European Science Methodical Journal
ISSN (E): 2938-3641
Volume 2, Issue 6, June - 2024

USE OF INNOVATIVE TECHNOLOGIES IN EDUCATIONAL PROCESSES AND IMPROVEMENT OF DESIGN

Shermukhamedov R. S.
Chirchik State Pedagogical University

Abstract:

This article shows interactive methods, application and design methods of innovative technologies in technological education classes.

Keywords: interactive methods, innovative technologies, project, drawing, equipment, square.

Introduction

It is not for nothing that we remember the above-mentioned simple and at the same time wise thoughts of the academician Tashmuhammad Qori-Niyazi and the famous Russian pedagogue K.D. Ushinsky. Because it is one of the most urgent issues to develop young people in a harmonious manner in all aspects, to enrich their professional worldview and to raise them in the spirit of love for their chosen profession.

Achieving the goal (happiness) in life does not always proceed smoothly. Sometimes a profession is chosen, and soon there are cases of not getting used to the profession, going to work - dissatisfaction with work, changing the profession. Of course, this affects not only the person himself, but also harms the family lifestyle and all social spheres. It can be seen that teaching young people to choose a profession and preparing them for a target profession, especially in the educational system, is a complex pedagogical process that has several specific directions.

So what is career education and career guidance? How is it conducted? In the article, comments related to this issue are presented based on the topic of this article. In other words, the possibilities of integration of all the work carried out by the educational system in the fields of enterprises, construction, transport organizations, agriculture, trade, domestic service, handicrafts, health care, etc. . There are several views on the concept of integration. We will give brief information about them. The term integral was first introduced into mathematics by Y. Bernoulli (1654-1705) in the 17th century. According to him, in higher mathematics, this concept represents the whole quantity, which is considered as a sum of infinitely small numbers. Based on this concept, the next concept of "integration" was used in philosophy, sociology, psychology, pedagogy and a number of other disciplines. Accordingly, integration and integration are defined in the Russian-Uzbek dictionary as "uniting as a whole; to make a whole" is explained. Also, "Integration" is derived from the French term integration - to join together, to participate, and from the Latin term integration - whole integer, and means to restore, fill in the gaps.

To describe the concept of integration, scientists use terms such as "system", "systematic", "relationship", "generalization", "integration", "elements", "components", "parts". In this sense, the above descriptions of integration as a general scientific concept are multifaceted, and it is not possible to reveal the essence of all their aspects in one article. This can be explained by the fact that the idea of integration is didactically deeply rooted. Based on analytical considerations, the directions of integration specific to the educational system:

1. Expanding and deepening the understanding of knowledge of academic subjects;
2. Elimination of redundant subjects in the educational system;
3. Reducing the time of studying topics in classes and sections;
4. Limiting repetitions;
5. Changing educational technologies;
6. Creating the best pedagogical conditions for the development of students' knowledge;
7. In the pedagogical process, it can be said to justify the perspective system that takes into account the organizing activities and their possibilities.

According to the above, it can be said that the integration possibilities of the prospective system of training young people to choose a targeted profession embody interactive (collaborative) and integrative (bringing separate parts into a whole) methods and possibilities of education.

It can be seen from the above that the integration method ensures the highest (effective) results obtained in education.) is highly effective and should have its own scientifically based concept (viewpoint, holistic view). This requires combining and organizing the elements of the concept related to the private capabilities of all integrated systems.

It can be seen from the above connection schemes that the first type of connection cannot ensure the compatibility of the possibilities of the prospective system of purposeful career selection and training. Because the population is large and the production sectors (professionals, specialists in all fields) are lagging behind it, that is, there is an excessive number of professionals and other specialists, but there are few enterprises that provide them with work. as a result, an army of unemployed will be created. As a result, many professionals are forced to go to other countries in search of work. In this sense, the second type of connection in the connection scheme can be called appropriate (optimal). This is important in the purposeful preparation of young people for choosing a profession, which can be explained by the fact that it is the basis for the creation of a prosperous lifestyle of the people.

These forecasts, in turn, require the analysis and consideration of the possibilities of the system that ensures the continuity of interdependence for each specific case of preparation for the target profession, and this continuity of possibilities is closely related to each other in the entire educational system as in the above scheme. will be

First of all, we reimagine the concept of continuous education system. In general, it is known to everyone that the continuous education system works for the bright future of any country, human development, enlightenment, and culture, so it is called the public education system. In this sense, the relationship between science and education and production is inevitable. We will gradually focus on the nature of science, education, and the relationship between them. Science. John Bernal said about science: "Science is a factor of fundamental change of the world by

people", and Albert Einstein called it "Scientific thinking has been used for several centuries to connect all the phenomena that can be known in the world on the basis of a certain system. "It is his tireless work" - he describes it in a broader sense. The influence of science is a vital and historical-social phenomenon, which is clearly manifested in all aspects of people's material and spiritual-educational activities. In this sense, it is impossible to deny the influence of science on the education system

