UDC 378.147.81'243

DOI https://doi.org/10.24919/2308-4863/47-4-28

Liudmyla ROIENKO,

orcid.org/0000-0002-6794-0051

Senior Lecturer at the Department of Philology and Translation Institute of Law and Modern Technologies of Kyiv National University of Technologies and Design (Kyiv, Ukraine) Lroyenko@gmail.com

Olena HORLATOVA,

orcid.org/0000-0002-7761-8701
Senior Lecturer at the Department of Philology and Translation
Institute of Law and Modern Technologies of Kyiv National University of Technologies and Design
(Kyiv, Ukraine) LenaLera@bigmir.net

Svitlana REDKO,

orcid.org/0000-0002-2474-5344

Senior Lecturer at the Department of Philology and Translation Institute of Law and Modern Technologies of Kyiv National University of Technologies and Design (Kyiv, Ukraine) redko.knutd@gmail.com

USING OF PROJECT-BASED LEARNING METHOD IN ORGANISATION OF STUDENTS' INDEPENDENT STUDY IN THE PROCESS OF FOREIGN LANGUAGE TEACHING AT HIGHER EDUCATIONAL ESTABLISHMENTS

The paper tackles the issue of project-based learning method (the project method) as a type of educational technology in organising students' independent activity at institutions of higher education. The main focus of this article is to define and substantiate the effectiveness of project-based learning method as a form of independent work organising. The functions of the project method have been defined and the interrelated forms and objectives of students' independent work have been mentioned in the article as an approach to realize various creative goals, to stimulate students' cognitive interest and to form a steady motivation for the educational process. Project method application gives possibility for visual integration of knowledge from different subjects as well as space for students' creative activity. The method of projects promotes development of students' active independent thinking and orients them to research work. The projectbased learning frameworks proposed by J.-M. Harding Da Rosa, M. Conca, G. H. Beckett and T. Slater have been analysed in the present research paper. Project work allows students to act as authors, expands the overall worldview, increases the level of practical English language skills, develops skills of independent activity. It is well known that project technologies are aimed at stimulating students' interest in new knowledge, personal development through problem solving. The authors describe the types of projects that can be recommended for university courses: advertising products or technical posters, articles, essays and so on. The authors analyse the conditions which are required for the successful implementation of an educational project and stress the importance of necessary training for teachers who plan to use the given educational approach. The importance of keeping a diary and proper evaluation of students' project activity results have been emphasized in the article. Based on the conclusions derived from the research, it can be noted that the method of projects is a complex educational method which allows to individualize educational process, gives the chance to a student to show independence in planning, organization and control of the learning activity.

Key words: project-based learning method, project work, students' independent activity, project-based learning frameworks.

Людмила РОЕНКО,

orcid.org/0000-0002-6794-0051 старший викладач кафедри філології та перекладу Інституту права та сучасних технологій Київського національного університету технологій та дизайну (Київ, Україна) Lroyenko@gmail.com

Олена ГОРЛАТОВА,

orcid.org/0000-0002-7761-8701

старший викладач кафедри філології та перекладу

Інституту права та сучасних технологій

Київського національного університету технологій та дизайну

(Київ, Україна) LenaLera@bigmir.net

Світлана РЕДЬКО,

orcid.org/0000-0002-2474-5344 старший викладач кафедри філології та перекладу Інституту права та сучасних технологій Київського національного університету технологій та дизайну (Київ, Україна) redko.knutd@gmail.com

ВИКОРИСТАННЯ МЕТОДУ ПРОЕКТНОГО НАВЧАННЯ ПІД ЧАС ОРГАНІЗАЦІЇ САМОСТІЙНОЇ РОБОТИ СТУДЕНТІВ У ПРОЦЕСІ ВИКЛАДАННЯ ІНОЗЕМНОЇ МОВИ В ЗАКЛАДАХ ВИЩОЇ ОСВІТИ

