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### **INFLUENCE OF THE PROJECT METHOD ON STUDENTS' CRITICAL THINKING DURING SELF-STUDY**

*This article discusses the conditions, content and features of the project method in teaching university students English, as well as the influence of this method on the development of critical thinking in their self-study. Using a survey method based on a self-developed questionnaire conducted among teachers and master's students, a current assessment of the application of the project method and an understanding of the essence and purpose of projects in universities was identified with the results in the form of graphical charts in percentages. Being a relevant method in the modern world, the project method involves students in the active independent development of critical thinking, thereby investing in them the initial skills of composing research papers, which are so necessary in the life of the university. All this leads to the success of students in the field of scientific and educational activities and to the development of professionally significant competencies. The results of this article are the problems of using the project method, focused on the critical thinking of students in the process of self-study, identified through a survey in universities and proposed appropriate solutions. These solutions may be useful for teachers preparing teaching projects and for subsequent research in the field of education and methods of teaching a foreign language. The value of this article is explained by modern trends in the search for specialists with critical thinking skills, which are achieved through the competent use of the project method in universities.*

*Key words: project method, self-study of students, teaching English, critical thinking, survey, questionnaire.*

## MAIN PROVISIONS

Different authors defined the term “project method” in different ways, but each understanding fully revealed the essence of this method and complemented it. W. Kilpatrick in his book pointed out that the project method is the intention of the student himself, which is achieved through sincere efforts [1, 10].

While J. Dewey, on the contrary, elevated the role of the teacher, belittling the independence of the student, making the general conclusion that the essence of project activity lies in the mutual work of the subjects of the learning process [2].

E.S. Polat, in turn, gives the following definition in his work: “project activity in the classroom is, first of all, a system of problem-search methods, creative and representing a didactic means of organizing cognitive activity, the formation of creativity and certain individual and personal qualities of students in the process of creating a certain product” [3, 195].

E.G. Azimova adhered to a similar opinion, asserting in her work: “project methodology is a special teaching method based on a personal-activity approach to learning” [4, 216].

It is obvious that modern educational institutions set goals aimed at the intellectual and creative development of students who are able to think analytically. The project method thus helps to instill in students the need for self-learning supported by critical thinking. Accordingly, this method is able to solve the goals and objectives specified by the education system.

I.A. Zimnyaya offers an optimal classification of types of projects in the pedagogical field of activity, highlighting projects: related to methods of implementation (practical, informational, creative, scientific); with open and closed coordination of actions; university, regional and international; according to the form of conduct (group, individual, pair); by the time spent on project implementation (medium-term, long-term, short-term) [5, 37].

Based on the work of foreign scientists Saad Aslina and Zainudin Suhaila, where the authors compare project-based learning (PBL) and computational thinking (CT), important aspects of comparing and contrasting the two processes were taken [6].

An important aspect of this article, which was taken as the basis for considering the practical issue of applying the project method in English lessons are language-oriented types of projects such as:

- situational projects related to real life;
- individually oriented projects carried out in groups;
- interdisciplinary projects;
- linguistic projects;
- projects focused on creating a product.

Research by M.P. Gorchakova-Sibirskaya and I.A. Kolesnikova determined the following sequence of projects [7, 82]:

- 1) Initial stage – analysis and preparation of a project plan;
- 2) Middle stage – bringing the project into reality and presentation;
- 4) The final stage – diagnostics of the results.

These stages should not be a separate part of the educational process, but an organic element of it. That is, this activity is carried out in a planned, systematic and purposeful manner. An important condition for the effectiveness of the project method is the ability to work independently, and then begin working together on a project.

In order to find a connection between the project method and the distinctive structure of the “critical thinking” technology, the work of the Kazakh author Zh.A. Musina was studied. The author identified in this technology such stages as challenging the problem, its comprehension and subsequent reflection [8, 120].

Work by Baygonysova K.O. highlights the problems of “practical application of methods for developing critical thinking in English lessons” [9, 23]. The author developed exercises that lead to

the development of critical thinking skills, which were considered in combination with project method to understand the main areas of research in this article.

## INTRODUCTION

The modern education system of Kazakhstan in higher educational institutions is aimed at educating an individual who applies acquired knowledge in the most optimal way in practice through independent thinking, uses critical thinking when searching for answers to questions and solving problems, draws up a structural plan for his professional actions, and has developed communicative competence in intercultural cooperation. Accordingly, the search and optimization of modern methods that would develop these skills in students is relevant. The project method, due to its content characteristics, when applied correctly, can provide high-quality development of the skills of a modern specialist.

