Volume: 3 Issue: 9 | Sep-2024 ISSN: 2720-6874 http://journals.academiczone.net/index.php/ijfe

# Use of the Innovative Educational Method of Design in the Teaching of Database Science

Khahharov S. Kh.

Professor of Bukhara State University, DSc.

Nosirova Sh. E.

BukhSU 1st stage doctoral student

**Abstract:** The practical significance of the research is in improving the content of teaching database science in higher education institutions through project-oriented educational technologies and electronic didactic tools on the basis of a competency-based approach, developing competence competencies for creating a database, and it is expressed in the creation and use of educational and methodological materials in the educational process, in the development of modern educational technologies of teaching.

**Key words:** database, MBBT, educational technologies, MS Access, relational model, design method.

Today, in our country, which is accelerating on the path of innovative development, education of a mature generation, education of enlightened and highly moral citizens is one of the priority directions of our state policy. Out of 5 initiatives of the President aimed at meaningfully organizing free time of the population and young people and ensuring their employment, the 3rd initiative is aimed at organizing the effective and efficient use of computer technologies and the Internet among the population and young people. shows that. Based on the current demand, the database and its use form the basis of any industry. Based on this need, working with programs that create a database is becoming a need for a representative of any field. Similarly, MS Access is the most widely used tool for creating databases. Since the MS Access program is a relational database, it is based on tables. Creating tables in MS Access is the main part of it. Taking into account this aspect, it is no exaggeration to say that creating a table is the basis of creating a database. Therefore, creating tables in MS Access means building the foundation of the database. Because the more thorough the foundation, the stronger the part that is built on it.

The purpose of any information system is to process information about objects of the real environment. In a broad sense, a database is a collection of information about specific objects of the real environment in a certain subject area. The subject area means a certain part of the real environment studied for the organization of automated control. For example, an enterprise, a factory, a scientific research institute, a higher educational institution, etc.

When creating a database, the user tries to sort information by various characters and quickly get a selection with an arbitrary combination of characters. This can only be done using database management systems (DBMS) by structuring the data.

The intensive efforts to create information systems and the rapid increase in the volume of data led to the creation of a special software complex called "Database Management System" (MBBT) in the early 60s.

In the process of development, the information in the life of a person and society is increasing dramatically. Software tools play an important role in their collection, processing and transmission. Knowing how to use such software tools is becoming the need of the hour. It can be concluded that the

http://journals.academiczone.net/index.php/ijfe

MS Access program is also a necessary tool for managing the database. Using it and organizing work is one of the main tasks of today's pedagogues. As mentioned in this chapter, the value of spiritual blessings is increasing for mankind in the current period, rather than material blessings. In particular, information (information) is becoming valuable nowadays. From this point of view, it will be possible to save valuable time by organizing and managing the database. The sharp increase in the volume of data creates the need to organize them as a database. The MS Access program, one of the most common types of MBBT today, is also entering the life of society. Although representatives of small industries use spreadsheets to work with data, public and regional associations, large enterprises, data processing bureaus and other industries use MS Access. In short, MS Access is becoming a reliable source of data management. As mentioned above, the table is the basis of MBBT, and the correct organization of this table is the main stage of the correct organization of the database.

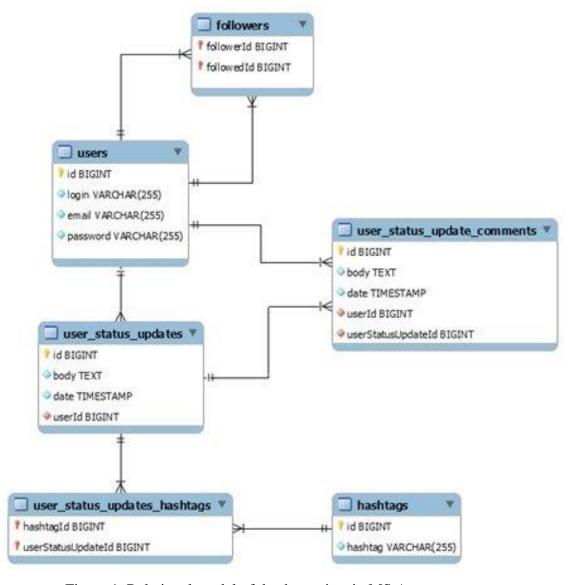


Figure 1. Relational model of database view in MS Access program

In the future, the educational system should serve for the development of the new socio-economic network of the Republic of Uzbekistan.

It is required that the educational process be integrated with the system of studying the achievements of production, science and technology, culture and spirituality.

http://journals.academiczone.net/index.php/ijfe

The new model of educational content should first of all expand the educational possibilities of the teaching process and the potential of students to use the knowledge, skills, and abilities in social life.

In the course of the new era educational system, modular teaching is a guaranteed result of education and learning efficiency.