У статті розглядається питання проектного методу навчання (метод проектів) як різновиду освітньої технології організації самостійної роботи студентів у закладах вищої освіти. Основна увага даної статті на визначення та обгрунтування ефективності методу проектного навчання як форми організації самостійної роботи. Визначено функції методу проектів та зазначено взаємопов'язані форми та завдання самостійної роботи студентів як підхід до реалізації різноманітних творчих цілей, стимулювання пізнавального інтересу та формування стійкої мотивації до навчального процесу. Використання методу проектів дає можливість наочної інтеграції знань із різних предметів, а також простір для творчої діяльності студентів. Метод проектів сприяє розвитку активного самостійного мислення студентів та орієнтує їх на дослідницьку роботу. Структури навчання на основі проектів, запропоновані Ж.-М. Хардінг Да Роза, М. Конка, Г. Х. Беккетом і Т. Слейтером, було проаналізовано в даному дослідженні. Проектна робота дозволяє учням виступати в ролі авторів, підвищує креативність, розширює загальний світогляд, підвищує рівень практичного володіння англійською мовою, розвиває навички самостійної діяльності. Загальновідомо, що проектні технології спрямовані на стимулювання інтересу учнів до нових знань, розвиток особистості шляхом вирішення проблемних завдань. Автори описують типи проектів, які можна рекомендувати для навчання в університетах: рекламна продукція або технічні плакати, статті, есе, мультимедійні презентації тощо. Автори аналізують умови, що необхідні для успішної реалізації освітнього проекту, і наголошують на важливості відповідної підготовки викладачів, які планують використовувати поданий освітній метод. У статті наголошено на важливості ведення щоденника протягом виконання проекту та правильного оцінювання результатів проектної діяльності студентів. Підсумовуючи результати дослідження, можна зазначити, що метод проектів – це комплексний навчальний метод, який дозволяє індивідуалізувати навчальний процес, дає можливість студенту проявити самостійність у плануванні, організації та контролі навчальної діяльності.

Ключові слова: метод проектного навчання, проектна робота, самостійна діяльність учнів, структура процесу проектного навчання.

Problem statment. In modern terms of surrounding reality it becomes obvious that society needs highly qualified specialists with an active professional and vital position, capable not only to adapt in the global world but also occupy leading position in it. Therefore, higher education faces special tasks related to training of future specialists having both professional and cultural competences and desire for self-development and self-perfection. Undoubtedly, for the achievement of these objectives it is impossible to be limited to the revision of the methodological approaches going near the process of teaching in institutions of higher education and use of modern technologies. The solution of this problem requires a change of conceptual principles of teaching since the formation of the creative self-identity can hardly be done by traditional rendering of knowledge. In the new educational paradigm a student from a passive consumer of knowledge should become an active subject, able to solve problems independently, finding effective ways to achieve them. In this vision of the educational process at the university students' inde-

pendent work is not just a form of educational process, it is a part of its integral basis.

Currently, the following trends are observed in the system of higher education of Ukraine: improvement of traditional methods and techniques of working with students and search and development of new alternative technologies that are more efficient, optimal and effective than those that existed in the past.

One of the methods that significantly enrich the educational process is the method of projects as the type of individual work, the use of which changes the traditional approach to learning, and aims to develop cognitive abilities, skills, find ways to solve certain problems through various forms of activity. The analysis of the professional literature revealed that the problem of project-based learning method application as one of the most effective forms of students' independent work organization in the process of learning English is insufficiently developed and needs further attention.

Analysis of research. Domestic and foreign scholars addressed the problem of the project methodology in teaching foreign languages. Thus, foreign

educationalists W. Kilpatrick, G. Thomas, R. Ribe, N. Vidal, P. Morris devoted their research to the definition of project types and their main characteristics. Scientists N. M. Khorushko, E. S. Polat, I. A. Zimniaia, T. E Sakharova, I. V. Shmorgun, L. I. Stetsiv studied the application of project-based method in teaching pupils a foreign language at secondary school. V. B. Goncharova, Y. P. Anosova (Honcharova, Anosova 2013), O. V. Shtelmakh (Shtelmakh, 2013), O. Y. Koval (Koval, 2019), N. V. Liamzina, S. V. Shcherbyna, H. M. Protsyk investigated the use of the project method in teaching foreign language for specific purposes in higher education institutions.

