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# РОЛЬ ПРОЕКТНОЙ РАБОТЫ В ПРОЦЕССЕ ФОРМИРОВАНИЯ ИНОЯЗЫЧНОЙ КОМПЕТЕНТНОСТИ БУДУЩИХ СТОМАТОЛОГОВ

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# THE ROLE OF PROJECT WORK IN THE PROCESS OF FUTURE DENTISTS' FOREIGN LANGUAGE COMPETENCE FORMATION

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#### Резюме.

Цель статьи состоит в том, чтобы изучить метод проектной работы в научных источниках, результаты его внедрения и усовершенствовать предложенный метод для улучшения процесса формирования иноязычной компетентности будущих стоматологов.

Материал и методы. Проектная работа — это метод формирования иноязычной компетентности будущих специалистов в области стоматологии, который заключается в том, чтобы предоставить студенту возможность изучить определенную проблему и подготовить доклад по заданной теме. Этот вид задания должен включать следующие этапы: организация проекта, выполнение, презентация доклада, подведение итогов.

Результаты. Проведенный среди студентов первого курса стоматологического факультета Национального медицинского университета им. А.А. Богомольца педагогический эксперимент показал эффективность предложенного метода. Количество «неудовлетворительных» оценок в экспериментальной группе уменьшилось на 15,4%, количество «удовлетворительных» оценок уменьшилось на 12,6%, количество оценок «хорошо» увеличилось на 19,1%, количество оценок «отлично» увеличилось в экспериментальной группе на 8,9% по сравнению с контрольной группой.

Заключение. Метод проектной работы имеет такие преимущества: обеспечивает успешное формирование языковой компетентности (грамматика, лексика), развивает языковые навыки учащихся (чтение, аудирование, письмо и речь). Предложенный в статье метод предполагает активную работу студентов в ситуации, где им необходимо использовать язык как средство получения информации, а также побуждает учащихся получать профессиональные знания и развивать коммуникативную речь. Благодаря вышеуказанному методу студенты-стоматологи могут формировать иноязычную компетентность в реальных жизненных ситуациях. Следовательно, метод проектной работы успешно используется для формирования иноязычной компетентности будущих стоматологов и повышения их мотивации к дальнейшему самообразованию. Необходимость применения проектного метода тщательно рассмотрена и обоснована в статье.

Ключевые слова: компетентностный подход, проектная работа, иноязычная компетентность, профессиональная компетентность, способности, языковые навыки.

#### Abstract.

Objectives. To study the role of project method in the works of different researchers, the results of its implementation and to adjust it in order to facilitate the process of future dentists' foreign language competence formation.

Material and methods. Project work is a method of future dentists' foreign language competence formation which consists in providing a challenging issue for the students to research and prepare a presentation on a given task. This kind of activity should include the following stages: initiation, execution, presentation delivery and project close.

Results. The results of the pedagogical experiment, conducted among the first-year dental students in Bogomolets National Medical University for checking up the effectiveness of the project work method, revealed that the amount of «unsatisfactory» marks in the experimental group decreased by 15,4%, the number of «satisfactory» marks decreased by

12,6%, the number of «good» marks increased in the experimental group by 19,1%, the number of «excellent» marks increased in the experimental group by 8,9% as compared with the control group.

Conclusions. The method of project work has a number of advantages, and namely it provides successful teaching of language components (grammar and vocabulary), develops students' language skills (reading, listening, writing and speaking) by putting them into the center of activity where they can use the language, encourages learners to acquire professional knowledge and practise communicative speech. The learners can experiment with the language in real life situations. Consequently, project work is successfully used to form future dentists' foreign competence and increase their motivation to further self-education. The necessity of project application is thoroughly considered and substantiated in the article.

Key words: competence approach, project work, foreign language competence, professional competence, abilities, language skills.

Content knowledge and conceptual understanding, by themselves, are not enough in today's world. In higher school students need to be able to think critically and solve problems, communicate well with others, and manage themselves effectively. These competencies are called «success skills». They are also known as «XXI century skills» or «College and career readiness skills» [1]. With the introduction of competence approach, the concept of teaching has changed; that's why pedagogy has been looking for new methods and techniques to achieve good results working with a group or a class. Today, the tendency of teachers to improve the quality of education sounds more and more insistently. They call for the transition to teaching using the newest educational technologies which allow the implementation of different methods into practice. One of them is a project work.

Historically, the project method emerged in 1577 when master builders founded the Accademia di San Lucca in Rome to advance their social standing by developing their profession into a science and improve the education of their apprentices by offering lessons in the theory and history of architecture, in mathematics, geometry, and perspective. To bridge the gap between theory and practice the architects subsequently expanded their repertoire beyond teacher-centered methods. They transferred them in the way that the students could acquire knowledge through learning by doing and simulating real life situations, already at the university [2].

