Berlin Studies Transnational Journal of Science and Humanities ISSN 2749-0866
Vol.2 Issue 1.1 Economical sciences
http://berlinstudies.de/

INTEGRATIVE BILDUNG ALS INSTRUMENT ZUR BILDUNG BERUFSMATHEMATISCHER KOMPETENZ ZUKÜNFTIGER WIRTSCHAFTSWISSENSCHAFTLER

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Abstrakt: Der Artikel diskutiert die Integration von Theorie und Praxis in den Bildungsprozess zur Verbesserung der Ausbildungsqualität angehender Wirtschaftswissenschaftler, insbesondere interdisziplinäre Verknüpfung in der Mathematikdidaktik, Berufsorientierung und Ausbildung von Fachkräften mit fachlicher und mathematischer Kompetenz durch integrative Bildung**.**

Schlüsselwörter: Integration, Bildungsintegration, Integrationsstufen, Frage der ökonomischen Inhalte, Praxisorientierung, mathematisches Modell, mathematische Modellierung, Kompetenz, Stufen der berufsmathematischen Kompetenz**.**

INTEGRATIVE EDUCATION AS A TOOL FOR FORMATION OF PROFESSIONAL-MATHEMATICAL COMPETENCE OF FUTURE ECONOMISTS

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Abstract. The article discusses the integration of theory and practice in the educational process to improve the quality of training of future economists, in particular, interdisciplinary connection in mathematics education, professional orientation, and training of professionals with professional and mathematical competence through integrative education.

Keywords: integration, educational integration, levels of integration, issue of economic content, practical orientation, mathematical model, mathematical modeling, competence, levels of professional-mathematical competence.

Over the past four years, Uzbekistan has seen economic growth as a result of socio-economic changes. These processes put before the education system the task of training a new generation of personnel for the renewed Uzbekistan.

Raising the process of training economists to a qualitatively new level, its competitiveness in the labor market depends on many factors, including the mathematical training of the specialist.

Despite a number of systematic measures aimed at improving the quality and effectiveness of mathematics education in the training of future economists, the slowness of these processes indicates the need to implement the following measures:

- Further improvement of the economic-semantic-methodological direction within the course of mathematics at all stages of continuing education;

- Development and implementation of the content and essence of the science program in accordance with the practical tasks of the industry to develop the skills of graduates to solve practical problems related to certain economic processes;

- Improving the methodological development of mathematics teaching (game methods) based on the modeling of processes in professional activities, including the implementation of the principles of interdisciplinary connection with general professional subjects, professional orientation in the teaching of mathematics;

- To develop the skills of graduates to apply their knowledge of mathematics in technology in the real sector of the economy, as well as in practical and scientific activities.

One of the conditions for overcoming the identified problems is to improve the quality of education based on an integrated approach.

Issues of integration in education have been widely studied by Uzbek pedagogical scientists (E.O. Turdikulov, R.H. Djuraev, O. Abdukuddusov, O.I. Avazbaev, O.Q. Tolipov, N. Hurboev, R.G. Safarova and others).

Integration is the process of bringing things together into a whole, a whole, a system, a whole set of knowledge about nature, the orientation of knowledge in different disciplines to a single goal. It represents the integrity of the universe.

The need for mathematical knowledge aimed at solving problems related to the professional activity of future economists is related to the need to form the mathematical competence of the economist.

Competence does not mean the acquisition of individual knowledge and skills by the student, but the acquisition of integrative knowledge and actions in each independent direction. In terms of the requirements for the level of professional training of graduates, competence refers to the ability of students to apply a set of knowledge, skills and methods of activity in specific situations [1].

M.V. Noskov and V.A. Shershneva suggest a three-component structure of bachelor's mathematical competence: 1) mathematical knowledge, skills, abilities; 2) ability to mathematically model knowledge in the field of professional activity; 3) ability to use information and communication technologies in the process of mathematical modeling [2].

In our opinion, the concept of professional-mathematical competence of future economists is the result of his integrative, dynamically evolving education, reflecting the integrity of his theoretical mathematical training and the ability to construct a mathematical model for solving professionally oriented economic problems, competent application of mathematical methods.

One of the indicators of the integration of mathematical education is the level of its implementation (interdisciplinary relations, interdisciplinary relations, integrity).

The level of interdisciplinary communication is carried out within the framework of the course "Mathematics for Economists". The level of interdisciplinary communication is carried out within the framework of the course "Mathematics for Economists". At the intramural level, students develop basic knowledge, skills and competencies as a result of mastering such sections as "Linear

Algebra and Analytical Geometry", "Mathematical Analysis", "Probability Theory and Mathematical Statistics". Students develop basic mathematical knowledge, skills and competencies.

The next level of integration of mathematics education is the level of interdisciplinary relations. The level of interdisciplinary relations provides for the integration of the course "Mathematics for Economists" and general professional disciplines (economic theory, microeconomics, macroeconomics, finance, etc.). At this level, the integration of academic disciplines is carried out on the basis of mathematics, but in this case, each of the interacting subjects retains its own conceptual basis.

The degree of integrity of the integration of mathematical education is a high level of integration of mathematical education in the preparation of future economists in the process of production practice, research work, course work on special subjects and graduation theses. In this activity, future economists develop the skills of independent application of mathematical knowledge in solving professional problems.

Defining, planning and implementing the goal of integration of mathematics education in accordance with the established levels leads to the formation of the student's professional-mathematical competence (MMC). The formation of the economist's professional-mathematical competence as a result of integration in accordance with the three levels of the integration process (within science, interdisciplinary and integrity) is characterized by the following three levels: PMC - 1, PMC – 2 , PMC – 3.

Formed levels of professional-mathematical competence are viewed as the goal and outcome of the integration of mathematical education and are assessed through the readiness and ability of graduates to construct and solve mathematical models of professional problems.

The purpose of the integration of mathematical education is the formation of mathematical knowledge, skills, abilities, personal qualities included in the content of professional mathematical competencies in students, the implementation of which determines the level of formation of mathematical competence of future economists (Table 1).

Table 1

Levels of formation of mathematical competence as a result of integrative learning

Level of integration	Competence level	Parameters of mathematical competency	Criteria
Relationships within science	PMC-1	Have mathematical knowledge; knowledge of mathematical modeling, implementation of	Existence of motivation to study mathematics, to have practical mathematical and

		formalization and interpretation methods as key components of modeling skills. volume_up content_copy share	fundamental knowledge necessary for future professional activity.
Interdisciplinary relations	PMC-2	Be able to apply the method of mathematical modeling in solving practical problems of economic content.	Selection, justification and application of mathematical methods in solving practical problems of economic content; case solution analysis.
Integrity	PMC-3	Use of mathematical methods as a means of solving professional problems; independent planning and implementation of mathematical modeling of economic processes.	Mathematical knowledge and skills in solving professional problems, readiness to apply skills independently.

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