The aim of this article is to determine the current level of application of the project method in universities and its compliance with the requirements for the development of critical thinking in students' self-study.

In this article issues related to the definition of the concept of the project method, its types and stages are examined. In this regard, the authors developed a questionnaire to determine the relevance of using the project method in universities for teachers and master's students. This questionnaire was used as a means to collect information through a survey method with closed questions. The analysis of the results obtained is presented in graphical form, which makes it possible to identify problem areas and the level of focus of the application of this method on the development of critical thinking in students' self-study. An important part of the study is the presence of proposed possible ways to improve the use of the project method as a form of self-study for students in the conclusion of the article.

The subject of the study is the influence of the project method on the development of students' critical thinking. It follows that the problem lies in the need to study the current situation in universities and analyze the level of effectiveness of using the project method in the process of self-study, which can lead to students' developed competence in critical thinking.

At the same time, the study is novel and educationally valuable, since it sets itself the task of enriching existing knowledge about the influence of the project method on the critical thinking of students in English lessons, and also identifies problems and their solutions at the present stage of development of this method in education.

The project method in the educational process in higher educational institutions is important in the formation of a professionally competent individual. The use of this method in classroom teaching allows students to gain experience in participating in projects, which develops students' critical thinking in their self-study in the process of learning English. Therefore, the research in this article is of high significance, which consists in exploring existing problems and proposing ways to overcome them, based on a study of the works of other authors and the survey method.

## MATERIALS AND METHODS

The experimental part of the article was compiled based on the use of qualitative and quantitative research methods. Quantitative nature of data collection and analysis involved counting respondents for the survey and calculating the responses received. Qualitative side of the study is that the opinions of individuals were collected in the form of a survey. The survey method, which is an empirical research method, was used as the main research method for collecting and analyzing information for the study. The means of collecting key information from respondents was a list of questions compiled by the authors, divided into thematic categories, contained in the questionnaires. To compile a narrowly focused survey, the method of analyzing secondary literature was used, namely the works of the authors, provided in the main provisions and references sections.

Research survey was conducted among teachers and master's students of the Eurasian National University and Astana International University. The total number of respondents who took part in the survey was 120 respondents.

The main research question of this survey was to determine the modern application of the project method in universities and the level of understanding of the influence of the project method on the development of critical thinking in students' self-study. This question can be formulated in more detail as follows: "How often is the project method used in universities and is this process focused on developing students' critical thinking?"

Based on the findings from the literature of secondary sources and the direction of research in this article, aimed at orienting projects to develop critical thinking in students' self-study, a questionnaire developed by the authors, consisting of several categories of questions, is provided below.

*Table 1 Survey questions for the first category*

<b>A. The essence of the project method in English lessons</b>	<i>YYes</i>	<i>NNo</i>	<i>Don't know</i>
1. Do you agree with the statement that the project method in English lessons promotes the active participation of students (schoolchildren) in the educational process?			
2. Does the project method develop students' (schoolchildren's) creative thinking?			
3. Do you know how the project method helps students (schoolchildren) deepen their knowledge of the English language?			

Table 1 presents questions aimed at identifying the level of respondents' understanding of the main aspects and the main idea of the project method in the process of teaching a foreign language. If the answer to all questions is "yes", it is revealed that the level of understanding of the essence of the project method is high, and vice versa, if the level is low, the answers "no" and "I don't know" are present.

*Table 2 Survey questions for the second category*

<b>B. Application of the project method in English lessons</b>	<i>YYes</i>	<i>NNo</i>	<i>Don't know</i>
1. Do you practice using the project method in English lessons (or during teaching practice)?			
2. Have you noticed the use of the project method in the classes of your colleagues (or in the classes of your classmates during teaching practice)?			
3. Do you use the project method to motivate students (or schoolchildren) to learn English?			

Regarding the practical application of the project method in English lessons, the content of the questions in Table 2 is considered. With frequent use of the project method, "yes" answers often appear, which means positive dynamics. However, the more often the answer "no" and "I don't know" appears, the less often the project method is used in teaching practice.

*Table 3 Survey questions for the third category*

<b>C. The connection between the project method and critical thinking in students' self-study</b>	<i>YYes</i>	<i>NNo</i>	<i>Don't know</i>
1. Do you know how the project method contributes to the development of critical thinking among students?			
2. Do you agree with the statement that students (schoolchildren) use analytical thinking during the implementation of the project?			
3. Does the project method contribute to the development of independence and responsibility of students, thereby organizing their self-study?			

