

TECHNOLOGIES FOR IMPROVING THE TEACHING OF INTELLECTUAL MEASURING INSTRUMENTS IN TECHNICAL UNIVERSITIES BASED ON IMITATION AND VARIATION

Obidov jamshidbek

Doctor of philosophy (PhD) in pedagogical sciences, associate professor Fergana polytechnic institute, Uzbekistan

ABSTRACT

In this article, simulation modeling (situational modeling), which can be used in the teaching of engineering sciences in technical higher education institutions, is a method that allows you to build models that explain how processes actually happen, and to test such a model in time for one or more tests. It is presented that it can be used according to, while the results are determined from the random description of processes.

KEYWORDS: The science of Intelligent measuring instruments, engineering technologies, innovative methods, imitation modeling, modeling of educational materials based on imitation-variability, independent education, types of lessons.

INTRODUCTION

In the world, many studies have been carried out on the improvement and development of teaching materials for students in technical universities based on imitation and variation, and these scientific issues are being researched in a number of leading research centers and educational institutions, including The Jawaharlal Nehru Center for Advanced Scientific Research (JNCASR) is a multidisciplinary research institute located in Jakkur, north of Bangalore, India, that provides simulation-based teaching of study materials to students in the process of self-directed learning at the frontiers of science and engineering covering a wide range of fields. Great attention is paid to improvement, world-class research and imitation-variety education, and promotion of this process through advanced pedagogical technologies and innovative methodological methods.

Imitation through innovative methods models can be created because the method virtual resources how realizes and ensures that it is referred to. Therefore, when creating virtual resources through simulation models, it is necessary to pay attention not only to its educational methodical views, but also to its normative content. Because its direction is defined through content. Creating a structure and creating a process is formed on the basis of imitation-variability.

RESEARCH METHODOLOGY

Forms, methods and tools of the pedagogical process aimed at improving students' knowledge of the basics of technologies for improving learning materials based on imitation-variation are based. The quality of the technological-pedagogical education and training process, which is the goal of higher technical education, is closely related to the training of highly qualified



Published Date: - 30-01-2025

specialists. At the same time, the training of competitive engineers in higher technical education is a complex pedagogical process not only for professors and teachers, but also for students. The didactic process of training a highly qualified specialist requires the formation of professional knowledge and skills in future bachelors and masters.

In the qualification requirements for future engineers, it is necessary to improve their knowledge of the basics of teaching materials based on imitation-variation based on pedagogical technologies [1], to develop their individual abilities based on general and private didactic laws, to professional activities. Priority tasks are defined for increasing knowledge of the field, acquiring the skills of effective use of various methods and tools of innovative activity.



Examination and assessment of students' knowledge and skills in an imitative-variative form



Types of lessons based on imitation-variety, which are most often used in the educational system



Presentation of new knowledge based on imitation-variation

Figure 1. The main components of the technologies for improving the teaching of the science of intellectual measuring instruments on the basis of imitation-variability in technical higher educational institutions.

In educational practice and pedagogical thinking, he is always looking for ways to improve the lesson. Each type of lesson has a specific structure and characteristics. These things help the teacher to correctly and effectively explain the educational material, to remember it firmly, to repeat it and to control its assimilation.

Teaching-methodical axioms and its normative structure in creating improved models based on imitation-variability. Today, the rapid development of the innovative sector in the life of society, the growth of the share of intellectual products, information and scientific-technical and innovative activities in the economy has led to the fact that innovations, like minerals, production capacities and intellectual potential, are considered the wealth of the country. Effective use of innovative and scientific and technical potential for the benefit of our country and its citizens would not have been possible without the formation of a comprehensive innovation policy in the country and the creation of legislative foundations for its implementation.

With the implementation of market reforms, the integration of the country into the world community, the change of the world economic system towards the growth of the role of knowledge and information, the strengthening of relations between new technologies and the



Published Date: - 30-01-2025

capital market, the transition of our country's economy to the path of innovative development becomes of urgent importance [2].

Knowledge of the general laws and trends of development in the leading developed and developing countries of the world, as well as taking into account the unique conditions of Uzbekistan, which has rich natural resources, production and scientific and technical potential, can lead to the path of innovative development of Uzbekistan. ways and methods can be developed. Due to the commercialization of intellectual products in the modern world, a fundamental change in the role of science and technology, each country, as well as structures at the lower management level up to the level of individual enterprises, allocate resources to scientific and technical and innovative activities in market conditions, and their attitude to the implementation of the results of these activities.

Must have a vision, that is, develop its own innovative policy that will allow effective achievement of the set socio-economic goals of the country, region, organization and individual [3].

CONCLUSION AND SUGGESTIONS

On the basis of imitation-variation Based on imitation-variation The method of improved modeling on the basis of imitation-variation is widely used in modern science. In the process of independent education, the didactic features of the formation of educational materials on the basis of imitation-variation in the teaching of specialized subjects to students facilitate the process of scientific research, and in some cases become the only means of studying complex objects.

In conclusion, it should be said that in technical higher educational institutions, in improving the knowledge and outlook of future engineers on the technologies of improving teaching materials on the basis of imitation-variation, improving the teaching of educational materials on the basis of imitation-variation in the process of professional training The didactic algorithm of improving knowledge about technologies is the most important for improving the quality of education through corporate adaptation of such stages as analytical-modeling, constructive-formative (working on information, creating creative projects), correction-diagnostic (monitoring of results), presentation-generalization to the technical higher education system. is an important factor.

REFERENCES

- **1.** O.Mamaraufov., Software tools of simulation modeling. Presentation 14.03.2016//https://prezi.com/bfyxcqnqabry/imitation-modeling-software-tools/
- **2.** Rasulovna M.K, "Innovation teaching method in primary education" //Czech Journal of Multidisciplinary Innovations. 2022. T. 5. S. 31-34. pages.
- **3.** William Griswold Smith. Practical Descriptive Geometry. London 2013.-257 pages.
- 4. Jo Erskine Hannay. Tom van den Berg2, Scott Gallant3, and Kevin Gupton4., "Modeling and Simulation as a Service infrastructure capabilities for discovery, composition and execution of simulation services". The Journal of Defense Modeling and SimulationVolume 18, Issue 1, January 2021, Pages 5-28 © The Author(s) 2020, Article Reuse Guidelines//.

