



## METHODOLOGY OF USING PROJECT-ORIENTED LEARNING AND MIXED TASKS IN EDUCATION

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### ABSTRACT

*Today, various educational technologies and methods are widely used in distance education. The main goal is to achieve educational efficiency and develop high knowledge and competencies of students. The main goal of project-oriented educational technologies is to enable students to perform practical activities and directly apply their knowledge. Various mixed tasks help to test their knowledge and increase their interest in learning.*

Distance education models. Distance education (D) is a type of education in which teachers and students are separated by distance or time, using information and communication technologies. Today, project-oriented education is widely and effectively used by many scientists of the world. This technology was created in the USA in the second half of the 19th century, and its theoretical foundations are formed by the views of John Dewey. In the course of our research, as a result of the analysis of many methods, the organization of distance education and their use in the training process were analyzed. Organization of distance education in higher education institutions is taught on the basis of various educational technologies and methods. In the education system of many countries of the world, especially in the higher education system, distance education is being organized using individualized educational technologies. In the course of our research, we have studied scientific research on this topic in many higher education systems of the world.

If we look at the organization of distance education on the basis of database science, many scientists have worked in this regard. Students deal with issues of information systems design oriented to real practice, that is, using real data of a particular enterprise and solving the necessary issues for the work process. During the preparation of the final qualification work, at least 50% of students choose topics related to the development of information systems for specific enterprises that make up the database.

The analysis of various educational technologies shows that the effectiveness of project-oriented educational technologies in the process of database training is high in international experiences. We found it acceptable to use this educational technology in our research work.

In distance education, it is important to pay special attention to the use of various mixed assignments and to organize the practical training classes on "Database" subjects using the project method focused on practical activities. Therefore, it is advisable to use electronic didactic tools such as video lessons, electronic textbooks and electronic manuals in practical training classes.

Mixed tasks form skills such as being ready for different tasks, creative thinking and being ready for different situations.

Advantages of mixed assignments prepared in Ispring

1. Using different tasks in one set of tasks in an arbitrary order.
2. The possibility of preparation based on various text, video, audio and graphic information in prepared tasks.
3. Ability to post mathematical formulas and problems.
4. Development of students' ability to think logically by performing various tasks.
5. Development of students' creative approach to tasks.
6. Convenience of the program interface.
7. Popularity and accessibility for every user.

And we can bring others.

The question given in the first part of our assignments is answered by choosing one of the yes or no answers. With this, the student shows his unique approach to the question. In our second assignment, the student completes a three-variable test assignment. We used a test question with an average level of complexity. In the third stage, the student works with a multiple-choice question, in which the answer can be one or more of them, or all of them, which causes the student to think.

At the next stage, the student completes the task by combining the interrelationships of various considerations. Completing such a variety of tasks not only increases students' interest in science, but also develops their intellectual abilities.

Faced with various tasks every time, they form a correct assessment of the situation and find the right way to get out of difficult situations. This ability is one of the main requirements for all database specialists.

We give an example of the development used in the organization of practical training classes on the subject "Data base" in distance education. Here are some examples from a set of tasks to assess knowledge on the topic of creating a database:

Table 1.

<b>Test questions</b>		
<b>1</b>	What is the relational data model?	A) Representation of data in the form of a table. B) Grid representation of data. C) Data sorting.
<b>2</b>	Show answer given by Database Management System?	A) MS Access, MySQL B) Photoshop, Paint C) Google Chrome
<b>Logical questions</b>		
<b>3</b>	If the information is collected, sorted and systematically arranged and placed in a table, what model of data warehouse should be used?	
<b>A problematic question</b>		
<b>4</b>	A large amount of information is collected during continuous data entry into the data warehouse. This creates a memory and speed problem. How to organize work with data allows you to avoid these problems.	

The use of tasks of various mixed forms not only tests and consolidates knowledge, but also serves to form professional competence by working with problematic situations and problematic questions, finding solutions to them.

In distance education, it is important to pay special attention to organization using the project method aimed at practical activities in laboratory training classes on "Database" subjects. Therefore, it is appropriate to use electronic didactic tools such as various mixed tasks, video lessons, electronic textbooks and electronic manuals in practical training classes.

### Summary

As a result of the study and analysis of the conducted scientific research, a model for improving the teaching methodology was developed based on electronic didactic tools and technologies in the process of organizing distance education in the higher education system. Applying these in practice encourages students to learn and work independently. Based on the above, we recommend using project-oriented educational technologies in the process of organizing distance education.

### Adabiyotlar:

1. Jasur Doniyor, O. G., Saidov, L., Allayorov, S. P., OMBORINI, S., & BAHOLASH, Y. M. Scientific progress. 2021.№ 1. URL: <https://cyberleninka.ru/article/n/ma-lumotlar-omborini-yarati-sh-bo-yicha-kasbiy-kompetentligini-baholash-mezonlari> (дата обращения: 02.06.2022).
2. Toshtemirov, D., Muminov, B., & Saidov, J. (2020). Fundamentals of compilation of electronic tasks for students to test and strengthen their knowledge of database. International Journal of Scientific and Technology Research, 9(4), 3226-3228.
3. Toshtemirov, D. E., Saidov, J. D., & Mamatqulov, S. X. (2019). Technology of creating modern electronic educational resources. Bulletin of Gulistan State University, 2019(1), 67-71.