The purpose of the article. The main aim of the present research is to define and substantiate the effectiveness of project-based learning method as a form of independent work organising.

Presenting main material. The project method was proposed by a prominent educator W. Kilpatrick who developed the idea of child-centered approach that emphasized on maximum student participation in the process of learning in 1918. Kilpatrick's project method stipulated the following stages of implementation: purpose, plan, execute and judge. According to W. Kilpatrick's educational method, students should perform the leading role in the process of acquiring knowledge. It is essential to remember that the Project method was not a rigid method but a kind of philosophical approach. The project-based learning became the basis for the development and improvement of students' decision-making skills.

As practice shows, the method of projects used in organizing individual work of students can perform the following functions:

- activates creative thinking;
- stimulates research skills;
- incorporates 21st century student skills;
- it integrates two or more subjects;
- gives students the opportunity to feel the practical value of education;
- develops skills for applying and improving knowledge;
- promotes confidence, self-realization of students as individuals;
 - increases the level of self-education;
 - teaches to acquire and apply knowledge;
- helps to solve new cognitive and practical problems;
 - develops communication skills;
- it can be applied with limited resources and distance learning environments.

In modern practice individual work of students can be represented by the unity of interrelated forms:

- individual work in a classroom under the guidance of a teacher;
 - out-of-class individual work;
 - creative work including research.

In modern circumstances a huge amount of time is set aside for out-of-class individual work. This type of work offers wide opportunities for a student's independence improvement as it is not limited by the framework of the class time. It helps to realize various creative goals, stimulates a cognitive interest and forms a steady motivation for the educational process.

According to Shcherbiak Yu. A., the main objectives of a teacher in organizing out-of-class individual work are:

- to create the conditions for the development of students' minds and intellectual initiative;
- to teach them to find independently and use the necessary data, working with scientific Information;
- to impart students the skills of cognitive activity and self-education;
- to develop students' best qualities of a professional (Shcherbiak, 2014: 93).

The use of project methodology as the type of individual work in learning of foreign languages has shown that students achieve good results in learning a foreign language, when they have practical opportunity to apply acquired skills. The method of projects increases a student's motivation to learn a foreign language. There is visual integration of knowledge from different subjects as well as space for creative activity. It is a multi-level approach to language learning that includes reading, listening, speaking and grammar. The method of projects promotes development of active independent thinking of students and orients them to research work. Learning a foreign language, being an integral part of the higher education, deepens understanding by students the place and value of the profession in economic, scientific and technical development of the country, promotes expansion of professional outlook. Knowledge of a foreign language expands framework of professional creativity, contributes to the development of critical thinking, forms the scientific depth of knowledge and philosophical judgment of laws of the nature, as well as connections between them.

Jane-Maria Harding Da Rosa from IH Newcastle proposed one of the best examples of project-based learning frameworks that includes the following stages:

- generate and stimulate (ideas are generated by the teacher, areas that need further exploring should become exposed);
- define and refine (a teacher gives a driving question);

- designate and collaborate (the activities are organised according to SMART goals: specific, measurable, achievable, relevant, timely);
- compare and share (according to THINK strategy: Is it true? Is it helpful? Is it inspiring? Is it necessary? Is it kind?);
- enhance and advance (the development of HOTs not LOTs 21st century skills: citizenship, intercultural competence, digital literacy);
- review and revise (reflection on what has been achieved and what they would do differently);
- produce and present (make it real, make it count) (Harding Da Rosa, 2018).

