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Implementing educational webquests as an effective tool for developing communicative competence among university students: a methodological aspect

This article analyzes educational web quests as a teaching method for university students to develop communication skills. The main goal of the study is to assess the effectiveness of using web quests to develop students' communication skills in various aspects: the grammatical structure of language, sociolinguistic contexts, and strategic competencies. The possibilities of integrating these methods into the educational process are also considered. The study design is based on the use of both qualitative research methods — such as experiments and questionnaires — and quantitative methods such as testing and content analysis. The study involved 120 students: 60 of them were assigned to the experimental group and the other 60 into the control group. The experiment lasted eight weeks; during this time, students from the experimental group completed various tasks based on educational web quests to apply theoretical knowledge in practice. The results of the study showed that the use of web quests improves students' communication skills. On average, the score of the experimental group was 27% higher than the control group. Particular attention was paid to the development of discursive and strategic competencies, which contributed to the successful completion of tasks such as debating, writing essays, and creating multimedia projects by students. Web quests also stimulated student interest in learning, developing critical thinking, and interpersonal skills.

Keywords: educational webquests, communicative competence, digital education, methodological aspect, innovative teaching methods, higher education, digital tools in education.

Introduction

Learning today is evolving due to the digitalization process and the recognition of the need to graduate students who can effectively communicate in multicultural environments. Under these circumstances, the development of communicative competence has become one of the major tasks of the higher education system. Hymes defined communicative competence as the ability to use language appropriately in various social and linguistic environments [1]. Canale and Swain later expanded this concept and identified the structural components of competence, including grammatical, sociolinguistic, strategic, and discursive elements [2]. The integration of digital tools, as Larson and Merrill highlight, makes a significant difference in developing these components [3].

The use of educational webquests is another innovative method that facilitates the development of communicative competence. The concept of the webquest, developed by Dodge, is a way of learning that involves exploration, including through independent information searching and practical problem solving [4]. Webquests were found to be effective in improving language skills, promoting critical thinking, and motivating students, as shown in the study by Gonzalez and Hughes [5]. As Zhumabaeva (2022) notes, the use of web-quests in a multicultural educational environment contributes to the development of intercultural competence, which is especially relevant in the modern globalized context [6]. [6]. However, their implementation is not straightforward and requires a strong methodological foundation. For example, Buchanan and Simpson stress the need to match tasks to students' levels of training and to guarantee technical support [7]. These considerations remain relevant for this study, which aims to examine the effect of educational webquests on the development of university students' communicative competence and to establish guidelines for their effective integration into the educational process. The scientific importance of this research is based on its contribution to the theory of webquests in education and its justification of the methodological approach. The practical significance lies in the possibility of using the results to enhance the quality of teaching and to help students prepare for future careers in a technologically driven society.

The concept of communicative competence has become central in modern educational processes and is understood as the ability to communicate effectively and appropriately in various linguistic and cultural environments. This paper provides an overview of the theory of communicative competence, a term first used by Hymes, which goes beyond linguistic features to encompass features of social interaction [1]. Based on Hymes' theory, Canale and Swain developed a model with four components: grammatical, sociolinguistic, strategic, and discursive [2]. Today's society demands that professionals not only have a deep understanding of their subject area but can also communicate effectively in various communicative situations. As noted by Belyaeva and Gurov, the development of communicative competence is essential for the successful performance of professional activities, particularly in areas involving intercultural communication [8]. In the Kazakhstani context, Zhumabayeva emphasizes the importance of fostering communicative competence in a multicultural environment, stating that the goal of intercultural communication can be achieved only through the comprehensive development of all components of communicative competence [6]. The digitalization of education has also expanded the search for innovative methods to develop communicative competence. Antropova's research demonstrates that the use of digital tools such as educational webquests provides opportunities for the development of all components of communicative competence [9]. The author also highlights how the virtual environment enhances linguistic, sociocultural, and strategic skills.

Ensuring the integrated development of linguistic, cognitive, and social skills as a key goal of modern education requires innovative methods. In this context, educational webquests play a significant role by combining the active use of digital technologies with research activities. These tasks allow students to integrate theoretical knowledge with practical skills and pursue both educational and professional objectives [10]. The first educational webquests were created by American educator Bernie Dodge in 1995. The main idea was to use the Internet as a primary source of information while developing skills in searching for, analyzing, and interpreting information independently. According to Dodge, webquests shift learning from passive knowledge reception to active engagement, where students take on the role of researchers [4]. This approach has been widely adopted in various educational systems, including those of Kazakhstan and Russia, due to its flexibility and universality.

