



THE ROLE, PLACE AND PROBLEMS OF EDUCATION AND SCIENCE IN THE TRAINING OF SPECIALISTS IN TECHNICAL UNIVERSITIES

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Abstract

Today the system of Uzbek vocational education is in a situation of double challenge. On the one hand, everyone who comes to study at a college, technical school, university expects that after graduation he will become a specialist in demand. On the other hand, the state has set a task in the coming years to ensure the readiness of millions of young professionals to work in high-tech production. Despite the fact that the challenges have different bases - one acts on the system from the inside, the other - from the outside, they have the same vector: they both dictate the need to focus on the immediate provision of high quality education that meets the needs of the development of the Uzbek economy.

Key words: Uzbek universities, self-improvement of the system, road map, concept of development, problematic foci, attract business to investment

Аннотация

Сегодня система профессионального образования Узбекистана находится в ситуации двойного вызова. С одной стороны, каждый, кто приходит учиться в колледж, техникум, вуз, ожидает, что после окончания учебы он станет востребованным специалистом. С другой стороны, государство поставило задачу в ближайшие годы обеспечить готовность миллионов молодых специалистов к работе на высокотехнологичном производстве. Несмотря на то, что вызовы имеют разные основы - один действует на систему изнутри, другой - извне, они имеют один и тот же вектор: оба диктуют необходимость сосредоточиться на немедленном предоставлении высококачественного образования, отвечающего требованиям потребности развития экономики Узбекистана.

Аннотация

Bugungi kunda O'zbekistonning kasb-hunar ta'limi tizimi ikki tomonlama muammoga duch kelmoqda. Bir tomondan, kollejda, texnikumda yoki universitetda o'qish uchun kelgan har bir kishi maktabni tugatgandan so'ng u izlanadigan mutaxassisga aylanishini kutadi. Boshqa tomondan, davlat yaqin yillarda millionlab yosh mutaxassislarning yuqori texnologik ishlab chiqarishda ishlashga tayyorligini ta'minlash vazifasini qo'ydi.



Qiyinchiliklar turli xil asoslarga ega bo'lishiga qaramay - biri tizimga ichkaridan, boshqasi tashqi tomondan ta'sir qiladi, ular bir xil vektorga ega: ikkalasi ham zudlik bilan yuqori sifatli ta'limga e'tibor qaratish zarurligini belgilaydi O'zbekiston iqtisodiyotining rivojlanish ehtiyojlari.

Ключевые слова: ВУЗы Узбекистана, самосовершенствование системы, дорожная карта, концепция развития, проблемные очаги, привлечение бизнеса к инвестициям.

Kalit so'zlar: O'zbekiston universitetlari, tizimni takomillashtirish, yo'l xaritasi, rivojlanish konsepsiyasi, muammoli yo'nalishlar, biznesni investitsiyalarga jalb qilish.

Introduction

New opportunities for reorienting the vocational education system towards high quality have been created by the law "On Education in Uzbekistan" that came into force on August 7, 2020 [1]. It provided the legal conditions for effective interaction between educational organizations and industrial enterprises. Universities and technical schools were able to break the vicious circle of the internal logic of development and move on to building programs that meet the requirements of the real sector of the economy. Basic departments at enterprises, joint educational programs, various forms of network interaction between educational organizations and companies should provide graduates with a high level of competence to work in complex modern industries in accordance with international standards. A special emphasis on a practice-oriented approach will be placed in the process of training highly qualified workers.

In accordance with the developed Strategy for training workers by 2025, 60% of educational institutions of vocational education should have their own structural units at enterprises, where students will spend at least 50% of the study time. This approach should provide the necessary resource base for training and at the same time allow building educational programs in accordance with the needs of enterprises. However, no matter what opportunities are created normatively, their real implementation is the lot of the cadres working in the vocational education system. Therefore, it is fundamentally important that the best professionals in the country are masters in colleges and professors in universities.

Materials and methods

Attracting and retaining the best personnel in the vocational education system will allow us to count on the successful implementation of plans to increase the international



competitiveness of our education. The planned entry of the leading Uzbek universities into the hundred best world universities is an important signal for the external environment, attracting the world's best teachers, scientists and students to our universities. In addition, universities that can achieve such ambitious goals will set quality standards in the domestic arena, thereby contributing to the self-adjustment of the Uzbek vocational education system. At the same time, our expectations regarding the self-improvement of the system do not exclude further development of the system of external assessment of the quality of education. State audit - monitoring the effectiveness of universities, new approaches to accreditation, as well as independent assessment - certification of qualifications, professional and public accreditation of educational programs, participation of educational organizations in comparative international studies - are designed to guarantee each student an education that meets the highest international standards as soon as possible. ... Achieving high quality vocational education is not an easy, but absolutely real task. Consolidation of efforts of society, government and business will allow the vocational education system to quickly restructure and meet the expectations of people and the needs of the country's development [2].