On the basis of the abovementioned framework teacher trainer and educationalist M. Conca proposes her own scheme for project implementation in the teaching English process:

Stage 1. **Brainstorm and define**. This stage includes announcing the driving question, brainstorming categories and ideas, defining aspect).

Stage 2. **Goal setting and collaboration**. This stage includes presenting data to answer the driving question, collaboration to decide how to investigate (in the form of an online poll, school/class survey, interviews, readings; etc.); which sources of information to use: research existing data, collect new data; how to present findings – infographics, video

animation, article; which output mode to use: in the oral/written form, both.; finding the best way for presenting the outcome.

- Stage 3. **Compare and enhance**. This stage stipulates sharing and evaluation project results. Students think over feedback and take it into account.
- Stage 4. **Review and produce**. This stage envisages product creation.
- Stage 5. **Present and self-assess**. This stage includes presenting outcomes to a live/virtual audience and self-assessing the performance of a project associated with foreign language learning (Conca).
- G. H. Beckett and T. Slater proposed their idea of project framework, which is a planning framework representing a wide variety of components, presented in Figure 1 (Beckett et al., 2005: 110).

Gulbahar H. Beckett and Tammy Slater proposed their idea of project diary. According to their ideas, the diary is necessary to encourage students to make explicit not only the language, but also the content and the skills they have been using during the week of project execution. It also highlights what students have been able to accomplish, and what they were unable to complete as planned. This diary promotes note-taking skills, in other words, notes which can be used in tandem with a written summary of their progress (Beckett et al., 2005: 111).

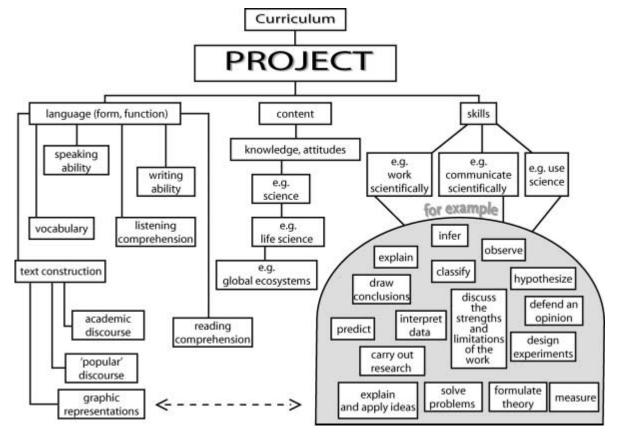


Fig. 1. The project framework, offered by Gulbahar H. Beckett and T. Slater

The purpose of learning a foreign language is the communicative activity of students, it means practical knowledge of a foreign language. Project work will help us to achieve this, it allows students to act as authors, creators, increases creativity, expands the overall worldview, increases the level of practical English language skills, develops skills of independent activity. The project also solves the problem of teaching students of different levels in one group: everyone does what he can, while participating in a single process.

Project methodology helps to build a bridge between the reality and something quickly achievable. Firstly, the project-based activity helps to integrate a foreign language into the learner's own network of communicative competence. It encourages the application of a wide range of communication skills, allows students to use other areas of knowledge and provides an opportunity to describe what is important in their lives. Secondly, the project makes language more related to the needs of the learner, because they learn to communicate about their own inner world, their country, their opinions. Thirdly, project establishes a closer link between language and culture. The purpose of learning a foreign language is to create a possible communicative bridge between two cultures. Project work is a way to translate these common goals into practice in the classroom. Fourthly, interdisciplinary approaches are encouraged. For language learning, this means that students should use the knowledge they have gained from other subjects while learning a foreign language. It is the work on the projects that motivates this activity.

The value of project work lies primarily in the fact that it encourages students to use communication skills in effective time management, while the students themselves are responsible for their learning.

