INTEGRATION OF SCIENCE AND EDUCATION: ESSENCE, PROBLEMS AND SOLUTIONS

[1]Nodira Sharifovna Khodjaeva, [2]Farangiz Eshonkolova
Teacher, Tashkent State Transport University[1], Student, Tashkent State Transport University[2]

ANNOTATION

The slow integration of research and higher education institutions reduces the potential for their development, hinders the beneficial participation of our country in the international division of labor, its full integration with the world scientific and educational community. The complexity of the development of the process of integration of science and higher education is largely due to the institutional backwardness in their organization, which is reflected in the preservation of the fragmentation of science and education.

Keywords: Science, research, education, institution, integration, international, labor, country, science education, public.

INTRODUCTION

In recent years, scientific and educational cooperation has been widely discussed at scientific conferences and periodicals. In this article, we would like to share some of our views on the fact that some aspects of this issue have not yet reached a logical conclusion and what needs to be done in this regard. In general, we need to think a little more deeply about this and rely on the results of a thorough analysis.

Research methodology and results First of all, let's take a closer look at the etymological features and lexical content of each of the above terms. The 5-volume explanatory dictionary of the Uzbek language defines these terms as follows:

“Science (Arabic mlʿ - knowledge, science, theory) is knowledge acquired through study and research, analysis; skill information » [1].

If we rely on the etymological basis of the word, science is the process of reading, thinking, and analyzing. This means that one must read, study, research and analyze throughout one's conscious life.

"The concept of science (art, mastery; free profession; science, knowledge; network) is a system of knowledge that reveals the laws of development of nature and society and affects the environment with its results" [2].

From the second definition we distinguish the following basic terms: nature, society, development, law, influence, system of knowledge.

In this source, the exact translation of the concept of "progress" (Arabic - تٰرو) means "rise, advance, development, growth." It is also interpreted as "a form of development from simple to complex, from the bottom up, its rise."

The exact translation of the concept of law (ydẖتąq) from Arabic means "legitimacy, the legal side of the issue" and describes "the connections between objective phenomena."

Hence, science forms new knowledge that expresses the intrinsic causal relationships of things and events in the world around us, influencing the development of nature and society.

There are four comprehensive explanations of the concept of education. «Education (teaching, teaching, knowledge; information)

1. The process of acquiring knowledge, skills and abilities, the main means of preparing a person for life and work.

2. A set of knowledge and skills acquired and acquired in the field of science or profession; knowledge. 3 Discipline, manners. 4 Instruction, guidance, teaching"[2].

"Integration (lot.integratio - restoration, restart, replenishment) is a concept that represents the state of connection of individual parts, elements, their combination"[3].

Therefore, science and education cannot develop in isolation. They are interdependent and interdependent and cannot function in isolation. As Wilhelm Humboldt pointed out, the university is a union of professors and students, a union of science and education.

The study of the practice of the world's leading countries and the experience of our country show that in the current situation, if science and higher education are not integrated, their ability will decline. For example, undergraduate graduates in some areas are unable to compete in the labor market, and the supply of highly qualified scientific and pedagogical staff is deteriorating as a result of declining aspirations of young professionals to science. The slow integration of research and higher education institutions reduces their development potential, reduces their share in the transformation of society and the economy, hinders the beneficial participation of our country in the international division of labor, its full integration with the world scientific and educational community. The complexity of developing the process of integration of science and higher education is largely due to the institutional backwardness in their organization, which is reflected in the preservation of the fragmentation of science and education, which is typical of the former Soviet system. Unfortunately, even today, such fragmentation in the activities and management of research and higher education institutions continues to some extent. The persistence of bureaucratic model elements in the organization of science and higher education does not meet the requirements and needs of today's market space. One of the main reasons for this is the shortcomings in the regulatory and organizational framework.

In general, in the process of integration of science and higher education, a number of normative-legal, administrative-administrative, financial-economic, organizational-methodological, social and even psychological barriers remain.

To solve such problems, the Resolution of the President of the Republic of Uzbekistan dated February 10, 2014 PF 2125 "On improving the activities of the Uzbek Agricultural Research and Production Center": "Coordination of research activities of research institutes and universities of the republic."

This is one of the most important tasks of the center. In the field of integration of science and higher education, in particular, the restructuring of the integration structure of research and higher education institutions is taking place slightly behind the changes in the economic space. Of course, this is a comprehensive, time-consuming and high-potential job. In our opinion, the solution to these problems is manifested in the following.

The impact of education on science in the combination of science and education:

- Involvement of employees of research institutions in pedagogical activities and exchange of experience with them;

- Creation of a new generation of educational literature in collaboration with the staff of research institutions;

- joint use of scientific, educational-methodical and information base;

- The organization of acquaintance practices of masters and students in research institutions and the organization of excursions to them, etc.

The impact of science on education is mainly reflected in the following:

- Involvement of professors and teachers in research work, implementation of joint research projects and discussion of research results;

- Review and editing of scientific and educational literature prepared by the specialists of the research institute and participation in the work of the WAC;

- lectures to professors and students on the achievements of national and world science on problematic and topical issues;

- communication and information exchange through the local information network;

- Establishment of named scholarships for students;

- Supervision of graduate work and master's dissertations and becoming a scientific adviser, etc.

In the introduction to the article, we highlighted the combination of science and education. Let us now turn to the areas in which the effect of the interaction of science and education is manifested:

- Development and implementation of joint international megaprojects;

- organization of joint scientific-practical conferences, symposiums, seminars and round tables;

- preparation of scientific-methodical and practical recommendations and organization of exhibition seminars (for example, "Farmers' Day", etc.);

- Carrying out joint research and publishing the results

push - to be a scientific adviser to senior researchers, independent researchers and masters;

- Organization of joint scientific councils and seminars for the discussion of dissertations, scientific monographs and scientific reports, etc.

Conclusions

As a result of combining science and education in higher education, the following is achieved:

- The quality of education and, consequently, the competitiveness of staff will increase by expanding the scientific outlook of students;

- develops the ability to correctly use the methods, laws and rules of scientific research;

- There will be an opportunity to quickly identify talented students and reveal their abilities;

- The effectiveness of fundamental and applied research will be increased through the accumulation of scientific potential, information base, formed theoretical knowledge and experience in higher education, and research will be more effectively coordinated;

- Improving the professional and organizational structure of professors and staff of research departments;

- Improving the involvement of university professors, master's and bachelor's students in research work and researchers in the educational process;

- in the educational process (textbooks, manuals, etc.) and in conducting research

the number of applied information resources (scientific monographs, articles, etc.) will increase;

- The quality of training of research and teaching staff will be further improved by creating conditions for senior researchers, independent researchers and masters to conduct research;

- The efficiency of agricultural enterprises will increase through the provision of highly qualified and modern-minded personnel and the wider introduction of scientific advances, high technologies and techniques.

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