To achieve educational objectives, webquests must be carefully structured. According to Polat and Bukharkina, a typical webquest structure includes six key elements [11], as presented below in Table 1.

Table 1

Key elements of webquest structure and their practical application

Element	Description	Example
Introduction	Provides the general context of the task, sets goals, and motivates students.	Preparing a tourist guide for visitors from another country.
Task	Defines specific objectives and expected outcomes.	Developing a social campaign to enhance language activity and critical thinking.
Process	Outlines the steps for completing the task, including instructions for resource use, discussions, and presentations.	Group discussions followed by a presentation of results.
Resources	Selects high-quality internet resources relevant to the student's level.	Using official museum websites or educational archives.
Evaluation	Specifies criteria for assessment, including completeness, originality, depth of analysis, and quality of presentation.	Assessment of originality and thoroughness of the completed task.
Conclusion	Encourages reflection on the task's significance and practical application.	Reflecting on the work done and its implications.

To help students learn in an active way, not passively receive knowledge, webquests are structured. projects [8]. Recent studies also emphasize the importance of customizing webquests to specific educational contexts and student needs. Mobile applications for creating more interactive webquests are described by Antropova [9], who links this development to the widespread ownership of smartphones. In addition, from

the multicultural context viewpoint, Zhumabayeva [6] underlines the significance of incorporating tasks related to local culture and language.

Thus, educational webquests represent an innovative teaching method combining research activity, interactive engagement, and critical thinking. Their structured and flexible design makes them an effective tool for developing communicative competence and other skills needed in the modern educational environment. Communicative competence develops through interactive tasks using authentic materials, making webquests a relevant and practical tool in modern pedagogy. The ability to use linguistic resources appropriately in diverse communicative situations and to engage effectively in interpersonal and intercultural communication is the complex integrative skill emphasized by Aydin, who highlights the role of WebQuests in developing communicative, discursive, and intercultural competence through authentic and context-based learning tasks [12]. Webquests provide the conditions for fostering these components due to their interactive nature and reliance on authentic materials.

Research by Polat and Bukharkina [11] demonstrates that webquests promote language skill development by engaging students in genuine communication based on searching for and analyzing information from online sources. For example, their study reports that students explored cultural heritage from various countries by preparing presentations and essays, thereby improving writing and critical thinking skills. Consistent findings are presented in Aydin [12], who argues that WebQuests significantly enhance discursive competence, as they require learners to organize information logically, formulate conclusions, and articulate their ideas persuasively in oral and written formats.

Webquests are advantageous due to their applicability in both individual and group formats, and their versatility. They also enhance motivation. Polyakov [13] notes that inquiry-based tasks rooted in real-world scenarios are more engaging than traditional teaching methods. For instance, in Asanova's [14] study, students developed marketing plans for imaginary products, applying both theoretical knowledge and practical skills. Similarly, Ivanova [15] reports on enhanced communication skills among students who collaborated to create virtual tours of historical sites. Nevertheless, there are challenges in incorporating webquests into education. As Belyaeva and Gurov [8] observe, teachers must be trained to design and use webquests effectively, which is often a barrier. In some regions, inadequate equipment and unstable internet connections limit usage, as noted by Zhumabayeva [6]. Furthermore, Baizhanova [16] points out that weaker students may be discouraged by tasks requiring high-level language or research skills if their abilities are not considered.

Despite these obstacles, webquests can be integrated into the learning process effectively. For instance, Antropova [9] details how students created and presented interactive Google Sites for foreign tourists, boosting both communicative competence and interest in their region. Matveev et al. [17] explain the use of webquests in training sociocultural professionals, where students created event scenarios using online resources to enhance both professional and communication skills. In the UK, students examined modern environmental issues in the study by Brown and Smith [18], improving their language abilities while engaging with real-world global problems.

Educational webquests have proven highly effective in developing communicative competence due to their interactivity, flexibility, and suitability across various educational settings. However, their implementation requires addressing barriers such as teacher training, technical infrastructure, and alignment with student proficiency levels. Case studies from Russia, Kazakhstan, and other international contexts confirm that webquests enrich the educational process, making it more dynamic, motivating, and relevant to the demands of today's society. [19]

Materials and methods

The present study is designed to investigate the effects of educational webquests on university students' communicative competence development. To meet this objective, a mixed-method approach was used, incorporating both qualitative and quantitative analysis. This helped to understand the processes by which communicative competence is developed and identify some of the important features of webquests in educational practice. The study involved one hundred and twenty students from universities in Kazakhstan who were studying humanities and pedagogy. The participants, 18 to 22 years old, were randomly assigned to two groups: the experimental group, which used the webquests, and the control group, which followed the traditional teaching method. This ensured that external factors such as academic achievement or prior knowledge were controlled for by equating the two groups through random selection. The study was a pedagogical experiment lasting eight weeks and was primarily designed to investigate the role of tasks in webquest-based learning for the experimental group. The tasks included individual and group work, presentations, online dis-

cussions, and different forms of interaction. Another important aspect of the experiment was the use of comprehensive and credible authentic materials and multimedia resources to enhance student learning.