Project technologies are aimed at stimulating students' interest in new knowledge, personal development through problem solving. The purpose of project work is to allow students to demonstrate their creative abilities, using the acquired knowledge of vocabulary, grammar, to have their own opinion, as well as learn to hear the opinions of others and respect them. Projectiveness is a form in which the art of planning, ingenuity, observation is manifested. New material is assimilated much faster and the quality of memorization is much higher than in traditional classes. The teacher acts as an assistant, advisor, consultant, gaining a better reputation among students than when he simply acts as a disseminator of knowledge and means of control of their acquisition.

The following types of projects can be recommended for university courses:

- text works that encourage students to use authentic English texts on special topics for research, surveys. Creation of advertising products or technical posters, articles, essays and so on;
- correspondence projects, which include correspondence, exchange of electronic messages and faxes between students and potential employers, or between student groups from different universities.
 The effectiveness of this type of project can be further enhanced if the project is based on the Internet, which offers the following tools: e-mail, weblogging, online discussions and chats;
- projects-meetings that give students the opportunity to communicate with native speakers who can share their experiences in the professional field (eg, intercultural misunderstandings in the professional environment, professional code of conduct in English-speaking countries, etc.).

According to H. M. Protsyk, experts point out that it is advisable to use the method of success situation, analysis of video materials, trainings for the development of cognitive activity of students (Protsyk, 2020: 68).

The method of projects is a complex educational method which allows to individualize educational process, gives the chance to the student to show independence in planning, organization and control of the activity.

Chinese educationalist Sue Wang emphasises that flexibility and feasibility of project-based language learning to enable students to experience authentic materials and learning by doing makes it is a useful approach for language instructors (Wang, 2020: 70).

The method of projects allows students to be independent in choosing sources of information, methods of presentation and presentation. The project methodology allows to conduct individual work on the topic that is of greatest interest to each project participant, which, of course, leads to increased motivated student activity. The student chooses the object of study, decides for himself, whether to limit the textbook to English (just after another exercise), or read other textbooks provided by the program. However, students often turn to additional sources of information, analyze, compare, leaving the most important and interesting.

O. Y. Karabin indicates the characteristic features of the creative project activity, where project activity is compared with creative activity that consists of 4 stages: preparation, maturation, incite and verification (Karabin, 2016: 438).

The following conditions are required for the successful implementation of an educational project:

 the presence of a significant problem in creative, research terms;

- teacher's ability to ask key and thematic questions;
- practical significance of expected results (publication, poster, article, essay, report at the conference, delivering a presentation to an audience etc.);
- independent work of students in pairs or outside the classroom;
- structuring the content of the project (stages, tasks, distribution of roles, etc.);
 - use of research methods;
- use of computer technology (to search for information, communicate with other project participants, create the final product of the project).

In order to achieve positive results in the implementation of the project method, foreign language teachers must undergo a multilevel system of training:

- information-theoretical;
- organizational and practical one with consolidation and testing of theoretical knowledge in practice;
- reflective with independent work of teachers on rethinking and creative analysis of their activities;
- correctional, which aims to supplement the knowledge and practical skills of teachers to overcome existing difficulties;
- methodological, which involves the training of teachers-trainers who can teach others, create their own master classes.

An example of practical application of the project-based method in teaching the disciplines "Foreign language" and "Foreign language for specific purposes" is the study of N. K. Liamzina, who described the features of the web-quest "Joining a Global Company", which was created to teach the 3d-year students of economic speciality in accordance with the syllabus for the discipline "English for specific purposes". Web-quest combines the advantages of the project method as a search engine: a research learning tool that originates in J. Dewey's constructivist approach to learning. Web-quest has a clear structure, which includes such basic elements as: "Central Task", "Process", "Resources", "Supports" and "Evaluation". The outcome of the students' project is giving a monologue professionally oriented presentation (Liamzina, 2015: 31).

Students should carry out a research on their own. The teacher should give the students the criteria selection of information and the criteria for the result evaluation of the students' project work as well. An extremely good example of the outcome evaluation criteria is given by N. V. Liamzina. In estimating the quality of the delivered students' presentations

N. V. Liamzina proposes to pay attention to the following aspects: presentation content, language use, grammar, vocabulary, delivery of presentation, PowerPoint presentation, anti-plagiarism efficiency, collaboration. Another important aspect in the abovementioned evaluation table is its division into 4 levels according to the quality of students' foreign language knowledge and preparation: beginning, developing, very good, exemplary (Liamzina, 2015: 34).