4. Saidov, J. D., Quدراتov, A. N., Islikov, S. X., Normatova, M. N., & Monasipova, R. F. (2023). Problems of Competency Approach in Developing Students' Creativity Qualities for Creating a Database. *Journal of Higher Education Theory & Practice*, 23(1).
5. Saidov, J. D. (2021). Study of the process of database and creation in higher education. In *International scientific and practice conference on "International experience in increasing the effectiveness of distance education: problems and solutions"*. Guliston.
6. Саидов, Ж. Д. Ў. (2022). КОМПЕТЕНТНОСТНЫЙ ПОДХОД ПРИ ОБУЧЕНИИ РАБОТЕ С БАЗАМИ ДАННЫХ В СИСТЕМЕ ВЫСШЕГО ОБРАЗОВАНИЯ. *Проблемы современного образования*, (6), 253-265.
7. O'G'Li, S. J. D. (2022). TA'LIM OLUVCHILARNING MA'LUMOTLAR BAZASI FANIGA BO'LGAN QIZIQISHLARINI KOMPETENSIYALIY YONDASHUVLAR ASOSIDA OSHIRISH MUAMMOLARI. *Science and innovation*, 1(B3), 89-93.
8. Ergashev, B. B., Saidov, J. D. O., & Islikov, S. X. (2021). BO'LAJAK INFORMATIKA VA AXBOROT TEXNOLOGIYALARI O' QITUVCHILARI KASBIY KOMPETENTLIGINI SHAKLLANTIRISH VOSITALARI VA METODLARI. *Academic research in educational sciences*, 2(2), 1139-1146.
9. Saidov, J. D. Study of the process of database and creation in higher education. Guliston. 2021.
10. Гаимназаров, О., Агафонов, А., & Саидов, Ж. (2023). СОВРЕМЕННАЯ ТЕХНОЛОГИЯ ПРОБЛЕМНОГО ОБУЧЕНИЯ. *Евразийский журнал технологий и инноваций*, 1(6), 94-99.
11. Saidov, J. D., Quدراتov, A. N., Islikov, S. X., Normatova, M. N., & Monasipova, R. F. (2023). Problems of Competency Approach in Developing Students' Creativity Qualities for.
12. Islikov, S., Saidov, J., & Xolmuminov, D. (2023). MUSTAQIL TA'LIMNI SHARQ MUTAFAKKIRLARINING QARASHLARI ASOSIDA TASHKIL QILISH. *Евразийский журнал технологий и инноваций*, 1(5), 172-174.
13. Saidov, J. D. O. G. L., Allayorov, S. P., & Islikov, S. X. (2021). MA'LUMOTLAR OMBORINI YARATISH BO'YICHA KASBIY KOMPETENTLIGINI BAHOLASH MEZONLARI. *Scientific progress*, 2(1), 1804-1807.
14. Jasur Doniyor, O. G., Saidov, L., Allayorov, S. P., OMBORINI, S. X. I. M. L., & BAHOLASH, Y. B. Y. K. K. MEZONLARI//*Scientific progress*. 2021. № 1. URL: <https://cyberleninka.ru/article/n/ma-lumotlar-omborini-yarati-sh-bo-yicha-kasbiy-kompetentligini-baholash-mezonlari> (дата обращения: 02.06. 2022).
15. Irsaliyeva, S., Irsaliyev, F., & Mavlonov, S. (2024). FIZIKADAN NOSTANDART NAMOYISH TAJRIBALARINI BAJARISHDA O'QUVCHI KREATIV FAOLIYATINI RIVOJLANTIRISHNING PSIXOLOGIK XUSUSIYATLARI. *Центральноазиатский журнал междисциплинарных исследований и исследований в области управления*, 1(2), 84-89. извлечено от <https://in-academy.uz/index.php/cajmrms/article/view/28109>
16. Halilovich, I. S. (2022). ZAMONAVIY TA'LIMDA MEDIYA TA'LIMNING AHAMIYATI.
17. Anarbaev, A., Tursunov, O., Kodirov, D., Khudaev, I., Isakhodjayev, K., & Islikov, S. (2021). Pre-sowing activation of seeds by ultraviolet (UV) radiation. In *E3S Web of Conferences* (Vol. 304, p. 03040). EDP Sciences.
18. Kalandarov, A. A., Kulmamatov, S., Islikov, S., Adilov, A., Kalandarov, A., & Allayorov, S. (2020). Numerical modeling of partially coupled problems of thermoelasticity. *International Journal of Advanced Trends in Computer Science and Engineering*, 9(3), 3095-3099.

19. Allayorov, A. I., Islikov, S. H., & Turdikulova, B. T. (2021). XXI CENTURY-THE CENTURY OF INTELLECTUAL YOUTH. Экономика и социум, (2-1 (81)), 56-62.
20. Khalilovich, I. S. (2022). General Objectives of Teaching Students Using Modern Methods in Pedagogy. The Peerian Journal, 13, 60-63.