To ensure methodological rigor, random assignment was carried out using a computer-generated randomization procedure, which allowed for eliminating selection bias. Additionally, both groups were taught by instructors with comparable professional experience to minimize instructor-related effects.

The following methods of data collection were used in this study: surveys, observation, testing, and content analysis. A single approach would make it difficult to draw a sound conclusion regarding the effect of webquests on the mentioned skills. Surveys were administered to students at the beginning and at the end of the experiment. This aimed to measure the initial level of communicative competence of the participants and the change that occurred during the study. The questions in the survey were structured in relation to the CEFR scales and dealt with aspects such as oral and written communication, teamwork, and confidence in interpersonal communication.

The survey instrument included items aligned with the CEFR communicative descriptors and demonstrated strong internal consistency (Cronbach's $\alpha = 0.87$), which confirms the reliability of the tool. Construct validity was ensured through expert review by three specialists in applied linguistics and language pedagogy.

In addition to surveys, participants' activity, including how often they posted to the discussion forums and how well they were able to distribute the work in a group—was measured through observations of student behavior during webquest activities. This approach not only captured quantitative, but also qualitative, changes that are associated with the development of communicative skills. This approach also helped to draw conclusions about the dynamics of these changes with the help of standardized observation forms used to systematize the collected data. The testing, which was done during the experiment, covered all four language skills — speaking, writing, reading, and listening, and hence gave a general picture of the level of communicative competence. Since the tests used in the study were commonly used in the learners' curriculum, this made the results very credible.

To quantitatively evaluate changes, pre-test and post-test scores were statistically compared using an independent samples t-test and paired-samples t-test where appropriate, with a significance level of $p < 0.05$. Effect sizes (Cohen's d) were calculated to assess practical significance. All statistical analyses were conducted using SPSS 25 software.

When the results of the experimental and control groups in the testing were compared, there were significant differences in the outcome, thereby indicating a positive impact of webquests on the development of communicative skills. Content analysis of students' completed tasks was also given special attention in the study. This method also helped to assess how well the participants were able to use language in its most natural environment as well as how creative and detailed they could be to arrive at a solution to a problem. For instance, the experimental group of students produced longer texts with higher coherence and logical language structuring, which showed positive development in discursive competence.

Content analysis was conducted according to predefined coding categories related to accuracy, coherence, fluency, lexical richness, and intercultural sensitivity. Inter-rater agreement between two independent coders reached 0.83 (Cohen's κ), indicating high coding reliability.

To some extent, the present study aimed to identify the factors that would facilitate the integration of webquests into the learning process. From the analysis, it becomes clear that instructors' knowledge of using digital resources effectively in the learning process and the content of tasks tailored to students' learning ability are crucial factors. However, there are some limitations of the study that should be taken into consideration when drawing conclusions. The research was conducted only on students from Kazakhstani universities, which means that the results cannot be generalized to an international context. This experiment lasted eight weeks, which is a good period for assessing short-term changes but does not give a complete picture of the long-term development of communicative competence when using webquests in the long run. The experiment may have been influenced by differences in digital literacy between students and instructors, and between the two groups.

The study did not require formal approval from an ethics committee, as it did not involve any intervention affecting the physical or psychological condition of participants and was conducted within the framework of the standard educational process. All students were informed about the purpose of the study and voluntarily agreed to participate. Anonymity and confidentiality of the data were fully ensured, and participation had no impact on academic performance or grades.