The general parameters of external project evaluation:

- significance and urgency of the problems,
 the adequacy of the research topic;
- correct use of research methods and processing of the obtained results;
- activity of each project participant in accordance with its individual capabilities;
 - the collective nature of the decisions made;
- the nature of care and mutual assistance between project participants;
- necessary and sufficient depth of immersion in the problem, the use of knowledge from other fields;
- provability of decisions, the ability to prove their conclusions;
 - aesthetics of project results design;
- ability to answer opponents' questions, conciseness and provability of each member's answers.

Conclusions. Taking into account all the information mentioned above, we can summarize that the project-based learning method as the type of individual work helps to organize effectively the educational process, enables improvement of students' cognitive activity, strengthens inner motivation for the process of study, develops the skills of creative problem solving when learning disciplines and creates conditions for self-development and self-improvement in future professional activity. The role of a student is connected with investigation process and tools, sources, output mode, results, self-and peer-evaluation, relevant reviews on own and others' work to improve results. In the process of organising students' project activity the teacher poses a driving question, encourages discussion and creativity, sets goals, provides language input and corrective feedback, works as motivator at each stage of project execution. The results of project-based learning of foreign language at establishments of higher education can be presented in the form of conference reports or articles publication, works for participation in the competition of scientific posters, essay writing, multimedia presentations etc.

BIBLIOGRAPHY

- 1. Гончарова В. Б., Аносова Ю. П. Метод проектної діяльності на заняттях іноземної мови за професійним спрямуванням у ВНЗ І-ІІ р.а. *Інформаційні технології в освіті, науці та виробництві.* 2013. № 3. С. 136–143.
- 2. Карабін О. Й. Проектна діяльність у формуванні професійного саморозвитку майбутніх фахівців у галузі інформаційних технологій. «Молодий вчений». 2016. № 12.1 (40). С. 436–440.
- 3. Коваль О. Ю. Проектна методика навчання іноземної мови студентів ВНЗ. *Педагогіка формування творчої особистості у вишій і загальноосвітній школах :* зб. наук. пр. Запоріжжя : КПУ, 2019. Вип. 63. Т. 2. С. 89–92.
- 4. Лямзіна Н. В. Веб-квест «Joining a global company» як засіб навчання майбутніх економістів професійно орієнтованого англомовного виступу у супроводі комп'ютерної презентації. *Іноземні мови*. 2015. № 3. (83) С. 30–36.
- 5. Штельмах О. В. Метод проектів у навчанні іноземної мови студентів нефілологічних спеціальностей під час позааудиторної роботи. *Педагогічні науки: теорія, історія, інноваційні технології.* 2013. № 6. С. 59–61. Project method in the process of foreign languages teaching of students of non-philological specialities during out-of-class work. Pedagogical sciences: theory, history, innovative technologies.
- 6. Щербяк Ю. А. Організація самостійної роботи студентів в умовах вищої економічної школи. *Педагогічна освіта: теорія і практика. Психологія. Педагогіка*: збірник наукових праць. 2014. № 21. С. 91–97.
- 7. Beckett G. H., Slater T. The project framework: A tool for language, content, and skills integration. *ELT journal*, V.59(2), Oxford University Press, 2005. P. 108–116. doi: 10.1093/eltj/cci024. URL: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.128.6618&rep=rep1&type=pdf
- 8. Conca M. All about PBL: How to Learn a Language through Projects. URL: https://ihworld.com/ih-journal/ih-journal-blog/all-about-pbl-how-to-learn-a-language-through-projects/
- 9. Harding Da Rosa Jane-Maria, IH Newcastle, 'Promoting Project-based Learning'. URL: https://oupeltglobalblog.com/tag/jane-maria-harding-da-rosa/
 - 10. Protsyk H. M. Project method: past and future. Медична освіта. 2020. № 1. Р. 67–71.
- 11. Wang S. Project-based Language Learning in China: A Literature Review. *Journal of Language Teaching and Research*. 2020. Vol. 11. № 1. January 2020. P. 66–72. DOI: http://dx.doi.org/10.17507/jltr.1101.08; URL: http://www.academypublication.com/issues2/jltr/vol11/01/08.pdf

