

## NEWS

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G.U.Abishova<sup>1</sup>, R.A.Amanzholov<sup>1</sup>, B.N.Mynbayeva<sup>1</sup>, D.I. Ibragimova<sup>2</sup><sup>1</sup> Abai Kazakh national pedagogical university, Almaty, Kazakhstan;<sup>2</sup> A.Yassawi International Kazakh-Turkish University, Turkestan, Kazakhstan[abish\\_gul@mail.ru](mailto:abish_gul@mail.ru)**READINESS OF STUDENTS-BIOLOGISTS FOR THE ORGANIZATION AND IMPLEMENTATION OF PROJECTS AT THE UNIVERSITY**

**Abstract.** Today, reforms of the Kazakhstan education system are aimed at revising the system of requirements for knowledge, skills, abilities and personal qualities of a teacher from the position of a competence approach. In order to train students in the skills and abilities necessary for competitiveness in the global economy, it is necessary to implement project training or the project method. The readiness of biology students for the organization and implementation of projects is a prerequisite for the successful implementation of professional activities, since the ability to design contributes to the successful solution of professional tasks. Possessing enormous potential, the project activity allows to improve the quality of biological training of future specialists, educate the individual on the principles of unity of educational creativity with real practical activities.

In this article, to confirm the relevance of this study and clarify the state of the students' initial readiness to organize and implement projects at the university, a survey was conducted among bachelor students. The results of the survey indicate a low willingness of biology students to organize and implement projects and at the same time their high interest in learning project activities. Consequently, the project activities of students have to be formed both in the course of specially organized training and in the framework of academic subjects.

**Keywords:** project, project method, project activity, readiness, organization and implementation of projects, questionnaire survey.

**1. Introduction.** In the annual message of the President of the Republic of Kazakhstan, it is noted that curricula should be focused on the development of critical thinking abilities and self-searching skills [1-2]. The key priority of educational programs should be the development of the ability to continuously adapt to changes and assimilation of new knowledge [3].

One of the modern educational technologies that provides a rational combination of theoretical knowledge and its practical application to solve specific problems of reality is the technology of project learning (the so – called "project method"), the founder of which was an outstanding American philosopher and teacher John Dewey (1859-1952).

It should be noted that a significant number of works of Russian scientists are devoted to the study of the problem of project training in an university. But the analysis of literature also showed that in Kazakhstan relatively little attention is paid to solving this problem. To confirm the relevance of this study, it is necessary to find out the state of readiness of students to organize and implement projects in the process of teaching biological disciplines in a pedagogical university.

Analysis of theoretical and methodological literature showed that the concept of the project in the pedagogical aspect is quite ambiguous.

"Project" (from Latin word *projectum* from the Latin verb *proicere*, "before an action") as a concept belongs to the same category as the "experiment" in the natural Sciences, "consideration of the case" in law or "tactics and strategy" in the military. This concept has long ceased to be associated only with architecture or engineering activities. It is now actively used in the economy, politics and pedagogy.

S. I. Ozhegov gives the following definition of the project:

1) the developed plan of construction, the organization of something;

2) preliminary text of a document;

3) idea, plan [4].

It is also indicated that the project is a joint activity of the teacher and students aimed at solving a complex professional problem and creating a socially significant product, and conditions for the implementation of cognitive and professional motives of students arise during this activity [5].

A number of Russian researchers (Sternberg V. N., Simonenko V. D., Zimnyaya I. A., Skvortsova I.) giving the definition of the project, emphasize the independence and activity of students; point to the need to take into account their emotional sphere; note that the project is focused on the definition of needs, the formulation of problems and the creation of situations close to reality.

Modern scientists (V. V. Guzeev, M. V. klarin, D. G. Levites, E. S. Polat, etc.) have also tried to clarify the meaning and reveal the content of the method of projects. They consider the method of projects at a qualitatively new level – as a integral learning technology that contributes to the mastery of students' methodological knowledge, skills, as the basis for further self-education, as a means of developing abilities of students, research skills, social skills, etc. [6].

Table 1 - Element analysis of the survey results

Question number	Elements of the content of students' answers	%
1.	Explain the lack of participation in projects by followed reasons:	
	the lack of time due to study	15
	The staff of the university doesn't organize, don't inform, don't encourage in participation in projects and passivity of teachers	63
	don't want to participate personally	13
	didn't respond	9
2.	The project is the implementation of scientific research, the scientific research of a certain object, the defense of a scientific project	44
	The project includes the collection of information and research on a single topic, the revelation of a single topic in any discipline	38
	Don't know about the project concept	18
3.	Don't know what kind of activities include the organization of a research project	58
	The following answers were offered: "choice of topic, definition of purpose, tasks", "choice of topic, presentation of topic, research on the topic", "choice of topic, collection of information on the topic", "analysis, design, definition of purpose, tasks, hypotheses"	30
	Activity consists firstly of drawing up the plan, the choice of object, the equipment	8
	Motivation and creation of conditions for participants are necessary to organize the project	4
4.	Don't know what kind of activities include the implementation of a research project	58
	The activity of the project is "a search, a motivation and an information gathering"	14
	The activities of the project include "research, protection, proof, achievement of the goal", "experiment, joint work", "definition of the goal and objectives of the project", "control, evaluation, presentation of the topic, research, conclusions", "analysis, experiment, project implementation, project completion", "object research, analysis"	28
5.	Incorrectly defined the sequence of actions in the organization and implementation of the project	86
	Correctly defined the sequence of actions in the organization and implementation of the project	14
6.	The readiness for the organization and implementation of the research project is important to biology teacher:	
	to improve skills and knowledge	52
	to be ready for research	28
	to train children in the implementation of the project at school later	4
	Deny importance of the readiness for the organization and implementation of the research project to a biology teacher owing to the fact that they are not trained to this	16
7.	Students are ready to take part in the implementation of projects on biological disciplines at the university in case of creating conditions for project implementation, training for organization and implementation of project	88

P. P. Blonsky, S. T. Shatsky, V. Kumarin and others understood the method of projects in their studies as a means of:

1. comprehensive exercise of mind and development of thinking;

2. development of creative abilities;
3. development of independence and preparation of students for self-employment;
4. to prepare students for professional activities;
5. the merger of theory and practice in training .