Thus, the methodology employed in this study is based on a comprehensive approach combining qualitative and quantitative methods to evaluate the impact of webquests on communicative competence development. The application of experimental design, surveys, observation, testing, and content analysis ensured the reliability and depth of the findings. This allowed for confirmation of the effectiveness of webquests as a teaching tool and identifying key factors that contribute to their successful integration into the educational process. **The robustness of the research design and triangulation of multiple data sources enhanced the validity and credibility of the study outcomes.**

Results and discussion

The study shows that web-based quests are a useful tool for improving the linguistic competence of students. As a result, there is a need for methods that, in addition to imparting knowledge, also teach the skills that students will employ in the profession and in social interactions. Thus, webquests, which combine individual research, collaborative work, and peer interaction, can be seen as a useful strategy in addressing these challenges. From the data collected, it is concluded that webquests encourage students to participate actively in learning, encourage them to seek information independently and help them apply knowledge. These outcomes are particularly valuable in the context of developing communicative competence because they are holistic, encompassing the grammatical, sociolinguistic, strategic, and discursive aspects of language. The objectives of the research as outlined in the methodology, were to examine how webquests affect the development of students' communicative skills. The study found that educational webquests are not only a theoretical language learning approach, but also a way of applying knowledge in real life. This makes them valuable in this era of competence-based educational systems that prepare students for the professional world. Thus, the analysis of the collected information reveals that webquests represent a useful approach to the teaching of communicative language skills, both in the context of the modern language learning curriculum and within the broader educational debate about the role of information and communication technologies in shaping the future of learning. Moreover, the findings of the study suggest that webquests can serve as a useful model for integrating theory and practice, research and teaching, as well as individual and collaborative learning. In this sense, the study offers significant implications for the development of innovative and effective methods of language teaching and learning.

The results are presented in this section based on the analysis of the data collected from the experiment. They include a comparative analysis of changes in the experimental and control groups; a dynamic analysis of key communicative competence components; and advantages and challenges of webquest implementation. This study also offers practical recommendations that may be useful for educators and educational program developers in addition to supplementing existing theoretical approaches.

The study found that there were significant differences between the experimental and control groups regarding the development of communicative competence, demonstrating that educational webquests are effective. The two groups were comparable at the beginning of the study to enable the researcher to make a fair comparison of the effect of webquests on learning. The pre-test score was 68.4 % for the experimental group and 67.9 % for the control group, which shows that the two groups were similar at the beginning. At the end of the eight-week experiment, the experimental group had a higher average score of 87.6 % than the control group, which had an average score of 73.1 %.

The greatest changes were observed in the key components of communicative competence: discursive, sociolinguistic, strategic, and grammatical competences. For example, when it comes to essay writing, 78 % of the students in the experimental group used complex grammatical constructions with confidence, whereas only 65% of the students in the control group could do. There was an improvement in the discursive competence evident in the production of multimedia presentations, which made the presentations by the experimental group more organized and logical in their information presentation. Content analysis of the presentations made by the experimental and control groups revealed that 92 % of the presentations made by the experimental group were logical and structured, a feat achieved by only 68% of the control group.

Additionally, role-playing exercises, such as "Interview with a Foreign Guest," highlighted the experimental group's superiority in sociolinguistic competence development. Students effectively adapted their speech to the communication context, demonstrating knowledge of cultural and social norms. These tasks contributed to the development of intercultural competence, which is especially critical in the context of a globalized educational environment.

For a clearer demonstration of improvements in the experimental group, the table below presents the results of key tasks (Table 2).

Comparative results of key communicative competence components in experimental and control groups

Component	Example task	Results: experimental group	Results: control group
Grammatical Competence	Writing an essay on “Global Challenges of Modernity” using complex syntactic constructions.	78 % of students used complex sentences.	65 % of students used simple sentences.
Sociolinguistic Competence	Conducting a role-play “interview with a Foreign Guest,” simulating real communication.	85 % successfully adapted speech to the context.	Only 60 % demonstrated adherence to sociolinguistic norms.
Discursive Competence	Creating a multimedia presentation on “Cultural Heritage of Kazakhstan.”	92 % of presentations were logical and coherent.	68 % of works lacked sufficient structure and coherence.
Strategic Competence	Conducting debates on “Technology in Education: Opportunities and Risks,” using argumentation strategies.	78 % successfully used persuasion and counterarguments.	Only 55 % effectively argued their positions.

The experiments showed that webquests do not only activate the linguistic activity but also cognitive and social skills development. For instance, the collaborative tasks such as developing a virtual travel guide assisted the students in the experimental group to learn teamwork as can be seen from the results: 88 % of participants worked effectively in teams compared with only 62 % in the control group. The analysis of the obtained data has shown that the application of webquests brings about a significant improvement in the development of communicative competence. These results are in agreement with those of Polat and Bukharkina (2022) who stressed the importance of interactive methods of teaching to enhance students’ motivation and participation. Moreover, the findings of this study expand on existing theoretical frameworks, demonstrating that educational webquests contribute to the development of not only linguistic but also sociocultural and strategic skills, making them an effective tool in modern educational practices (Fig. 1).