The content of Table 3 is closest to the topic of the article, the questions of which are aimed at determining the level of respondents' understanding of the project method as a form of self-study and critical thinking as the main engine for the development and assimilation of students' knowledge in

this process. A high level is determined by respondents marking “yes” answer options, while a low level is determined by the presence of “no” and “don’t know” answers.

In general, the research stages in the form of a survey took place in three stages:

1. Questionnaire design where the authors developed a questionnaire presented in Tables 1, 2, 3 which was used for data collection. The main criteria when compiling the questionnaire were its structure and logic, closed type of questions, suggesting the presence of answer options, clarity and clarity of the wording of the questions.

2. Conducting a survey in which respondents received questionnaires and voluntarily participated in the survey by filling out response forms. During the process, standardization and optimal conditions for all respondents were observed.

3. Analysis of the results obtained, which consists of receiving answers from respondents and analyzing the data obtained. The criteria for processing the collected responses were to identify the main trends and relationships between the main aspects of the issues under study.

All results are presented in visual form and analyzed with a focus on the research topic, namely identifying the level of prevalence and literacy of using the project method as a form of self-learning for students, which is aimed at developing critical thinking.

## RESULTS

Having conducted a survey among teachers and master's students of the two higher educational institutions of the country presented in the article, results were obtained, the analysis of which led to certain conclusions. These results are shown below in charts, each corresponding to a specific category of survey question.

The horizontal axis displays the percentage (%) of respondents who answered the question (maximum - 100 percent); on the vertical axis we see the numbers of questions related to a specific category in the questionnaire. The blue indicator refers to the percentage of people who chose the answer “Yes”, the red indicator – “No”, the green indicator – “Don’t know”.

Thus, the detailed visual representation of the responses received from respondents allows us to see the difference and scope in the understanding, application and direction of using the project method.

*Diagram 1. Results of answers to each question in the first category of survey questions*

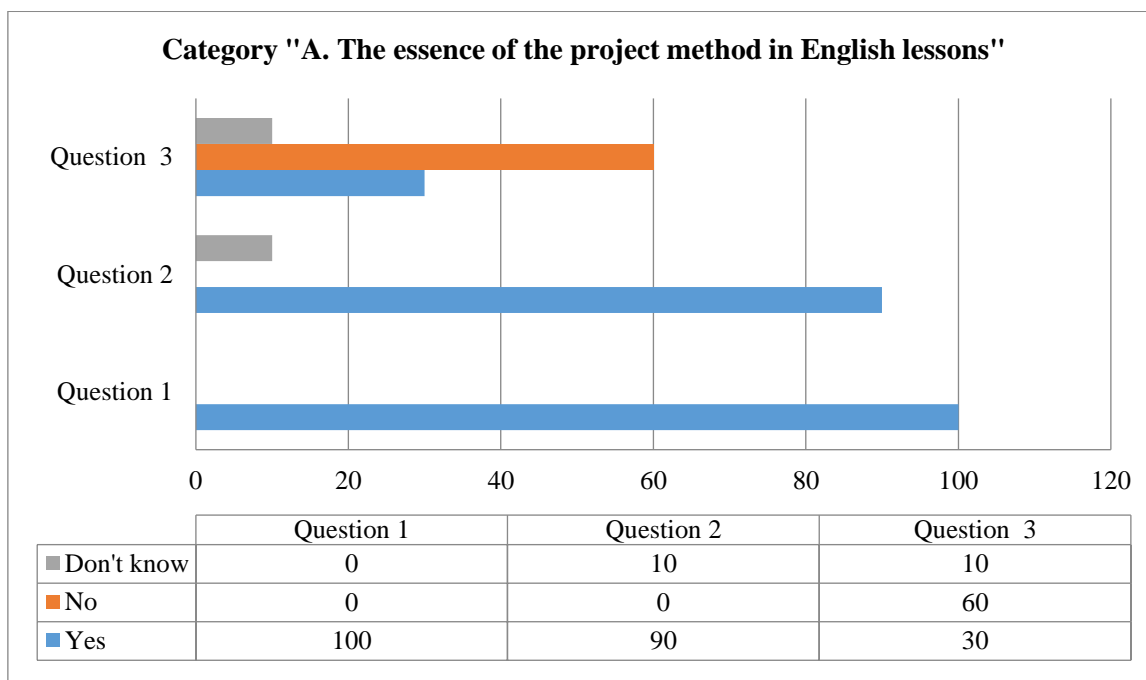


Diagram 1 provides results for questions in category “A. The essence of the project method in English lessons”. Thus, for each question, respondents’ answers regarding their understanding of the essence of the project method are shown.