**2. Research methods.** The questionnaire survey of biology students of Abai Kazakh national pedagogical university was held out to determine their initial level of readiness for the organization and implementation of projects in biological disciplines

**3. Main part.** The survey was conducted in the form of open questions. The first question was to find out the participation of students in projects in an university. The second question is to determine the students' knowledge of the concept of the project. The third question is what is the organization of the project. The fourth question relates to the knowledge of the project. The fifth question allows you to determine the students' possession of algorithm of actions in the organization and implementation of the project. The sixth question aims to clarify the importance of the readiness of a future biology teacher for the organization and implementation of the project. The purpose of the seventh question was to establish the reasons that encourage students to master the project activities.

The results of the element analysis of students' answers are given in table 1.

**Conclusion.** The results of the analysis of the practice of professional training of future teachers in Abai university indicate that a significant emphasis is placed on the formation of theoretical knowledge about projects and design and much less attention is paid to the formation of students' practical skills. The results of the survey showed the low readiness of students-biologists for the organization and implementation of projects and at the same time their high interest in learning project activities.

The success of the project activities of students is the basis of their creatively active well-being, the formation of their own ways of solving professional problems on their own. Students' success in the process of implementing their own project activities is a very important condition for their readiness to guide schoolchildren in project activities [7].

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#### ГОТОВНОСТЬ СТУДЕНТОВ-БИОЛОГОВ К ОРГАНИЗАЦИИ И ВЫПОЛНЕНИЮ ПРОЕКТОВ В ВУЗЕ

**Аннотация.** На сегодняшний день реформы казахстанской системы образования направлены на пересмотр системы требований к знаниям, умениям, способностям и личностным качествам педагога с позиции компетентного подхода. С целью обучить студентов навыкам и умениям, необходимым для конкурентоспособности в мировой экономике необходимо внедрение проектного обучения или метода

проектов. Готовность студентов-биологов к организации и выполнению проектов является условием для успешного осуществления профессиональной деятельности, поскольку умение проектировать способствует успешному решению профессиональных задач. Обладая огромными потенциальными возможностями, проектная деятельность позволяет повысить качество биологической подготовки будущих профессионалов, воспитать личность на принципах единства учебного творчества с реальной практической деятельностью.

В данной статье для подтверждения актуальности данного исследования и выяснения состояния исходной готовности студентов к организации и выполнению проектов в вузе проведено анкетирование среди студентов-бакалавров. Результаты анкетирования свидетельствуют о низкой готовности студентов-биологов к организации и выполнению проектов вместе с тем их высокой заинтересованностью к обучению проектной деятельности. Следовательно, проектную деятельность студентов необходимо формировать как в ходе специально организованного обучения, так и в рамках учебных предметов.

**Ключевые слова.** Проект, метод проектов, проектная деятельность, готовность, организация и выполнение проектов, анкетирование.

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### **ЖОО-да БИОЛОГ-СТУДЕНТТЕРДІҢ ЖОБАЛАРДЫ ҰЙЫМДАСТЫРЫЛУЫ МЕН ОРЫНДАЛУЫНА ДАЯРЛЫҒЫ**

**Аннотация.** Бүгінгі таңда қазақстандық білім беру жүйесінің реформалары құзыреттілік көзқарас тұрғысынан педагогтың біліміне, шеберлігіне, қабілетіне және жеке қасиеттеріне қойылатын талаптар жүйесін қайта қарауға бағытталған. Студенттерді әлемдік экономикадағы бәсекеге қабілетті ету үшін қажетті дағдылар мен іскерлікке үйрету мақсатында жобалық оқытуды немесе жобалар әдісін енгізу қажет. Биолог-студенттердің жобаларды ұйымдастыруға және орындауға дайындығы кәсіби қызметті табысты жүзеге асыру үшін шарт болып табылады, өйткені жобаларды білу кәсіби міндеттерді табысты шешуге ықпал етеді. Үлкен әлеуетті мүмкіндіктерге ие бола отырып, жобалау қызметі болашақ мамандардың биологиялық дайындығының сапасын арттыруға, нақты практикалық қызметпен оқу шығармашылығының бірлігі қағидаттарында тұлғаны тәрбиелеуге мүмкіндік береді.

Бұл мақалада осы зерттеудің өзектілігін растау және студенттердің ЖОО-да жобаларды ұйымдастыруға және орындауға бастапқы дайындық жағдайын анықтау үшін бакалавр-студенттер арасында сауалнама жүргізілді. Сауалнама нәтижелері биолог-студенттердің жобаларды ұйымдастыруға және орындауға дайындығының төмендігін, сонымен бірге олардың жобалық қызметті оқытуға деген қызығушылығының жоғары екендігін көрсетеді. Демек, студенттердің жобалық қызметін арнайы ұйымдастырылған оқыту барысында да, оқу пәндері аясында да қалыптастыру қажет.

**Түйін сөздер.** Жоба, жоба әдісі, жобалау қызметі, дайындық, жобаларды ұйымдастыру және орындау, сауалнама жүргізу.

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