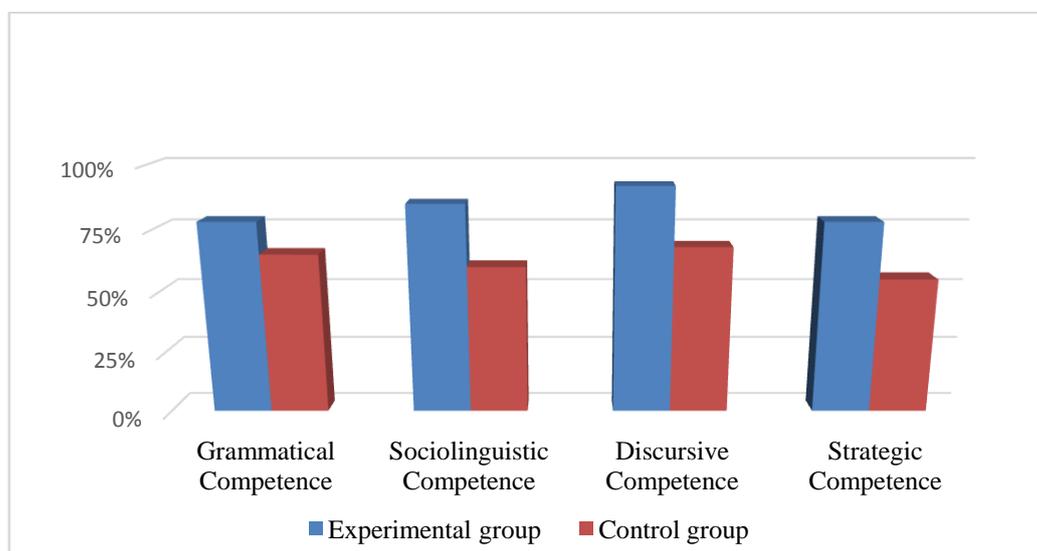


Figure 1. Development of key components of communicative competence: experimental and control groups

The chart shows that the use of webquests in the educational process gives better outcomes than traditional methods of teaching. The experimental group was clearly better in all aspects of communicative competence. The improvements were especially evident in the discursive competence, where the students in the experimental group made their language coherent and logically organized, as well as in sociolinguistic competence by enabling the students to understand when to use particular language in a given context. These re-

sults support that educational webquests are a productive activity to enhance the development of the total skills of communicative competence since it allows the students the opportunity to use language in its almost natural environment. Therefore, the incorporation of webquests does not only enhance language development but also promotes critical thinking, social interaction, and preparation for cross-cultural communication. The task performance of students in the experimental group showed positive improvements in all the components of communicative competence. These improvements were particularly evident in the following areas.

First, grammatical competence: Participants in the experimental group used complex syntactic structures confidently. For instance, on the essay question “Global Challenges of Modernity,” 78 % of students in the experimental group used complex and compound sentences more frequently than 65% of control group students. Second, sociolinguistic competence was enhanced through tasks that called for the language to be used in specific social and cultural environments. In the role play activity “An Interview with a Foreign Guest,” 85 % of the students in the experimental group were able to change their speech according to the situation, which was not the case with the control group compared to only 60% in the control group. Fourth, the development of discursive competence was observed in the production of multimedia presentations, where presentation style for topics such as “Cultural Heritage of Kazakhstan” was highlighted. Only 8 % of the students in the experimental group made unnecessary elaborations in their presentations, a rate that is much lower than the 32 % of the control group. Lastly, strategic competence was most clearly seen in the debate. In the course of the discussion of the issue “Technology in Education: Opportunities and Risks,” 78 % of the students in the experimental group provided counterarguments and rebutted the opposing arguments, which is 23 % higher than that of the control group.

Advantages of using webquests

The study identified several key advantages of integrating webquests into the educational process, which facilitated not only the development of communicative competence but also the cultivation of additional skills necessary for professional success. Webquests proved to be an effective tool for enhancing student motivation, fostering autonomy, and developing teamwork skills.

One of the primary benefits was the increased interest of students in the learning process. More than 85 % of participants in the experimental group noted that webquest-based tasks were more engaging and beneficial compared to traditional teaching methods. For instance, the use of interactive and multimedia materials enabled students to better understand complex linguistic constructions and apply them in various contexts. Another significant aspect was the development of critical thinking. Through tasks involving information search and source analysis, students learned to assess data reliability, formulate conclusions, and structure their responses. The table below provides examples of tasks and their impact on key skill development (Table 3).