It took, however, more than 150 years and the transfer from Italy to France that the project work evolved from a sporadic and voluntary event for few people to a recurring and compulsory part of the curriculum for all students. Indeed, only in 1763 the advanced students of the Académie Royale d'Architecture in Paris got regularly design problems (now known as «projects») to demonstrate that they

were fit to apply the principles of composition and construction they had previously learned. From the very beginning, the project method served two functions: firstly, to supplement the bookish and theoretical training of the students, and secondly, to test their artistic and practical capabilities [3]. These beginnings indicate that the project method – like the scientific experiment – has its origin in the academization of a profession. Consequently, the concept of teaching by projects is not the result of abstract philosophical deliberations, but of practical teachers' thinking in order to activate their students' minds and make their training more interesting, lively, and, as far as possible, authentic and useful [2]. So, this method of teaching existed starting from the 16th century, but nowadays it has undergone fundamental changes.

The project work, also known as a project method, a project approach, and project-based learning, is one of the standard teaching methods. It is a subform of action-centered and student-directed learning in which students are engaged in practical problem solving for a certain period of time. For the most part, projects are initiated by the teacher but as far as it is possible they are planned and executed by the students themselves, individually or in groups. In project work, the students generate tangible products that frequently transcend disciplinary boundaries and are usually displayed to the general public. Contrary to traditional methods, projects focus on applying, not imparting, specific knowledge or skills. They aim at the enhancement of intrinsic motivation, independent thinking, self-esteem and social responsibility [3].

Currently it is defined as a kind of task that may be used by a teacher to make students use their language knowledge in a communicative situation. Project work allows students to consolidate the language that they have learned and encourages them to acquire new vocabulary and grammar. It also motivates students to practise in a wide range of communicative skills such as reading, listening, writing and speaking [4].

The analysis of scientific researches [5] revealed that the level of dental students' foreign language competence is low. Only 2,5%-10% of future dentists can speak a foreign language fluently [5]. So the implementation of project method is required to facilitate the process of future dentists' foreign language competence formation. Analyzing the scientific articles written by different researchers [1-4, 6], it was found out that these projects are mostly used for motivating students to explore cultural information such as «Presentation of my country», «The study of a region» or «Guide to the target language country». Not enough attention is paid to the implementation of projects in teaching dental students. Therefore this method needs to be thoroughly considered.

The aim of the article is to study the project method in the works of different researchers, the results of its implementation and adjust it in order to facilitate the process of future dentists' foreign language competence formation.

#### Material and methods

Dentists' foreign language competence includes the combination of their foreign language and professional competences. In this way dental students can discover scientific and professional information by performing a project work. It envisages the search for the necessary information, its integration, structuring and manufacturing of a new information product. This method promotes the formation of skills to work with huge data flow choosing from it the main and the most necessary content [7].

This aim can be achieved by offering an issue to discover and solve, or a question to explore and answer. An engaging problem or question makes learning more meaningful for students. They are not just gaining knowledge to remember it; they are learning because they have a strong need to use it to solve a problem or answer a question that matters a lot to them. This problem or a question should challenge students without being intimidating. When teachers design and conduct a project, it is useful to write the central issue in the form of an open-ended, student-friendly question that focuses their task, like a thesis focuses an essay [8]. Consequently, topics for a project work should be related to dental specialty

and should include anatomy (skull anatomy, oral cavity anatomy, tooth anatomy), dental disorders and diseases (caries, pulpitis, periodontitis, periostitis, gingivitis, paradontitis, abscesses, phlegmons and tumors of the oral cavity or different types of malocclusions), medical emergencies (profuse bleeding, syncope, vascular crises, hypertensive crises, anaphylactic shock, cardiac arrest) or psychological problems (fear of dentists or dental phobia). Choosing these issues for dental students' project enables the learners to exploit scientific and professional information. Therefore, it provides the opportunities for them to discover the things that are important for their future profession. Usually students take part in this kind of activity eagerly as they understand the «impunity» of their mistakes in the lecture room; consequently they are involved in the dialogue more actively. It helps transform the lesson into a creative process of learning new material [7]. In this way, a project work creates links between the foreign language competence and the professional competence.

While working with a project work, students have a good opportunity to enhance a number of their skills:

- the ability to work with additional information (the ability to highlight the main idea, to search for information in a foreign language);
  - the ability to analyze information;
  - the ability to generate ideas;
- the ability to find several ways to solve a problem;
- the ability to communicate (to receive information, to respond to information, to express an idea, to support one's own idea) [6].

To achieve this aim, students should be thoroughly prepared for this kind of activity: vocabulary or grammar difficulties should be solved at the beginning of the lesson. New grammar or vocabulary material should be presented and practiced and only after that students will be able to use this knowledge in free speech [8].

Notwithstanding the fact that the project work is only a part of the lesson, it should be thoroughly planned in order to achieve success. Different teachers have different points of view on the issue how to plan project works. They use different ways. N. Ashurova [4] considers necessary to pass through five stages:

- initial discussion of the idea;
- making decision on a form of the project;
- practising language skills;

- collecting information;
- displaying the result of the research.

