

THE ROLE OF INTEGRATION OF SCIENCE, EDUCATION AND DEVELOPMENT IN STAFF PREPARATION FOR CONSTRUCTION

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Abstract. *This scientific article shows the ways of implementing the integration of science education and production in order to further improve the quality of education in construction education. Activities conducted by professors and teachers of the department and their results are highlighted in this field.*

Keywords: *integration, science, education, production, professional practice, technique, economy, graduate work, innovation, research, scientific development, material.*

РОЛЬ ИНТЕГРАЦИИ НАУКИ, ОБРАЗОВАНИЯ И РАЗВИТИЯ В ПОДГОТОВКЕ КАДРОВ ДЛЯ СТРОИТЕЛЬСТВА

Аннотация. *В данной научной статье показаны пути реализации интеграции научного образования и производства с целью дальнейшего повышения качества образования в строительном образовании. В этой области освещаются мероприятия, проводимые профессорами и преподавателями кафедры, и их результаты.*

Ключевые слова: *интеграция, наука, образование, производство, профессиональная практика, техника, экономика, дипломная работа, инновации, исследования, научные разработки, материал.*

INTRODUCTION

Ensuring the competitiveness of the national economy in the conditions of today's globalization and the rapid development of science and technology, achieving the wide introduction of innovative scientific developments to production by training highly qualified specialists with deep modern knowledge puts new high demands on science, education and business.

RESEARCH MATERIALS AND METHODOLOGY

Uzbekistan is a country where science has developed. Ma'mun Academy was established in Khiva in the Middle Ages. Our great ancestors of the Eastern Renaissance in the 9th-14th centuries - Muhammad ibn Musa al-Khorazmi, who made an incomparable contribution to the development of modern mathematics, trigonometry and geography, al-Khorazmi, who founded the science of algebra, Ahmad Farghani, who developed the theory of the astrolabe, the main astronomical instrument in the Middle Ages, the world Our scholars such as Abu Rayhan Beruni, who was one of the first in science to propose unique new ideas regarding the theory of the seas and the creation of a spherical globe of the Earth, Abu Ali ibn Sina, who was awarded the title of

one of the greatest thinkers of mankind, and Mirza Ulugbek, who gained fame as a great scientist in the field of astronomy, contributed to the development of world civilization. who made invaluable contributions. Their universal discoveries, the scientific schools they created led to the emergence and maturation of a new wave of talented generations.

RESEARCH RESULTS

This, along with the rapid growth of the economy, agriculture and urban economy, the high level of development of crafts and trade, the construction of roads, the opening of new caravan routes, served to ensure relative stability in Kurraizam. Taking a lesson from the great discoveries of Eastern geniuses, modern scientists of Uzbekistan re-perceive and re-evaluate the laws created by their ancestors over the centuries and carry out large-scale in-depth scientific research to increase the power of independent states, form and develop a modern economy.

In the current period, the integration of science education and production has become one of the important factors in raising the quality of education to a higher level. There are several factors in the training of personnel in the educational fields of construction, including the field of "Production of construction materials, products and structures":

- raising the quality of professional practice to a new level
- conducting some trainings in specialized subjects at production enterprises;
- more inclusion of students in order to participate in the scientific research works performed by the professors-teachers of the department on the basis of the economic contract;
- attract leading specialists of production enterprises to conduct training for students;
- wider involvement of high-level students in scientific seminars at the department of specialization and ensuring their participation with lectures.

A comprehensive approach to the above activities serves as an important factor in further improving the quality of education. In the following years, professors-teachers of the Department of Construction Materials and Products carried out many activities in the implementation of science education and production integration. In particular, special attention was paid to conducting professional practice for students of each stage. Leading professors and teachers of the department and experienced specialists of production enterprises were appointed as leaders of the practice. Each student was provided with a methodical instruction perfectly developed according to the type of practice. In the instruction manual, an independent work topic was given for thinking and conducting small research. At the end of the internship, students' reports were heard in the presence of the experts of the production enterprise. As a result, the efficiency achieved at the end of the qualification practice has risen to a new level. The department has branches in "Techno Standard Test" LLC and "Bunyodkor-3" LLC. Laboratory classes in "Construction materials and products", "Technology of concrete aggregates", "Technology of concrete and reinforced concrete products" are held in these branches.

CONCLUSION

A scientific seminar called "Construction materials and constructions" is operating under the department, professors, teachers, graduate students and talented students regularly participate in the seminar. Engineers and technicians of production enterprises in this field also participate in the workshop with their lectures. Activities aimed at improving the quality of education are giving positive results. In addition, in the next three years, 19 students who graduated from the bachelor's level of this field of study studied at the master's level. 9 of them benefit

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