Table 3

Key skills developed through webquest-based tasks and their impact

Skill	Example task	Result
Motivation	Developing an interactive guide to regional attractions.	88 % of students reported increased interest in assignments due to multimedia tools.
Critical Thinking	Analyzing articles and news on “Global Environmental Issues”.	82 % of participants correctly identified key information and formulated well-reasoned conclusions.
Teamwork	Collaborative projects involving presentations or multimedia products.	87 % of students demonstrated effective role distribution and active team interaction.
Intercultural Competence	Comparing cultural traditions of Kazakhstan and English-speaking countries.	84 % of students successfully used language to explain cultural differences.

This paper aims to explore the ways in which webquests can be used to improve the learning of English as a foreign language (EFL) at the university level, as well as to identify other benefits of this educational technology. The results of the study demonstrated that webquests can be an efficient means of improving communicative competence in English due to their interactive and engaging nature. For instance, in develop-

ing the webquests, students were required to search for information from various sources, organize it properly, and present it in a coherent manner, thus enhancing their writing skills. Moreover, a significant advantage was the enhancement of teamwork skills. Performing tasks in groups brought students together, enhanced their interpersonal skills and increased their sense of social responsibility. When, for example, developing multimedia products, students assumed roles, shared ideas, and made group decisions that improved the quality of task completion. In addition, the use of authentic materials was another important aspect that assisted the students in immersing themselves in the linguistic environment and developing intercultural competence. For example, analyzing texts on cultural traditions helped the students to better understand the nuances of interaction in English-speaking contexts and to choose the right linguistic tools.

Therefore, the educational webquests have been found to be a useful tool not only for the development of communicative competence, but also for other important skills such as critical thinking, teamwork, and intercultural interaction. This supports their current integration into the modern educational process and further points to their potential for use in future teaching practices.

Although the effectiveness of webquests was high in the study described below, their application raises some issues that need to be considered. These are technical and pedagogical limitations, as well as individual differences among students. The biggest challenge was the time it took to prepare the webquests. The teachers involved in the experiment reported that it took between 10 and 15 hours to prepare a single webquest. This was because of the need to identify suitable materials, to include these in an appropriate form for the students, and to produce multimedia products. In addition, teachers had to teach the students how to use basic digital tools, which added further time pressure.

Technical limitations also played a critical role. Approximately 15% of participants in the experimental group faced difficulties accessing stable internet connections, especially in regions with limited digital infrastructure. Some students experienced challenges using platforms for completing tasks, which decreased their motivation and hindered teamwork. The table below outlines the main technical and pedagogical limitations identified during the study (Table 4).

Table 4

Technical and pedagogical limitations of webquest implementation

Type of limitation	Example of issue	Impact on learning process
Technical Issues	Unstable internet connection.	Delays in completing tasks, reduced quality of real-time interaction.
Digital Literacy	Low proficiency in multimedia tools among some students.	Need for additional training, increasing workload for teachers and students.
Time Investment	Prolonged development time for webquests (10–15 hours per webquest).	Limits the frequency of webquest integration into the learning process.
Preparation Disparities	Students with low linguistic and digital skills struggled with tasks.	Slowed group performance, reduced motivation among less-prepared participants.

However, some pedagogical challenges have been noted regarding the adaptation of tasks to various student proficiency levels. For instance, a webquest that has been developed for advanced language skills may be rather challenging for a less prepared student. This would lead to students' dissatisfaction and not fully participating in the learning process. In most cases, teachers had to modify the tasks by providing additional instructions or dividing them into smaller steps. Nonetheless, these can be rectified with appropriate preparation. For instance, using ready-made platforms for the creation of webquests (such as Google Sites or Moodle) can help reduce the time it takes to develop them. In addition, holding introductory sessions on digital literacy and ensuring that the students select materials that are appropriate for their level of English proficiency can improve the effectiveness of webquests.

Therefore, based on the findings of this study, it is necessary to consider both technical issues and individual differences for effective use of webquests in the learning process.

This study supports previous research in this field, including studies that have examined the effectiveness of educational webquests in teaching communicative competence. The study found that the propositions made by Polat and Bukharkina (2022) were valid; these authors had argued that webquests are an engaging

method of learning that requires students to think critically and apply theoretically acquired knowledge in practice.