Another researcher K. Stricker [1] gives prominence to the following stages:

- initiation;
- planning;
- execution;
- monitoring;
- closing stages.

According to S. Achmadaliyeva, the method of project work includes the following stages:

<u>Preparation of a project.</u> This part deals with choosing the theme of the project, formulating the problem, offering the students an idea of the project.

Organization of the project. At this stage a teacher forms the groups of students and allocates responsibilities, taking into account their propensity to logical reasoning, to the formation of the project work's design.

<u>Implementation of the project.</u> This stage is related to the search for a new and more detailed information, a discussion of this information and its documentation.

<u>Presentation of the project.</u> This stage is devoted to the prepared project presentation to the group-mates.

Our own pedagogical experience suggests the necessity of using the next stages:

- initiation;
- execution;
- presentation delivery;
- project close.

<u>Initiation.</u> At this stage a teacher presents the idea of the project work, provides a brief information about the overall project goals, divides students into small groups or pairs and assigns the tasks to the groups. It is also a proper time to build team enthusiasm about the project.

<u>Execution.</u> After students' receiving the instructions, the teams can begin executing the project according to their assigned tasks. It is the stage where everyone actually starts doing the work: looking for necessary information and the ways to present it. When students are busy with their work, the teacher monitors their work, provides some directions and helps students to cope with some difficulties.

<u>Presentation delivery.</u> This stage is devoted to the oral presentation of information. The way, in which the learners present the information, is chosen by the students themselves. The focus is on the content of the information and the way the students

support it. Students are free to choose different forms of material presentation: power point presentations, presentations with the pictures, making posters, conventional reports. They may vary depending on the students' capabilities and time given for preparation. After presentations are delivered by the groups, some discussion may be initiated by their teacher.

<u>Project close.</u> Once all the details and tasks of the project have been completed and everybody agrees on the discussed items, the teacher can finally close the project work by brief summarizing of the most important information and evaluation of the students' work. Encouraging students is a very important and motivated technique, as the project work is quite a challenging task for the students, especially for those who are usually shy.

Students with different levels of the foreign language competence can be involved in the project work according to the level of their knowledge. Learners with the low level of the foreign language competence can take part in preparing the information and asking questions during the discussion when students with the higher level of the foreign language competence may present information, support the opinion of the group by providing facts and arguments.

#### The results and consideration

The pedagogical experiment was conducted at the Foreign Languages Chair of Bogomolets National Medical University in order to check up the effectiveness of the project work method. It was applied to facilitate the foreign language competence formation in the experimental group of 32 (2 academic groups) first-year dental students. At the same time traditional methods of the foreign language competence formation were used in the control group of 14 (1 academic group) first-year dental students. Traditional marks («unsatisfactory», «satisfactory», «good», «excellent») were used to check the students' level of their foreign language competence. The results of the experiment are shown in the Table 1 «Characteristics of the project method's influence on the future dentists' foreign language competence formation».

The results of the conducted experiment revealed that

- the amount of «unsatisfactory» marks in the experimental group decreased by 15,4% comparing to the control one:

Mark	experimental group, 32 students (percent)	control group, 14 students (percent)	Difference (percent)
"unsatisfactory"	20,4	35,8	15,4
"satisfactory"	36,6	49,2	12,6
"good"	28,5	9,4	19,1
"excellent"	14,5	5,6	8,9

Table 1 – Characteristics of project method's influence on the future dentists' foreign language competence formation

- the number of «satisfactory» marks decreased by 12,6 %;
- the number of «good» and «excellent» marks increased in the experimental group by 19,1% and 8,9%, correspondingly.

The provided results evidence that the application of the project work method produces positive results: students' achievement in the foreign language competence formation rose significantly after its implementation in the sequence of lessons. The observation of the students' work shows that students become more motivated in performing the project rather than in answering usual teachers' questions related to the same topic. At the same time a teacher's role resolves into monitoring the students' work and taking part as an equal partner in discussions.

The presented method has a number of advantages. It provides successful teaching of language components (grammar and vocabulary) together with the development of language skills (reading, listening, writing and speaking) by putting students into the center of activity where they use the language, professional knowledge and practise communicative speech. A project is an extended language activity focused on the vocabulary topics together with the professional component. Learners can experiment with the language in the real life conditions. The results, mentioned above, showed that the method of project work provides a strong motivation for the dental students to form their own foreign language competence. Besides, this kind of activity encourages the learners to work out things by themselves and in this way to form self-educational competence. Well-planned project work is not only informative for the students, but interesting as well, lively activity with lots of positive emotions that motivate students to keep on studying.

## **Conclusions**

Taking into consideration all advantages that are mentioned above, an improved method of «project work» is successfully used to form future dentists' foreign language competence and increase their motivation. The necessity of project application is thoroughly considered and substantiated in this article.

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