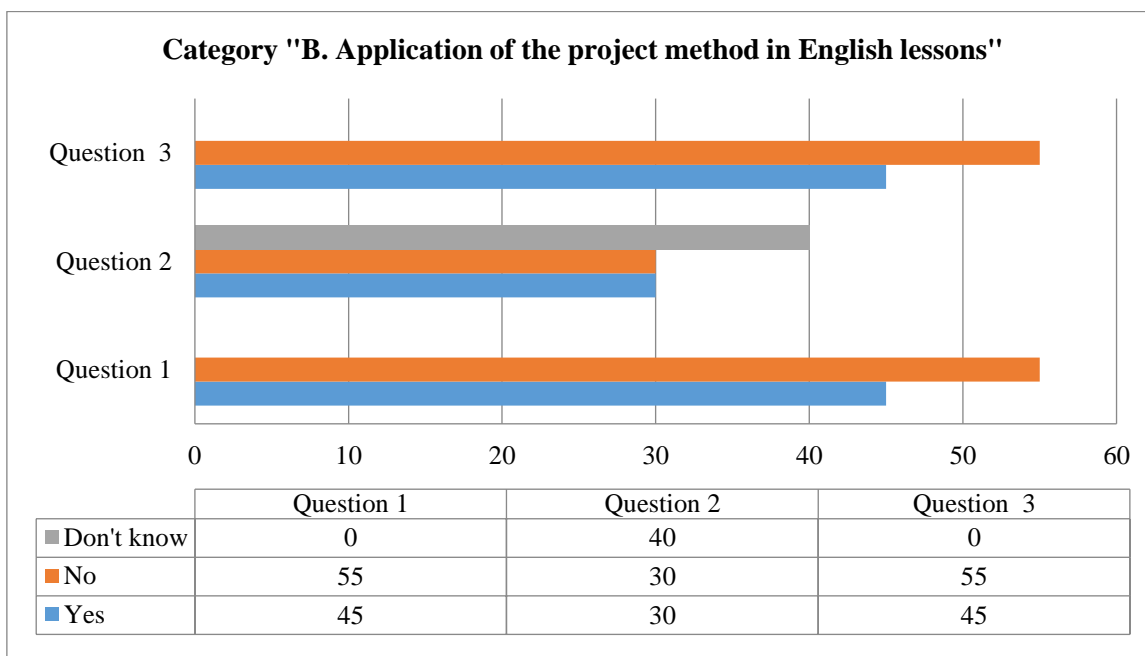
To the question “Do you agree with the statement that the project method in English lessons promotes the active participation of students (schoolchildren) in the educational process?” all respondents (100%) answered “Yes”. This suggests that teachers and master's students have an equally positive attitude towards the project method.

To the question “Does the project method develop students’ (schoolchildren’s) creative thinking?” 90% of respondents answered “Yes”, and 10% of respondents chose the answer “I don’t know”. This confirms that the majority prefer the project method in teaching practice.

To the question “How does the project method help students (schoolchildren) deepen their knowledge of the English language?” The answer “Yes” was chosen by 30% of respondents, the answer “No” was preferred by 60%, and the answer “I don’t know” was chosen by 10% of teachers and undergraduates. These results shows that teachers, although aware of the positive impact of the project method on students, do not fully understand how the educational process should proceed when using this method.

From the first diagram, one general conclusion can be drawn, containing the following problem: respondents do not understand how to organize a truly successful educational process using the project method, in which students would develop critical thinking while studying independently in English lessons. However, they understand that the project method has a positive effect on the learning process and, hypothetically, could well be an excellent means of achieving this result. It gives rise to the next problem, which concerns the reasons for the difficulty in organizing this method in such a way that students’ knowledge gradually deepens.

*Diagram 2. Results of answers to each question in the second category of survey questions*



Results for questions in category “B. Application of the project method in English lessons" is provided in Diagram 2. Visually, it is worth noting that the use of the project method, although welcomed by respondents, is not always used in their teaching professional practice.

To the question “Do you practice using the project method in English lessons (or during teaching practice)?” 45% of respondents answered “Yes”, and 55% of respondents chose the answer “No”. These results indicate that teachers and master's students more often do not use the method we

are studying in English lessons. At the same time, it is obvious that slightly less than half use the project method in their classes.

To the question “Have you noticed the use of the project method in the classes of your colleagues (or in the classes of your classmates during teaching practice)?” 30% of respondents answered “Yes,” another equal percentage of teachers and master's students preferred the answer “No” and as many as 40% chose the answer “I don’t know.” This indicates that teachers are not sufficiently involved in the learning activities and experience of their colleagues.