In addition, the research concluded with a finding, which is similar to Zhumabayeva's (2022) study that examined the effect of webquests on students in the multicultural educational environment of Kazakhstan. Like this study, Zhumabayeva reported that webquests are not only useful in developing language skills but also in fostering intercultural competence at a time when the world is becoming a global village. This is also reflected in the work of the experimental group participants, who were able to adjust their speech to cultural and social contexts in the tasks they were to complete, a finding that supports the effectiveness of webquests as a teaching method. This study extends and clarifies existing findings. For example, while Brown and Smith (2023) employed webquests to address environmental and social issues in English-speaking countries, this study showed that a similar approach can be effectively applied in the Kazakhstani environment. For instance, in creating multimedia travel guides on regional cultural landmarks, the participants displayed both linguistic proficiency and cultural knowledge of the area to be visited. The comparison of the findings also revealed some aspects that are novel to this study. In particular, the contribution of webquest tasks to developing strategic competence had not been previously considered. From the data, it became clear that tasks such as debates and role-playing activities assist students in overcoming communication barriers and also in developing strategic thinking to address challenges in uncertain conditions. A comparison with the literature also revealed the limitations of this study, which are similar to those of other studies. For instance, Polyakov (2023) noted that the effectiveness of webquests depends on students' level of digital literacy and the quality of the Internet connection. This was also the case in our study where 15% of participants encountered some technical problems in completing the tasks.

This study shows that educational webquests are efficient tools for developing communicative competence and confirms previous findings. It also stresses that this method is universal and can be easily implemented in any learning environment, and that it is valuable preparation for future professional communication. The conclusions of this study provide a basis for further investigations into the ways of improving and adjusting webquest design for multicultural and digital environments. The findings of this study reveal that educational webquests are of great practical value in teaching students to develop their communicative competence. This method was effective in enhancing linguistic skill development as well as other essential skills such as critical thinking, intercultural communication, and teamwork. The strength of webquests lies in their flexibility and ease of application in different learning environments.

The best example of webquest integration was the production of a multimedia travel guide. The participants learned linguistic constructions and how to use them in real life to convey a message to an audience. Such experience is very important as the students need to prepare to apply intercultural communication skills in their future careers. The use of webquests in the multicultural environment was particularly useful as it suited the goals of the Kazakhstan education system. The materials of local cultural orientation helped the students to develop communicative skills without compromising their cultural values. At the same time, the tasks that involved the selection of international cultural practices caught the students' interest in intercultural communication.

Examples of successful webquest applications presented in the table below underscore their versatility and practical benefits (Table 5).

Table 5

Examples of webquest applications and their outcomes in a multicultural educational context

Focus area	Example task	Outcome
Language Skill Development	Writing an essay using authentic materials.	78 % of students improved grammatical accuracy and expanded vocabulary.
Intercultural Communication	Analyzing cultural traditions of various countries and creating a video project.	84 % of students effectively used language in intercultural contexts.
Critical Thinking	Conducting debates on social issues presented in the webquest.	82 % successfully argued their positions, developing analytical skills.
Teamwork	Developing group projects with multimedia tools.	87 % noted improved teamwork and task distribution.

In summary, educational webquests can be effectively integrated into the learning process, tailored to students' specific needs and educational goals. They not only foster communicative competence but also provide opportunities for developing personal qualities essential in professional settings. The findings of this study can inform the development of new educational programs focused on integrating digital technologies into the learning process.

Conclusion

Based on the findings of this study, it has been shown that this approach is very effective in developing the communicative competence of university students. This study revealed that this approach is effective in helping the learners acquire the language skills and also ensures that these skills are used in real-life situations which are close to the professional activities. In contrast to traditional methods of teaching, webquests empower students to work independently, to think critically and to make decisions in a group. The results of the present study showed that the learners in the experimental group who were exposed to webquest-based activities made significantly greater improvement in the development of linguistic and communicative skills than the learners in the control group. Discourse and strategic competences were particularly well developed which means that the students were not only able to use language but also to vary it according to the situation. These achievements are clear evidence of how webquests can serve as a link between theory and practice in the learning process.

The practical significance of this study is that based on the findings, webquests can be recommended for incorporation into educational programs to help address both linguistic and interdisciplinary tasks. The findings also show that webquests are able to enhance the learners' motivation, improve their teamwork skills and increase their understanding of cultural and social issues. This makes them a very good educational tool in the current digital society and especially in the context of globalization. However, the study also revealed some constraints of using webquests; these include time to design, variation in students' digital literacy and lack of technological infrastructure in some areas. These issues are worth further examination as well as ways to overcome them in order to make webquests more accessible and versatile.

The above points highlight the recommendations for future studies include: Developing webquests for different subjects, investigating the persistent effect of webquests on students' professional preparation, and creating tools for generating webquests automatically. Studying the application of webquests in culturally and linguistically diverse environments is another direction that may help to develop the theory and practice of digital education.

In conclusion, it has been shown that educational webquests can be an effective methodological and practical tool for the all-round development of the students' communicative competence. Their incorporation in the educational system presents new possibilities for training personnel who are competent in the increasingly globalized world.

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Университет студенттерінің коммуникативтік құзыреттілігін дамытуға арналған тиімді құрал ретінде білім беру веб-квестерін қолдану: әдістемелік аспект

Мақала университет студенттерінің қарым-қатынас дағдыларын дамытуда білім беру веб-квестерін оқыту әдісі ретінде қолдану мүмкіндіктерін талдайды. Зерттеудің негізгі мақсаты — веб-квестерді қолданудың студенттердің тілдік құрылым, әлеуметтік-тілдік контекстер және стратегиялық құзыреттіліктер сияқты әртүрлі аспектілердегі коммуникациялық дағдыларын дамытудағы тиімділігін бағалау. Сонымен қатар, осы әдістерді оқу үдерісіне интеграциялау мүмкіндіктері қарастырылады. Зерттеу дизайны сапалық зерттеу әдістеріне, мысалы эксперименттер мен сауалнамаға — және сандық әдістерге, соның ішінде тестілеу мен контент-талдауға негізделген. Зерттеуге 120 студент қатысты: олардың 60-ы эксперименттік топқа, ал қалған 60-ы бақылау тобына бөлінді. Эксперимент сегіз апта бойы жүргізілді; осы кезеңде эксперименттік топтың студенттері білім беру веб-квестері негізінде түрлі тапсырмаларды орындап, теориялық білімдерін тәжірибе жүзінде қолданды. Зерттеу нәтижелері веб-квестерді қолдану студенттердің коммуникациялық дағдыларын жақсартуға ықпал ететінін көрсетті. Эксперименттік топтың орташа көрсеткіші бақылау тобына қарағанда 27 %-ға

жоғары болды. Әсіресе дискурсивтік және стратегиялық құзыреттіліктерді дамытуға ерекше назар аударылды, бұл студенттердің дебат, эссе жазу және мультимедиалық жобалар жасау сияқты тапсырмаларды табысты орындауына көмектесті. Сонымен қатар, веб-квестер студенттердің оқуға деген қызығушылығын, сыни ойлауын және тұлғааралық қарым-қатынас дағдыларын дамытуға ынталандырады.

Кілт сөздер: білім беру веб-квестері, коммуникативтік құзыреттілік, цифрлық білім беру, әдістемелік аспект, инновациялық оқыту әдістері, жоғары білім беру, білім берудегі цифрлық құралдар.

Д. Жупарбек, С.С. Нуркенова

Реализация образовательных веб-квестов как эффективного инструмента для развития коммуникативной компетенции студентов университетов: методологический аспект

Данная статья анализирует возможности образовательных веб-квестов как метода обучения для студентов университетов в развитии навыков общения. Основная цель исследования — оценить эффективность использования веб-квестов для развития у студентов навыков коммуникации в различных аспектах: грамматическом строении языка, социально-языковых контекстах и стратегических компетенциях. Также рассматриваются возможности интеграции данных методик в процесс обучения. Дизайн исследования основан на использовании как качественных методов исследования — таких как эксперименты и анкетирование, — так и количественных методов вроде тестирования и контент-анализа. В рамках исследования было задействовано 120 студентов: 60 из них попали в экспериментальную группу, а остальные 60 — в контрольную группу. Эксперимент продолжался восемь недель; за это время студенты из экспериментальной группы выполняли различные задания на основе образовательных веб-квестов с целью применения теоретических знаний на практике. Результаты исследования показали, что использование веб-квестов способствует улучшению коммуникативных навыков студентов. В среднем балл экспериментальной группы оказался выше на 27 % по сравнению с контрольной группой. Особое внимание уделялось развитию дискурсивных и стратегических компетенций, что способствовало успешному выполнению заданий типа дебаты, написание эссе и создание мультимедийных проектов студентами. Веб-квесты также стимулировали интерес студентов к обучению и развитию критического мышления и навыков межличностного общения.

Ключевые слова: образовательные веб-квесты, коммуникативная компетенция, цифровое образование, методологический аспект, инновационные методы обучения, высшее образование, цифровые инструменты в образовании.

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