Education. In addition to preparing specialists for production, it is also an important necessary step for those who want to engage in professions and science in the future. Secondly, a large army of highly qualified professionals work in education. Thirdly, not only masters, doctoral students, and even thousands of talented students and students in the many problematic laboratories, design bureaus, and scientific societies of education today are engaged in science and profession, or education is a so In other words, the giant has scientific potential. Fourthly, in the continuous education system, all subjects are studied in depth in concrete directions. According to the above, education (pedagogy) has a strong influence not only on production. In turn, it can be said that education has a moderate influence on the development of science. Production. Above all, production is a direct correlation between science and education. This, in turn, has a serious impact on the professional staff working in production. At the same time, production, in its turn, forces science to move forward by making it a task for science to carry out scientific research aimed at eliminating existing problems. Disadvantages in production require students to conduct serious scientific research in science. Solving such problems calls all pedagogues and tyrants to be active, creates new branches of science and creates new products.

Based on what has been said, it is appropriate to justify the analysis of the system activity of the integration prospects of education and production enterprises in orientation and preparation for the choice of a targeted profession in the subject as follows: Modern education can lag behind the achievements of science (education<science>social life and all occupations related to production); Of the above schemes of logical connections, the third type of interconnection can be called the most optimal (appropriate). According to him, modern pedagogy not only studies and teaches the achievements of science, but also causes the emergence of new professions and specialties that are suitable for new scientific tastes. This, in turn, serves as a foundation for serious progress in the continuous education system and the creation of opportunities for targeted training of new professions and specialist personnel related to the development of production industries. Therefore, it would not be wrong to say that one of the urgent problems facing modern education is to create a perspective system of integration of the educational system and production enterprises in the preparation for the choice of a targeted profession, which will have a positive effect in all respects. In conclusion, it should be noted that the extent to which these problems (opportunities) can be solved depends on the pedagogical skills of teachers, and the only condition for pedagogical skills is deep professional knowledge and the integration of activities aimed at choosing a targeted profession.

Today, the interest in using interactive methods, innovative technologies, pedagogical and information technologies in the educational process is growing day by day. Making changes to

practical processes with the help of innovative technologies, pedagogical process, and teacher and student activity, with the help of new and acquired knowledge, in its implementation mainly innovative technologies, interactive methods are fully used.

The effective use of innovative technologies and advanced methods of world pedagogy in the educational process is an urgent issue, and the project method is used in the technology lessons in the process of making items from equipment. First of all, design is the creation of new types and models of hardware and tools, buildings and structures, roads and bridges, machines and equipment, airplanes and spaceships, radios and televisions, telephones and computers, clothes and shoes, furniture and other various products. is the process of drafting and drawing their projects to build and create. It is used in all fields of science and technology. It includes scientific research, economic and technical calculation, estimation, drawing and reproduction of drawings. Currently, in technology classes, models are prepared from raw materials before making equipment and products based on drawings. Various methods are used to teach students how to design in building technology classes.

An item can be designed individually (in a single order) and typical (in a mass order). It is appropriate to use problem-based, brainstorming, interactive methods during the wide use of standardized details, aggregates, nodes and normative documents in designing. From the project method, there is an important task of mastering the existing knowledge and skills during the training of the technology teacher and applying them at all stages of education. Interactive methods are methods of pedagogical influence and are a component of educational content. The design method is becoming an important part of educational technology. This method helps students adapt to lifestyle, develop independent, creative thinking skills. Projecting (lat. rrojectus - put forward thought, idea, image), as the name itself says, is the planning of future work, the project is based on a certain calculation, drawing, etc. description is an expression of an idea embodied in the form of a statement. It reveals the essence of the expressed idea and the possibilities of its implementation.

melts The design method is one of the important aspects of the educational process and allows the teacher to work individually with students. The teacher makes good use of class time and works with students individually, taking into account individual psychological characteristics. In this way, a wider path will be opened for them to acquire professional sciences in depth. The application of the didactic task and the problems of its solution are considered in the organization of design work. The design method allows students to: - find and solve problems by combining knowledge in various fields of science, finding a target in the flow of information; - using the right to choose activities, to put forward various assumptions, ideas, to conduct research, to determine whether analysis is economically feasible; - to be responsible for the results of one's activities, to make independent decisions, to identify achievements and shortcomings, to search for their causes, to find and correct mistakes; - different solutions. scientific estimation (prediction) of the results of the proposal;

- work in a team, encourages participation in the discussion of different points of view. Using the design method, during the course of the lesson, the task of the student, students: - perform economically appropriate, socially significant work, produce products, solve scientific-

technical, economic and other problems within the specified time or make suggestions for solving them development. The task of the teacher: - to create conditions for the student's independent creative activities to be productive. The importance of this method in studying economics is that students learn to make a business plan and develop projects for participation in various competitions. They learn to develop a technological map of how to organize theoretical and practical training, that is, to develop a detailed plan of how to conduct a lesson, and in general, to plan their activities. At the same time, this method has its own characteristics that must be taken into account.