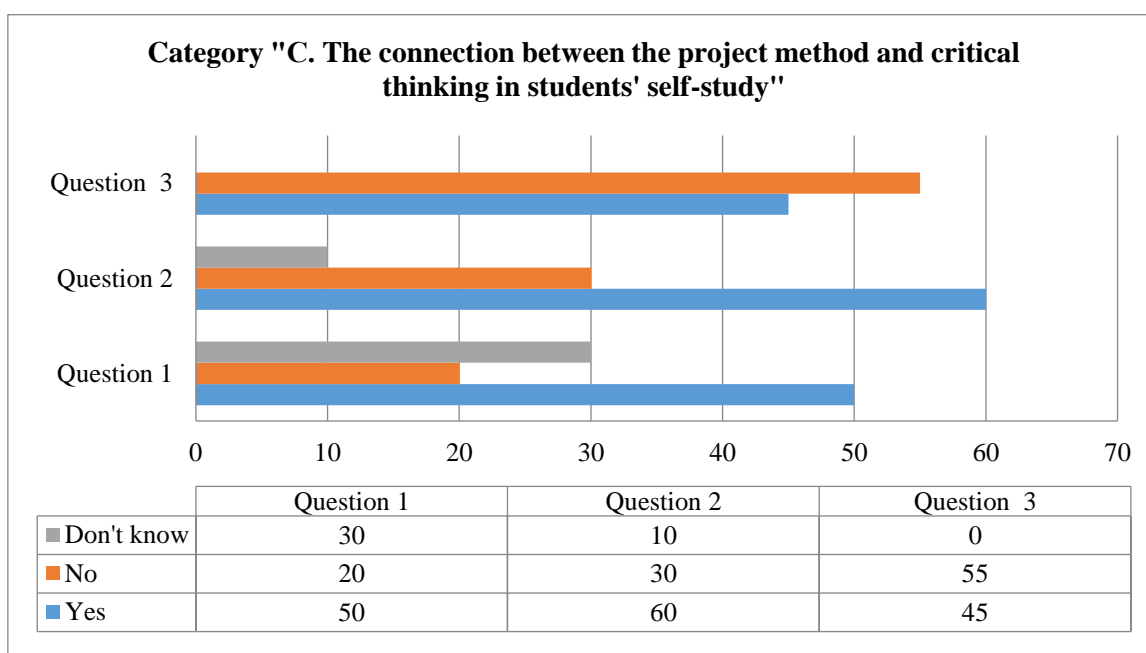
To the question “Do you use the project method to motivate students (or schoolchildren) to learn English?” 45% of respondents chose the answer “Yes”, and 55% of teachers and undergraduates answered “No”. This result tells us that only 45% of respondents use the project method effectively.

However, more than half prefer other methods of motivating students to learn a foreign language, which undoubtedly has its own reasons, raising topics for future research. Focusing on the research question of our article, the results largely show negative dynamics regarding the use of the method under consideration as a form of self-study for students.

The conclusion drawn from Diagram 2 is the problem of the rare use of the project method in higher educational institutions in such a way that students develop critical thinking and motivation during self-study in English classes, which can be attributed to various reasons, the study of which could form the basis for subsequent research in this area.

Regarding the topic of this article and its focus, the results for this category in the form of decline show the effectiveness of the research question under consideration. This is explained by the lack of desire on the part of most teachers to involve students in learning a foreign language through the project method, which limits the development of critical thinking during their self-study.

*Diagram 3. Results of answers to each question in the third category of survey questions*



Finally, the results of the questionnaire, the questions of which are aimed at finding out the possible cause, which is posed as a problem of this study in the article, are provided in diagram 3 with the category “C. The connection between the project method and critical thinking in students’ self-study.” Namely, this problem was proposed to consist in the possibly inaccurate use of the project method in English lessons.

To the question “Do you know how the project method contributes to the development of critical thinking among students?” 50% of respondents answered “Yes”, while the other 20% answered “No”; the answer “I don’t know” was preferred by 30 percent of teachers and master's

students. These results are considered quite positive, since half of the respondents mentally imagine the connection between critical thinking and the project method.

At the same time, returning to the previous results of questions from category B, where respondents noted that they do not often use the project method, a subsequent question arises. This question concerns the inconsistency of using the projection method with knowledge of its usefulness in relation to critical thinking.