REFERENCES

- 1. Honcharova V.B., Anosova Yu.P. Metod proektnoii diialnosti na zaniattiah inozemnoii movy za profesiinym spriamuvanniam u VNZ I-II r.a. [The method of project activity during classes of foreign language for specific purposes]. Information technologies in education, science and manufacturing. 2013. No 3. P. 136–143. [in Ukrainian]
- 2. Karabin. O. Y. Proektna diialnist u formuvanni profesiinoho samorozvytku maibutnih fahivtsiv u haluzi informatsiinyh tehnolohii. [Project activity in formation of professional development of the future specialist in the area of information technologies] «Young scientist». No 12.1 (40), 2016. P. 436–440. [in Ukrainian]
- 3. Koval O. Yu. Proektna metodyka navchannia inozemnoi movy studentiv VNZ. Pedahohika formuvannia tvorchoi osobystosti u vyshchii I zahalnoosvitnii shkolah: zb. Nauk. Pr. Zaporizhia: KPU, V. 63. T. 2. 2019. P. 89–92. [in Ukrainian]
- 4. Liamzina N. V. Veb-kvest «Joining a global company» yak zasib navchannia maibutnih ekonomistiv profesiino orientovanoho anhlomovnoho vystupu u suprovodi kompyuternoi presentatsii. [Web quest "Joining a Global Company" to teach students of economics to make oral presentations on profession-related topics with visual (Power Point) support] Foreign languages. No 3. (83). 2015 P. 30–36. [in Ukrainian]
- 5. Shtelmah O. V. Metod proektiv u navchanni inozemnoi movy studentiv nefilolohichnyh spetsialnostei pid chas pozaaudytornoi roboty. [Project method in the process of foreign languages teaching of students of non-philological specialities during out-of-class work.] Pedagogical sciences: theory, history, innovative technologies. № 6. 2013. P. 59–61. [in Ukrainian]
- 6. Shcherbiak Yu. A. Orhanizatsiia samostiinoi roboty studentiv v umovah vyshchoi ekonomichnoi shkoly. [Organization of future economists' independent study in higher educational establishments] Pedagogical education: theory and practice. Psychology. Pedagogics. The collection of scientific works. No 21. 2014. P. 91–97. [in Ukrainian]
- 7. Beckett, G. H., & Slater, T. The project framework: A tool for language, content, and skills integration. ELT journal, V. 59 (2), Oxford University Press, 2005. P. 108–116. doi: 10.1093/eltj/cci024 URL: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.128.6618&rep=rep1&type=pdf.
- 8. Conca, M. All about PBL: How to Learn a Language through Projects. URL: https://ihworld.com/ih-journal/ih-journal-blog/all-about-pbl-how-to-learn-a-language-through-projects.
- 9. Harding Da Rosa Jane-Maria, IH Newcastle, Promoting Project-based Learning, 2018. URL: https://oupeltglobalblog.com/tag/jane-maria-harding-da-rosa.
 - 10. Protsyk H. M. Project method: past and future. Медична освіта. 2020. No 1. P. 67–71.
- 11. Wang, S. Project-based Language Learning in China: A Literature Review. Journal of Language Teaching and Research, Vol. 11, No. 1, 2020. P. 66–72. DOI: http://dx.doi.org/10.17507/jltr.1101.08 URL: http://www.academypublication.com/issues2/jltr/vol11/01/08.pdf.