First of all, it is very difficult to apply this method to topics and individual subjects. Because the causes of one problem are extremely diverse. It is difficult to solve them within one discipline. Secondly, not all students can prepare a project and solve the given problem. Thirdly, this method requires the teacher to have deep knowledge, experience, constant work on himself, and personal participation in various projects. To apply the design method, first of all, we define the design object. What kind of issue or problem is there that we will solve and determine what the result of the project will be. 1. This may be a question on the subject being discussed or an actual issue awaiting a solution. The project can be scientific research chosen by students according to their own wishes and interests, or it can be suggested by the teacher. In both cases, students need to collect the necessary information and analyze it. Based on the analysis, a decision is made, the goal of project development is set, and what result will be achieved.

2. After determining the goal, we determine the content of the project. 3. Based on the plan, the tasks to be implemented are determined, that is, the activity plan is developed. The general description of the project is a month - listen. A basis for specific activity is created. The plan for the implementation of the project should be clear and not overly complicated. In addition to the general plan, weekly and monthly plans are drawn up, on the basis of which the student's work will be clarified.

4. Project participants are determined. The participants of the project are close to each other with their interests and opinions, helpful students, and they are united by the goal set in the project. Other participants may join them later. But too many participants will have negative consequences. Therefore, the task of each participant in the project is clearly written. 5. Project implementation deadlines are determined. If it is divided into stages, it will be shown with each period. 6. Stages of design and its implementation:

Students will learn to think independently if they use the knowledge gained during the project and practical tips that serve the learning process. They develop the ability to find new ideas, think creatively, choose the right strategy, and solve specific problems. The teacher observes their work. gives advice and supports. No other method can form and educate students in this methodological sense of responsibility. In order to organize the lesson process based on the design method, working groups are formed within the educational group. They are divided into three working groups depending on the level of mastery. In this case, when strong working groups work independently, more time is allocated for the teacher to train with students with low mastery. A high result in education is achieved when the level of mastery of the participants

of working groups is approximately equal. It is better to create such a group by the students themselves, because they know very well which group they fit into. It is possible to move from the 2nd and 3rd working group to the 1st working group. In small groups, the individual practical method can also be used, since each student performs project work individually. The difference between the individual method and the laboratory method is that students try to solve a practical task using the knowledge they have acquired during their work. This method deepens students' knowledge, improves their skills, and also enhances their learning activities. The stages of implementation of the design method provide information.

The peculiarity of these methods is that they are implemented only through the joint activity of the pedagogue, student and student. Such a process of pedagogical cooperation has its own characteristics, which include:

- to guide the student not to be indifferent during the lesson, to think independently, to create and to search;
- to ensure the constant interest of students in the learning process;
- to strengthen the student's interest in knowledge independently with a creative approach to each issue;
-organization of the student's always cooperative activity

The advantage of new innovative technology has passed the test of time and is proving to be an important factor in increasing the quality and efficiency of production and practical training processes.

Researchers who have accumulated a lot of experience emphasize that pedagogical technology is a factor that guarantees the success of the lesson, and they are concerned with the scientific planning of pedagogical processes, its implementation, and the precise and consistent implementation of the planned educational process into practice. bringing his opinions to the attention of the public. The question of what is the expected goal of the new innovative technology, its advantages, and the principles of improving the effectiveness of the lesson can be answered on the basis of the following derivatives.

1. New pedagogical technology is a new convenient and simple method.
2. Teaches independent thinking.
3. Multidisciplinary.
4. Simple, easy.
5. It is memorable.
6. Increases wealth of knowledge.
7. We win time.
8. It will be interesting.
9. Increases the effectiveness of the lesson.
10. Increases worldview.
11. Develops thinking.
12. Attracts students' attention.
13. There is an individual relationship with each student.
14. Strengthens memory.

15. Invites to search.
16. Encourages students to work on themselves.

Our activity in cooperation with students, within the framework of the class-lesson system, is expressed in the following forms of educational organization:

- frontal work, simultaneous work with all learners;
-working in groups:
-work in static pairs;
- work in groups;
- intergroup work;
- individual work.

Each of these organizational forms is characterized by different joint conduct of collective and individual education, different levels of independence of learners, different management of the teaching process from our side, etc.

When designing modern educational technologies, we choose to work as a group. But in this, depending on the methods of education, it is taken into account its compatibility with the set educational goals, planned results, etc.