To the question “Do you agree with the statement that students (schoolchildren) use analytical thinking during the implementation of the project?” The answer “Yes” was chosen by as many as 60% of respondents, 30% answered “No” and only 10% of teachers and master's students chose the answer “I don't know.” These results prove that the application of the project method in practice actually effectively influences the independent analytical activity of students' thought processes.

To the question “Does the project method contribute to the development of independence and responsibility of students, thereby organizing their self-study?” 45% of teachers and master's students answered “Yes” and 55% of respondents preferred the answer “No”. These results indicate a lack of understanding among teachers of using the project method in English lessons in an effective manner that contributes to the development of students' qualities such as independence and responsibility. Students develop these skills through self-study, in an environment in which critical thinking develops naturally. It is for this reason that this question contains important information for research. The low result in the answers to this question reveals a possible reason for the rare and incorrect use of the project method, which lies in the level of prevalence of this topic in various types of developments and literature.

From the third diagram, one general conclusion can be drawn, which contains the problem that teachers, seeing the partial positive impact of the project method on the thinking processes of students, do not fully understand how to most effectively and systematically organize this process in real teaching activities. The subsequent section of the discussion reveals the possible reasons and main aspects of the questions that arose in the process of analyzing the results regarding the research topic.

## DISCUSSION

The final three questions by category that arose during the analysis are discussed in this section. The contents of the three main questions for consideration are provided below:

1. Do teachers understand the essence of the project method for English lessons?
2. Do teachers use the project method in English lessons?
3. Do teachers connect the project method and critical thinking in students' self-learning?

Regarding the first question, it is estimated that about 90% of respondents understand the essence and main purpose of the project method. Most teachers have the same model for conducting classroom projects, the purpose of which is articulated by Jane Smith in her book.

In his study, the author states: “Motivation and the development of communicative competence are the main goals of the project method in English lessons; this method is comparable to the ability of students to reveal their professional potential” [10, 47].

This goal in the study is considered the most correct and it is possible that the use of the project method in English lessons at universities corresponds to the basic rules of its implementation.

The author Brown H.D. also accurately described in his book the essence and process of the project method. Regarding this issue, the author wrote: “When completing a project, students unite in groups and set a common goal, the achievement of which requires them to possess communication skills and practical actions while maintaining a positive atmosphere in the group” [11, 167].

It is these rules and the essence of using the project method in the classroom that teachers in our country understand and follow based on the results of the materials studied by Kazakh researchers and a survey conducted by the authors. Thus, in general terms, the answer to the first question in this section has a positive tendency.

Regarding the second question, the survey results showed that teachers, although they know the essence and positive impact of the project method on the development of students' skills, do not



always resort to its direct application. Possible reasons may be the lack of clear and well-thought-out projects that are directly used in English lessons, or the incorrect use of the necessary projects in the learning process.

Aspects of poor design and implementation of classroom projects may include insufficient knowledge of topics of interest to students or lack of use in the project of multimedia technologies that are so attractive to students today.

Richard Meier and his team, after conducting a study, identified twelve essential principles that prove the effectiveness of using multimedia in the learning process. Moreover, having studied in detail the mental processes of the brain, the professor noted that it is multimedia that leads students to useful learning. By useful learning, the author means learning that students can put into practice in the future and that will remain in their long-term memory [12, 28].

There may also be gaps in the compiled project assessment sheets. Initially, students are familiarized with the evaluation sheet. This sheet can both frighten students with its impracticability, and, on the contrary, make the process of creating a project extremely easy and unimportant due to the excessive simplification of the assessment.

The reasons in each individual case are individual, but in most cases, with sufficient diagnosis of the research question in practice, a general solution to this problem can be found. To this end, designs now available on the Internet have been reviewed and studied. As an example, the following most interesting book “English: Creative Projects for Schoolchildren and Students” by A. S. Bikeeva was analyzed [13, 108]. In this collection, teachers will be able to find many options for various projects, presentations, advertising campaigns and business plans for English lessons not only in schools, but also in higher education institutions.

To develop competent projects with instructions for students and students, a textbook by the authors M.A. Stupnitskaya, S.I. Alekseeva was reviewed [14, 16]. This manual includes the most important information about the structure and rules for applying the project method in practice for teachers and students, for example:

- optimal ways to start working on a project;
- formulation of the correct problem;
- selection of relevant topics and determination of the main goal;
- rules for planning stages of the project;
- collection and processing of necessary information;
- types and benefits of project results;
- ways to present project results in the most effective ways.

