the students themselves than by the tutors. In accordance with the present results of the study, we can highlight that on the other hand, the students' responsibility for the meta-cognitive results increases rapidly. It is the student who is liable for the synthesis and generation of knowledge content through self-study, group discussions, and critical thinking. So the role of students becomes more complicated and diversified.

We consider that a student should be regarded as:

- 1) researcher with basic skills: to observe, record the results of observations in tabular, test, graphic form; compare the received data; the ability to reason, to argue one's point of view; formulate, analyze problems; draw conclusions, generalize, etc.);
- 2) critical thinker having the ability to quickly navigate the flow of information and find the right thing, the ability to comprehend and apply the information received;
- 3) information and media literate comprising ICT competencies in use of the media environment, media language, creative use of media, ethical competence, safety, respect for rights, and economic aspects media actions;

4) effective communicator who understands the interlocutor, and can compose messages in oral and written forms (letters, recommendations, stories, descriptions, etc.);

5) team player, interacting with other people with the ability to distribute roles in a group, work productively in a team, perform different roles and responsibilities; empathize and accept different points of view;

6) socially responsible citizen with the ability to act in the interests of the community, to behave ethically towards others [15].

The position of a tutor in problem-based learning is radically different from the role played by the teacher in preparing the student within the traditional curriculum. It is true that postmodern tutors, like traditional teachers, take an active part in the learning process but, when we speak about the European present-day context, the authoritarian approach has gone into the past. In a digital educational environment, the role of a teacher as a bearer of the traditional foundations of higher education is becoming increasingly important. At the same time, the teacher needs the ability to adapt, make non-standard decisions, show flexibility, and openness while communicating with students and colleagues [9].

At the forefront of European educational science are the thoughts that for the effective performance of tutors' professional duties the following competencies are needed to be developed on a lifelong basis:

1) the ability to study the theory of teaching and learning, including in-depth challenges;

2) the competence to create a favorable environment for learning and communication with students;

3) the aptitude to take on the role of a leader, organizer, manager of the learning process, and moderator of group work [9].

According to the abovementioned competences these are the basic demands of the contemporary teachers taking part in PBL, they must be capable:

– to monitor the most up-to-date problems for the projects should be actual, modern and interesting;

– to conduct the comparative analysis of data obtained from different sources and to identify the general trends;

– to solve different psychological and pedagogic problems finding the most effective;

– to create the development of new, constructive ideas;

– to organize collaborative or joint gaming activities; and surely;

– to have a deep subject knowledge [44].

All these are competencies of the XXI century pedagogues-facilitators who are generally considered to be moderators of the learning process leading a group and managing communications within it so that the audience achieves its goals more effectively, is motivated to the knowledge development process and comprehends the material being studied.

If we analyze the PBL dimension, we must point out that, as any foreign language is studied in four interrelated areas, directed at developing four basic language skills – speaking, listening, writing, and reading, a foreign language teacher should demonstrate to students various approaches to the multidimensional phenomena being studied, form interdisciplinary knowledge, use the methodology of the so-called student-centered learning, enquiry-based learning, based on the questions and requests of students.

Moreover, the pedagogue-facilitator should be a researcher at the same time who can effectively investigate all the language projects by himself and will teach the students to ask proper project questions, formulate hypotheses, look for answers, discuss them with other project participants, and, finally, analyze the results and put them into practical activities. As a general example, the students may do some research projects in grammatical topics or lexical units and put the researched constructions into written or oral speech. For this, it is important for a teacher to have the ability to motivate students so that they learn to comprehend the knowledge gained.

Another transformed skill of a foreign language teacher in the knowledge-based epoch is the ability to adapt the learning process to various formats and maintain interest in the topic under study when moving from online classes (as it was with the pandemic COVID 19 situation and is now with the severe war in Ukraine) to classroom lectures, seminars, and workshops.

Consequently, the tutors within the project-based language learning model take on the all-encompassing functions of facilitators, organizers, researchers, consultants, managers or even coaches and stage directors. They should contribute to the students' process of decision-making by observing them, encouraging group discussion, stimulating mental activity, enhancing group work, and providing feedback to the students in appropriate cases [14]. Very important in this case for a tutor to be together with a student in his individual language learning path that will bring the results.

Conclusions. Our investigation proves that to be compatible with the globalized postmodern society education, particularly foreign language teaching has to adapt and renew itself continuously. Using authentic material provided by the internet helps students to be better in communication and to be in contact with the culture of the country and people whose language they study [15].

The results of this study indicate that:

- due to the technology-mediated problem-based learning strategy implementation foreign language learning has gained a unique experience in creating learner-centered, freedom-based, and evidence-oriented system;
- in the system of foreign language education PBL is introduced as an interactive learning technology with the following characteristic features: independence, inductiveness, practice-based, experience-oriented, collaboration, and participation;
- co-existence of non-authoritarian, democratic methods of PBL training technologies construct an atmosphere where learners can make efficient educational decisions, be responsible for their learning, and be successful;
- PBL as innovative learning technology, combining non-standard and meta-cognitive approaches increase students' participation in tertiary education programs and create a better response to the learners' requirements;
- the organization of project activities in the English language lessons using modern educational resources and computer technologies contributes to the formation of cultural and communication skills, both with the teacher-consultant and with peers-participants in the project and other subjects of activity.

Today we can observe rapid changes in the whole society, which require new qualities from a person. First of all, we are talking about the ability to think creatively, to be independent in decision-making, and initiative.

Naturally, the tasks of forming these qualities are assigned to education, and first of all to the system of tertiary education, which is regarded to be the essential part of the social continuum that gives a continuous foundation for the development of thinking, initiative, and independent personality.

The use of computer and information technology allows to increase the intellectual level of students, facilitates the solution of practical problems, and helps in achieving the main goals of education to prepare the younger generation for life in a rapidly changing information society, in a world in which the process of the emergence of new knowledge is accelerating.

We assume that the outcomes of this particular research may give a clearer insight into the general prospects of technology-mediated problem-based learning promoting into the system of high education, especially in the foreign language teaching dimension.

This research is not exhaustive. The necessity of continuous study is determined by the importance of the discussed problems. The observed decline in the popularity of foreign languages for specific purposes learning forces us to formulate the prospects for further comparative investigation in the design of the content and methods for the building motivation

of students to learn various languages with the perspective to apply to different education programs all over the world with the perspective to get better job in the international labor market.

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