- Increases wealth of knowledge.
- We will save time.
- It will be interesting.
- Increases the effectiveness of the lesson.
- Increases outlook.
- Develops thinking.
- Attracts students' attention.
- There is an individual relationship with each student.
- Enhances memory.
- Invites to search.
- Encourages students to work on themselves.

Our activity in cooperation with learners, within the framework of the class-lesson system, is expressed in the following forms of educational organization:

- frontal work, simultaneous work with all learners;
-working in groups:
-work in static pairs;
- work in groups;
- intergroup work;
- individual work.

Each of these organizational forms is characterized by different joint conduct of collective and individual education, different levels of independence of learners, different management of the teaching process from our side, etc.

When designing modern educational technologies, we choose to work as a group. But in this, depending on the methods of education, it is taken into account its compatibility with the set educational goals, planned results, etc.

REFERENCES:

1. Musurmanov, A. A., Qurvontoev, R., Faxrutdinova, M. F., Mirsharipova, G. K., & Jurayev, M. S. (2021). The Influence of Soil Mulching and Minimal Tillage on the Degree of Correlation Bonds between the Quantitative Indicators of Cotton and Wheat. *Annals of the Romanian Society for Cell Biology*, 6172-6179.
2. Atabayeva, K., Mirsharipova, G., Mustafakulov, D., Musurmonov, A., Botirova, L., & Kurbonova, M. (2021). Influence of planting norms and harvest term on Sudan grass (Sorghum× drummondii) yield. In *E3S Web of Conferences* (Vol. 284, p. 03021). EDP Sciences.
3. Мусурманов, А. А., & Курвантаев, Р. К. (2018). Изменение агрохимических свойств орошаемых сероземно-луговых почв под влиянием мульчирования с минимальной обработкой. *Актуальные проблемы современной науки*, (4), 182-186.
4. Xayitmurodova, N. A. (2024). Talaba yengil atletikachi xotin–qizlarning o‘quv mashg‘ulotlarini rejalashtirish. Globallashuv jarayonida talabalar sporti, 4(7), 247-250.
5. Xayitmurodova, N. A. (2024). Yosh yengil atletikachilar mashg‘ulotlarida tezkorlik sifatlarini rivojlantirish usullari. Buxoro imiy xabarnomasi, 5(1), 185-190.
6. Musurmanov, A. A., Alibekov, M. A., & Qurbonova, S. (2023). Agrophysical Properties of Irrigated Soils of Sirdarya District. *Texas Journal of Agriculture and Biological Sciences*, *15*, 23-25.
7. Miraxmedova, S. N. (2024). Axborot turlari va ishonchliligi. *PEDAGOG*, *7*(3), 573-577.
8. Bo’stonbekova, S., & Miraxmedova, S. N. (2024). Axborat va uning manbalari. *PEDAGOG*, *7*(2), 265-270.
9. Musurmanov, A. A., & Mamaraimov, D. J. (2022). Agrochemical Properties of Dry Soils of the Northern Part of Turkestan Ridge. *Texas Journal of Agriculture and Biological Sciences*, *11*, 56-58.
10. Holiqova, D. S. (2023). Methodology of developing students' reading and writing skills based on distance education technologies (in the example of English language materials). Current Issues of Bio Economics and Digitalization in the Sustainable Development of Regions (Germany), 7(2), 75-80.
11. Holiqova, D. S. (2023). Тенденции развития образования и педагогики. Conference, 1(5), 147-150.
12. Musurmanov, A. A., Bazarova, R. S., & Tojiyev, K. (2022). Innovative methods of growing pineapples (Ananas comosus (L.) MERR). *Journal of Academic Research and Trends in Educational Sciences*, *1*(8), 7-12.
13. Jalilovna, X. D. (2023). Interpretation of Society and Religion in Fiction. *Texas Journal of Philology, Culture and History*, *16*, 57-60.
14. Xalilova, D., & Normamatova, Y. (2022). Preparing preschool children for literacy. *Science and Innovation*, *1*(8), 670-673.

15. Abdujalilova, O. H., & Musurmanov, A. A. (2021). Identification of the influence on increasing productivity of microbiological biopreparations in yield of winter wheat.
16. Тунгунов, М. Т., Курвантаев, Р., & Мусурманов, А. (2012). Гранулометрический и агрегатный состав почв голодной степи. *Труды Института геологии Дагестанского научного центра РАН*, (61), 198-200.
17. Umurkulov, Z. B. (2019). LEXICAL MEANS EXPRESSING COMPARISON. *Theoretical & Applied Science*, (11), 237-240.
18. Umurqulov, Z. (2021). Metaphor is an Important Means of Perception of The Universe. International journal of multidisciplinary research and analysis, 1418-1421.