On the Internet it possible to find many examples of project results and their topics, but the exact structure of projects and recommendations for them are rarely given. As a result, it is easy to find only lists of project topics, but one must take into account the fact that these topics may already be outdated and not of interest to students. When viewing the project product, teachers cannot delve into the details of its preparation.

This leads to the conclusion that in most cases, university teachers draw up projects themselves, and due to the lack of a competent sample, this process is not always successful. A database of exemplary projects with detailed descriptions of their application in the teaching process would be useful in this case for most teachers to achieve success in effectively using the project method.

Regarding the third question, it should be noted that the peculiarity of using the project method in the educational process is its connection with the development of critical thinking in the process of students' self-study. However, not all teachers combine the project method and critical thinking in students' self-study, which can be perceived as one of the main problems of modern education.

Combining the project method and critical thinking in English classes can enable university students to develop not only language skills, but also the problem-solving, research, argumentation and communication skills necessary for their future professional competence. That is why the problem of understanding this aspect among teachers has a bad effect on the results of applying the project method in practice. The absence of this focus in existing English language lesson projects leads to the ineffective use of this method and its partial unpopularity in universities.

Overall, the discussion of the results of the survey highlighted the importance of understanding and applying the project method in English lessons, as well as the need for further research and development of strategies to stimulate its use in the educational process to develop critical thinking among students.

Noting important aspects, it can be highlighted that the survey results showed that the majority of teachers understand the essence of the project method in English lessons. This, in turn, indicates theoretical knowledge regarding this method among the majority of respondents.

Subsequent survey results raise questions about the reasons for the low practical implementation of theoretical knowledge and the need to study barriers or obstacles to the use of the project method in the educational process. The answer may be that teachers do not connect the project method with the development of critical thinking in students in the process of self-study.

The survey results, in turn, may be useful for other research. In other words, these results provide a basis for further research that may contribute to the development of more effective educational strategies and approaches.

For example, the aspect of studying barriers to the application of the project method has not been sufficiently studied with regard to the consideration of relevant factors. Research can also be aimed at assessing the effectiveness of educational programs that include the project method. This could add qualitative information to the question of assessing the impact of such programs on the level of understanding, application and influence on students' critical thinking in the process of their self-study.

## CONCLUSION

Teaching English in universities in an effective manner aimed at achieving the objectives of modern education requires the use of the project method. It is this method that allows students to stimulate critical thinking, which is formed in their self-study.

The project method provides students with the opportunity to conduct the communication process competently, apply new knowledge in practice, analyze information, collaborate with other participants, and make decisions at the right time. And most importantly, students independently set goals and objectives, collect and analyze information, create their own material, which develops into unconscious self-study, supported by critical thinking.

During the study, the methods of collecting and analyzing information were a survey of master's students and teachers, as well as an analysis of the literature of other authors in this field. As a result, the aim of the study was achieved, namely, the level of application of the project method was determined, and the aspects of its compliance with the requirements for the development of critical thinking of students' self-study in higher educational institutions were compared.

To summarize, the survey results show insufficiently competent and frequent use of the project method with a focus on developing students' critical thinking in English lessons. However, the understanding of the importance and positiveness of the project method and the desire to use it competently among respondents is quite high, which proves the importance of researching this issue.

As a result, two main problems were identified that hinder the effective use of the project method aimed at developing critical thinking when students work independently in English classes at universities:

1) Insufficiently competent and detailed preparation of projects for English lessons in universities (for example: optimal structure, frequency of use, current topics, use of authentic and multimedia material, competent preparation of assessment sheets).

2) Incorrect application of the project method in professional practice in English lessons (in the presence of a well-prepared project).

As a solution to all the listed problems that were identified as a result of a survey among teachers and master's students, the authors propose the following::

1) Diagnostics and refinement of existing projects in university programs, if there are any inaccuracies, their addition.

2) Conducting seminars and trainings on the effective use of projects available in the program for English lessons with the preparation of methodological recommendations.

3) Drawing up a system of projects that meet all of the above requirements.

4) Creation of detailed methodological recommendations for each of the developed projects for their implementation in practice, or holding an appropriate seminar with training.

Thus, the study was successful, which made it possible, through the results of the survey and analysis of methodological literature, to compile lists of identified problems and ways to solve these problems. These findings may be useful for future research in the field of methods of teaching foreign languages, as well as for teachers and students who are interested in this topic or have some difficulties in the field of study.

Correct use of the project method in the professional activities of teachers of higher educational institutions and taking into account the results, conclusions and proposed solutions in this study would make the process of teaching a foreign language more interesting and developing. Using the project method in such a way that this process is a form of self-study for students and ensures their natural development of critical thinking, it can enable modern education to prepare future specialists who are competent in the professional field.