By presidential decree, the state social policy in the coming years determines several important vectors for the development of the vocational education system. The principal task is to increase teachers' salaries; special attention is paid to scholarships. Regular assessment of the performance of universities will continue, and through the introduction of a system of standards, it is planned to make the mechanisms of budget financing much more transparent. All these large-scale changes are predetermined by the presidential decrees "CONCEPT OF DEVELOPMENT OF THE PUBLIC EDUCATION SYSTEM UNTIL 2030" [3].

"Roadmap" for growth According to the presidential decree, by 2019 the average salary of teachers of vocational education organizations - teachers and masters of vocational training - should reach 100% of the average salary in the region, and the average salary of university teachers should increase to 200% of the average salary in the region. Uzbekistan. The task of increasing the average salary of teachers is enshrined in the republican "road map" of structural changes in the education system. But since the main financing of technical schools and universities is carried out by the regions, the target indicators for the wages of these workers are reflected in the regional "road maps". As a result, by the middle of this year, it was possible to increase the average salary of the majority of teachers in vocational education organizations (including masters of industrial training). In order to improve the remuneration system in educational organizations, it is planned to develop an effective contract system in the next five years.



Its mechanisms have already begun to be developed with the participation of leaders and employees of educational organizations.

The plans of the Ministry of Education and Science are to prepare guidelines for the implementation of the new system in institutions of higher and professional education. Various factors were taken into account, for example, technical areas require increased funding due to the need to use complex equipment; standards of the ratio of the number of students and teachers are especially important for creative specialties, where training is often individualized.

The system of standards ensures transparency and controllability of spending considerable budgetary funds (annually, more than 350 billion soums are allocated from the state budget to finance educational activities of universities). Universities subordinate to the Ministry of Education and Science have been operating in accordance with the normative per capita funding for the second year already. The rest will be gradually transferred to such funding, while the quality of education should be preserved.

Development of universities In addition, in 2019, a project for the development of the country's leading universities was developed, the goal of which is to increase their competitiveness at the global level. State support is aimed at ensuring that by 2025 at least five Uzbek universities are included in the first hundred of the three most authoritative world rankings of the best universities.

Results and Discussions

The monitoring of the performance of universities, which has been carried out for the second year in a row, is intended to contribute to improving the quality of educational programs. Its task is to evaluate the work of universities and to identify the centers of poor-quality provision of educational services, unsatisfactory conditions for their provision, ineffective organization of scientific work. The difficulty in carrying out such an assessment is determined by various factors, including often diametrically opposed understanding of quality by both universities and society: for one it is the competition of a diploma in the international market, for the other it is the acquisition of applied qualifications that will make it possible to be in demand in the regional labor market. The picture of how they teach in the country's universities, how scientific work is carried out, is important for the state. Including for determining funding priorities. Last year's discussions about the adequacy of the assessments obtained by universities in the course of monitoring, and what should be the criteria for these assessments, clearly revealed the need to take into account the specifics of universities, the need to introduce "external" indicators of their performance, such as, for example, the level of employment



of graduates. It is obvious that such a complex instrument as a unified monitoring of universities cannot be static and, while maintaining a common approach and focus on identifying "problematic foci" of the system, it will be improved.

The vocational education system focuses on integration with the real sector of the economy. Thus, with the participation of local executive authorities and regional associations of employers, it was decided to form multifunctional centers of applied qualifications based on existing vocational education organizations.

One of the most important ways to achieve this goal is the Presidential Program for Advanced Training of Engineering Personnel for 2019-2024. This year, at least 5 thousand specialists of the engineering and technical profile of enterprises and organizations of the real sector of the economy will improve their qualifications.

New principles of competitive distribution of budget places (admission targets) were introduced in the university system. For the first time, when allocating budget places, we were able to take into account the needs of industries and regions in personnel training. Not only federal executive authorities, but also employers' associations are involved in determining the volumes of admission control figures. Ten "responsibility centers" in 40% of areas of training and specialties of higher education took part in the development of a policy regarding the formation of the volume of budget places for 2020 [4].

For the first time in 2019, the monitoring of the effectiveness of the activities of universities was carried out, according to the results of which most of the universities with signs of inefficiency have developed and are implementing optimization programs, and some are subject to reorganization. It is important that not a single ineffective university was closed: the priority for the ministry is to respect the rights of students and teachers. In assessing the effectiveness of universities in 2019, there were changes that made it possible to look more objectively at the activities of universities. First, non-state universities and their branches took part in the monitoring. Secondly, additional assessment criteria have been introduced for universities that have a specific activity (creative, transport, etc.). Thirdly, an additional indicator of efficiency has been introduced for all universities - employment of graduates. Applied (Practice Oriented) