

Project-based learning technology in classes for technical and it-orientating groups: Experience and results of implementation

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Abstract. In today's world, where technology continues to transform and innovation is becoming an integral part of our lives, it is becoming increasingly important to give children the opportunity to learn practical skills that will be useful to them in their future careers. Introducing technical and IT specialisms early in their education allows children to develop an interest and ambition in this area. One of the effective approaches in teaching has become project-oriented learning with the use of modern technologies. This method allows students to actively and practically apply their knowledge and skills by working on real projects. Within this approach, students not only learn theory, but also apply their knowledge in practice, which allows them to remember and learn the material better. When project-oriented learning using technology was implemented in classes for technical and IT-oriented groups, the results of implementing this methodology were impressive. Students involved in projects showed more interest and motivation in learning, as they saw direct practical value in the material being learnt. In addition, this approach develops in students a range of skills that are essential in today's world, such as communication, co-operation, problem solving, critical thinking, etc. Project-based learning also promotes creative thinking and innovation. The experience of implementing project-oriented learning using technology in classrooms for technical and IT-oriented groups confirms its effectiveness and significance. Such an approach improves learning outcomes, motivates students and develops not only specific technical skills but also general competences necessary for a successful career in the modern world. Therefore, the use of project-oriented learning and technologies in the education of technical and IT-oriented groups is a relevant and integral component of modern curricula.

1 Introduction

The main task of modern higher education is to prepare highly qualified, competitive, creatively thinking specialists with deep and lasting knowledge, skills and abilities, capable of independently solving pressing problems in their professional activities. In solving this urgent problem, the Russian language is of no small importance, due to its relevance: it is the

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language that is used in the study of fundamental and modern scientific research on topical problems and their implementation in various spheres of human activity.

2 Main part

As many years of practice in teaching the Russian language in foreign-language groups at universities have shown, one of the effective pedagogical technologies that makes it possible to realize this important task is project-based learning.

According to Yu. A. Sokolova's definition, "a project in teaching is a specially designed detailed development of a specific problem, involving the search for conditions and ways to achieve a real practical result; this is the independent development of developed skills, the application of knowledge acquired in Russian language lessons, but at a new, productive, exploratory level" [8, 3]. From the above definition it follows that the project method is based on the idea of directing students' educational and cognitive activity towards obtaining a result when solving a particular practically or theoretically significant problem.

Many specialists are developing project-based learning models at universities, which involve practice-oriented learning, attaching students to departmental projects, and building individual trajectories. Project activity in the learning process is considered by researchers (V. P. Bespalko, G. B. Golub, N. F. Maslova, N. Yu. Pakhomova, E. S. Polat, S. A. Smirnov, etc.) as the most important method successful formation of professional competence of future specialists.

In order to consolidate the acquired theoretical knowledge on the grammatical system of the Russian language on the basis of comparative analysis with the grammatical system of the native (Uzbek) language, to develop the analytical and creative abilities of second-year philology students in the field of education "Uzbek Language and Literature" and the first year of the field of education "Information Service" and public relations", "Internet journalism", "Print media" of the faculties of Uzbek philology and journalism, we use the project-based learning method.

Based on the goals of the educational project, we formulated the following requirements:

- 1) the presence of a significant educational task (problem) - research, informational, practical;
- 2) planning actions to solve the problem;
- 3) student research work.

The result of the work was a product developed by the participants of the project group to solve the problem posed - the publication of scientific and journalistic articles, as well as original poems in collections of materials of scientific and practical conferences and in the final journalistic publication "Youth and Time". In addition, students prepared abstracts in the form of reports, presentations, and various videos; teleconferences were organized and conducted.

The implementation of the project method in Russian language classes turned out to be advisable at the stage of creative mastery of the material, when students had already acquired a certain amount of knowledge in sections of the Russian language: phonetics, lexicology, morphology and syntax. It must be emphasized that the students compared and analyzed the studied linguistic phenomena in the Russian and Uzbek languages with interest. This contributed to the fact that Russian language classes gradually began to develop into a discussion and research club, in which current, practically significant scientific problems for students were solved.

In modern methodological literature, several types of educational projects are considered. According to the dominant activities of students, the following can be distinguished: informational, role-playing, practice-oriented, creative and research projects [see: 4;1; 2; 5; 6; 9; 10].

As teaching practice shows, quite often there is a kind of “synthesis” of the named varieties of educational projects. For example, when studying lexical topics “Education in Uzbekistan. Personality and profession”, “Personality and society. Outstanding personalities of our time” students had the opportunity to present both informational and role-playing projects. For example, one of the project groups presented an information project, within the framework of which they collected, summarized and analyzed information about the modern education system in Uzbekistan, another project group implemented a role-playing project. As part of the role-playing project, students presented the following topics: “Let me introduce myself”, “Speech portrait of a modern philology student”, “Speech portrait of a modern philologist teacher”, “Speech portrait of a modern student journalist”, “Speech portrait of a modern teacher-journalist”, “Modern speech etiquette”, etc.

In the role-playing project, students were also asked to act as historical or literary characters, fictional heroes. The students successfully completed the tasks, demonstrating their acting and speaking abilities.

The next type of project, a practice-oriented project, can be aimed at the social and cognitive interests of the project participants themselves. In this case, the product must be determined in advance and used in the future life of the student group or faculty. For example, the result of developing the topic “Reasons for the appearance of neologisms in the Russian and Uzbek languages” may be a selection of materials “Neologisms of students (teachers) of the twenty-first century” or the compilation of a dictionary of neologisms in the Russian and Uzbek languages.

A creative project involves a free and unconventional approach to the presentation of results. These can be theatrical performances, videos, etc. For example, projects on the topics: “Nodira-khon”, “Alisher Navoi”, “Life and work of Mukimi”, “Life and work of A. Kadyri”, “Abdullo Avloni” and others.

The research project on the Russian language was a scientific study in structure. It included justification of the relevance of the chosen topic, identification of research objectives, mandatory formulation of a hypothesis with its subsequent verification, and discussion of the results obtained. In this case, methods of modern science were used: modeling method, sociological survey, statistical accounting, etc. This type of work was carried out on the topics: “Official business style of speech. Genres of official business style”, “Scientific style of speech and its features. Genres of scientific style”, etc.

Russian language projects can also be classified by duration. Mini-projects last 20-30 minutes, work is carried out in small groups. Their development is productive for developing students’ oratorical speaking skills (during presentations) and the ability to formulate their thoughts. Short-term projects may take 1-2 sessions. Maxi-projects are carried out in groups. The work is carried out under the guidance of a teacher; 3-4 lessons are required to complete them.

An educational project in the Russian language gives student researchers the opportunity to carry out independent research, show creativity, test their knowledge, and apply research skills in practice.

An educational project for a teacher is an integrative didactic means of development, training and education, which allows you to develop and develop specific skills and design skills, namely, to teach problematization, goal setting and activity planning, self-analysis and reflection, searching for the necessary information, conducting research, mastering and the use of adequate technology for manufacturing a design product, presentation of the progress of its activities [see: 5].

Let’s take a closer look at the progress of work on the project “The Life and Work of Great Uzbek Writers.” This is an information and research maxi-project that requires 4-5 lessons in the Russian language. This project is addressed to students and is intended to help them master some of the techniques of effective public speaking necessary for presenting the

results of their educational and project work, as well as for the successful implementation of their professional activities in the future.

The study can be carried out either individually or in a group. The goal of the project is to instill in students the skills of public speaking, reasoned presentation of their point of view or research results, and to contribute to the development of their communicative competence.

Project objectives: study literature on the topic, get acquainted with classic examples of public speeches by famous writers, radio and television presenters, present the project according to certain rules.

An important principle of organizing this project is its practical orientation, when the learning material and its result is student performance. Much attention is paid to students' independent work both with samples of speeches by famous literary figures, radio and television presenters, and with the texts of their own speeches.

Planned outcome of the project: students will become familiar with examples of public speaking, master basic techniques and some methods for developing a topic; learn about forms of nonverbal communication and some rules for working with an audience; will gain experience in developing a topic and a detailed plan.

The report form is a presentation of the project in the form of a public speech.

3 Results and discussions. Implementation of an educational project

The project "The Life and Work of Great Uzbek Writers" should be built on a combination of three main areas of work: mastering the norms of speech and elements of public speaking necessary for preparing the text of a speech; familiarization with the form of text presentation and practicing the basic techniques of public speaking (both verbal and non-verbal components); studying the elements of group interaction when preparing and conducting a performance. During the study, each participant can receive advice from a teacher. In the classroom, students' activities are coordinated, while the main work of collecting information and preparing a presentation is carried out by them while performing independent work during extracurricular time at the educational institution and at home.

At the first lesson, the goals and objectives of the research, the composition of the project groups are determined, the groups' reports on the collected information are accepted, the result of the work and the form of presentation are determined. In the second lesson, a communicative game is conducted, which is analyzed by members of the project group, presentations of the project, discussion and evaluation of this research are carried out.

When organizing this kind of educational and research work, the teacher sets certain goals: a) to develop research and professional skills in students; b) increase interest in studying the subject; c) expand the vocabulary and linguistic horizons of students in the Russian and Uzbek languages, thereby increasing their professional and intellectual level.

Project-based learning can also be used as an auxiliary factor that complements the main training sessions as a type of independent work of creative groups of students, focused on improving the Russian language as a language of specialty, with the delivery of results at the final stage of training.

Based on the subject-content area, such a project can be defined as interdisciplinary, based on the method - as practice-oriented (applied), based on the number of participants - as a group project. In terms of duration, long-term projects or maxi-projects can take more than 3-4 classes. It is advisable to carry out preparatory work during extracurricular time allocated for independent work.

The implementation of such a project from the very beginning of teaching Russian as a second language orients student journalists to perform individual independent and creative work in groups, which outlines the purpose of the project, its expected result - the preparation

of a scientific or journalistic article and their subsequent publication in a scientific or journalistic publication (collections of scientific articles, student magazines, newspapers).

So, in particular, in order to consolidate acquired knowledge, form and improve speech and public speaking skills in a large audience in a non-native (Russian) language, students of the Faculty of Journalism can be offered to conduct a joint project "Youth and Time". We present our plan for organizing and conducting the educational project "Youth and Time":

- choice of topic;
- development and organization of individual work for students;
- implementation of the planned project – presentation of the project;
- evaluation and analysis of results.

At the initial stage, students are engaged in collecting and preparing useful information. Orienting students toward independent study of the Russian language and individual creative work, teachers promptly advise and guide students in the process of developing the project topic. The development and organization of the project plan should be carried out through the joint efforts of project leaders (teachers) and students, who draw up thematic mini-projects and mini-presentations. The implementation of the project, especially at the preparatory stage, as a rule, arouses genuine interest among students, but the process of implementing the project itself requires extensive language and translation work by students under the direct supervision of teachers.

At the second stage, authoring material is written on the following topics: "Native Uzbekistan", "Country of the Sun", "Why am I studying Russian?", "Speaking Russian", "Russia is the country of the language being studied", "My future specialty", "My contemporaries", "Favorite poet, writer", "I am a journalist", "About the profession of a journalist", "My idol", etc.; teachers checking creative works submitted for consideration, correcting grammatical and stylistic defects.

Based on the results of checking the submitted works, "work on the word" is carried out in order to prepare participants in the educational project for the public presentation (performance) of their creative works. Writing short-form essays, essays, summaries, dialogues, consistently developing into journal notes, interviews, reports; The creation of videos and teleconferences require a lot of time and thorough work on the word and, undoubtedly, contribute to improving the quality of both written and oral speech of students.

At the final stage - the defense of the project - students present a presentation in the form of a student journal and their defense of copyright materials. Students must demonstrate correct speech in Russian as the language of their specialty. The authors of the project must present their pages in various sections of the journal in accordance with the lexical topics of the Russian language curriculum: "Uzbekistan", "Russian language is one of the world languages", "Russia. General information: government structure, population, nature", "Education in Uzbekistan. History of NUUZ", "Personality and Profession", "Personality and Society. Outstanding personalities of our time"; "My faculty and its history", "What does journalism study?", "Reporting in journalism and its features", "Can you listen to lectures? Essay", "Interview with a journalist. Language of the media."

Expansion, refinement or processing of student materials into material for publication in a student journal is carried out as a result of the joint work of teachers with students in extracurricular time, after classes. The Internet is also widely used in the form of online consultations for students in ZUM, as well as other social networking opportunities. It should be noted that at the stage of creating a magazine, additional work arises in searching for useful information in the form of documentary data, historical information about famous cultural monuments of the language or country being studied.

4 Conclusion

The results of our educational projects in practical classes in the Russian language with first- and second-year students in the areas of education “Uzbek language and literature”, “Information service and public relations”, “Internet journalism”, “Print media” of the faculties of Uzbek philology and journalism allow we can draw the following conclusions:

1. Work on the project contributes to the activation of communicative and speech activity and the development of creative thinking of students.
2. The results of the work indicate that project-based learning technology makes it possible to solve current problems of education: firstly, it provides the opportunity to carry out learning in a favorable creative environment; secondly, it contributes to the successful implementation of theoretical knowledge of the Russian language in the practical activities of students, implemented in the form of an active independent cognitive process; thirdly, it forms and develops their professional skills.

Thus, it can be argued that the project-based form of learning is effective and promising. The use of the project method allows the teacher to successfully organize the process of teaching students the Russian language, develop their creative and intellectual abilities, research and professional skills.

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