As a result of the development of society, the amount of information is increasing several times. Collecting, storing and processing these data has become a necessity. In this process, the MS Access program is one of the solutions to the problem. It can be concluded that it is necessary to improve the teaching of this subject in the educational process.

When the project method is used in the teaching practice, the student develops various abilities, while in the traditional teaching, "knowledge" is given. In traditional education, the descriptive-explanatory method of teaching is the priority in imparting knowledge to the student. The educational process is fully controlled by this method, students are monitored, and the subject is asked in a reproductive form. The main goal of this approach is the formation of knowledge, skills, qualifications, and the reimagining of the leading view of the activity. The project method is focused on the person being trained. One of the indicators of personality development is students' mastery of observation skills (synthesis, comparison, generalization, categorization, induction, deduction, abstraction, etc.). The most important thing is that the student needs to develop his personality, to change himself, to develop the emotional and image sphere, and to acquire the skills of emotional value relationships. Project-based teaching in this way is an effective alternative to the classroom-lesson system. But it cannot completely replace the traditional norm. Because the world education system has accumulated a golden reserve of pedagogical methods, approaches, and technologies for a hundred years. According to experts, the project method is used as an addition to other forms of education, and it turns out as an acceleration of the growth of the individual. From the point of view of the teacher, the educational project or research is an integrative didactic tool of development, teaching and upbringing. It allows the emergence and development of unique educational skills of design and research in the student. An educational project or research teaches students exactly the following: - problem solving (examining the breadth of problems and separating problems under problems, setting the leading problems and tasks arising from these problems. - forming meaningful activity of the student and planning; - analyzing one's own activities;

The project should be scientifically understood, summarized, categorized and the scope of its effective application should be defined. The strong development of innovations in pedagogy makes it possible to widely use the design method, and it becomes necessary with the classification of educational projects, their methodical execution, the introduction of educational projects into the educational system, and the formation of new courses. Educational projects occupy a leading place in education at the school. Different fields of knowledge are involved for such purposes of knowledge. Projects are categorized by different levels. For example, according to the subject areas, according to the volume of activity, according to the implementation, the number of performers, according to the importance of the results. Depending on the type of projects, all of them will have a unique authorship, which will be unique. All projects are aimed at achieving some goal. At the same time, there will be temporary restrictions. Educational projects are different. Projects ranging from one lesson to one year. There will be individual, group and school-wide projects for different ages. The results of the project may be different according to its form. For example, video film, multimedia, presentation, performance, bills, games, etc. Time projects are divided into mini-projects. They occupy a lesson or part of a lesson. Short-term projects are carried out during 2-6 lessons. In medium-term projects, 12-15 lessons are spent in extracurricular and in-class activities, as well as in long-term projects. Also, the full cycle is performed outside of class. By completing the project, the student can use his strength, his knowledge, make a profit, and show the result he has achieved in front of many people. This is an activity aimed at solving an interesting problem, often formed by students themselves in the form of a task. The result of this activity is the

http://journals.academiczone.net/index.php/ijfe

found method of solving the problem - it has a practical nature. It has important practical importance and is interesting and important for the discoverers themselves.

When choosing a new model of educational content, it is appropriate to rely on the main parameters of the development of society and individual life.

It is necessary to ensure that the knowledge presented in the educational content is presented consistently as a whole integrated system. In this case, it is necessary to assume that these knowledge and concepts are, first of all, specific to a specific branch of science and production.

As a result of the educational process mastered by students in the learning process, it is necessary to create a foundation for the socio-economic development of science, technology, production, and society's life, not only for the development of the student himself in all aspects.

In the process of education, it is important to ensure the student's all-round literacy, education, culture, legal and economic knowledge, and the level of readiness for social life.

#### References

- 1. A. Sattarov. "Database Management System (for Access windows-9X/2000)". Tashkent. "Science and Technology" 2006. 304 p
- 2. M. Aliyev. "Sistemnoe programmnoe obespechenie" Tashkent "Alokachi" 2010. 160 b
- 3. Sh. Nazirov, A. Nematov, R. Qabulov. "Advanced Course in Database Programming". Tashkent. "East" 2007
- 4. "General pedagogy" under the editorship of O. J. Yoldoshev. Tashkent. Science and technology" 2017
- 5. Buronova Gulnora Yodgorovna, Atayeva Gulsina Isroilovna Preimushchestva ispol'zovaniya metoda uchebnogo proekta v protesse obucheniya // Problemy nauki. 2020. No. 8 (56). URL: https://cyberleninka.ru/article/n/preimushestva-ispolzovaniya-metoda-uchebnogo-proekta-v-protsesse-obucheniya
- 6. Buranova G. Yo., Nosirova Sh. E. Sushchnost primeneniya metoda case-technologiy v organizatsii uchebnogo protsessa //Academy. 2020. No. 9 (60). S. 29-31.