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## Жоба әдісінің студенттердің өзіндік жұмыс барысында сыни ойлауына әсері

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*Бұл мақалада жоғары оқу орындарының студенттерін ағылшын тілін оқытудағы жоба әдісінің шарттары, мазмұны мен ерекшеліктері, сондай-ақ бұл әдістің өз бетінше жұмысында сыни ойлауды дамытуға әсері қарастырылады. Оқытушылар мен магистранттар арасында жүргізілген өз бетінше әзірленген сауалнама негізінде сауалнама әдісінің көмегімен жобалар әдісін қолданудың ағымдағы бағасы және графикалық диаграммалар түріндегі нәтижелері бар жоғары оқу орындарындағы жобалардың мәні мен мақсатын түсіну анықталды. Қазіргі әлемдегі өзекті әдіс бола отырып, Жоба әдісі студенттерді сыни ойлауды белсенді дербес дамытуға тартады, осылайша оларға Университет өмірінде өте қажет ғылыми жұмыстарды құрудың бастапқы дағдыларын салады. Мұның бәрі студенттердің ғылыми және білім беру қызметі саласындағы жетістіктеріне және кәсіби маңызды құзыреттерді дамытуға әкеледі. Осы мақаланың нәтижелері студенттердің өзіндік жұмыс процесінде сыни ойлауына бағытталған, университеттерде сауалнама жүргізу арқылы анықталған және тиісті шешімдерді ұсынған жоба әдісін қолдану мәселелері болып табылады. Бұл шешімдер оқу жобаларын дайындайтын оқытушыларға, сондай-ақ білім беру саласындағы кейінгі зерттеулер мен шет тілін оқыту әдістемесіне пайдалы болуы мүмкін. Бұл мақаланың құндылығы жоғары оқу орындарында жобалық әдісті сауатты қолдану арқылы қол жеткізілетін сыни ойлау дағдылары бар мамандарды іздеудің заманауи тенденцияларымен түсіндіріледі.*

*Кілт сөздер: жоба әдісі, студенттердің өзіндік жұмысы, ағылшын тілін оқыту, сыни тұрғыдан ойлау, сауалнама әдісі сауалнама.*

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### **Влияние метода проектов на критическое мышление студентов в ходе самостоятельной работы**

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*В данной статье рассматриваются условия, содержание и особенности метода проектов в обучении студентов вузов английскому языку, а также влияние этого метода на развитие критического мышления в их самостоятельной работе. С помощью метода опроса на основе самостоятельно разработанной анкеты, проводимой среди преподавателей и магистрантов, была выявлена текущая оценка применения метода проектов и понимание сущности и цели проектов в вузах с результатами в виде графических диаграмм в процентах. Являясь актуальным методом в современном мире, метод проектов вовлекает студентов в активное самостоятельное развитие критического мышления, тем самым вкладывая в них начальные навыки составления научных работ, которые так необходимы в жизни вуза. Все это приводит к успехам студентов в сфере научной и образовательной деятельности и развитию профессионально значимых компетенций. Результатами данной статьи являются проблемы использования метода проектов, ориентированного на критическое мышление студентов в процессе самостоятельной работы, выявленные посредством анкетирования в вузах и предложенные соответствующие решения. Данные решения могут быть полезны преподавателям, готовящим учебные проекты, а также для последующих исследований в области образования и методики преподавания иностранного языка. Ценность данной статьи объясняется современными тенденциями поиска специалистов с навыками критического мышления, которые достигаются за счет грамотного использования метода проектов в вузах.*

*Ключевые слова: метод проектов, самостоятельная работа студентов, обучение английскому языку, критическое мышление, анкетирование, анкета.*

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## **OPTIMIZATION OF ADAPTIVE LANGUAGE LEARNING USING ARTIFICIAL INTELLIGENCE**

*The active penetration of digital technology into all spheres of human activity has naturally led to processes of transformation of the education system. In recent times, the growing interest around the possibility of using artificial intelligence (AI) in the educational space indicate the relevance of the topic. The aim is to analyze methods and technologies for optimizing adaptive learning of the Russian language as a foreign one based on AI. The theoretical significance is determined by its contribution to exploring various approaches to integrating AI into the educational process, as well as further investigating the effectiveness of using AI in adaptive language learning. The practical significance lies in the possibility of applying its main research results when introducing adaptive learning platforms and applications into educational institutions and developing recommendations for optimizing language teaching programs. During the study, scientific and methodological*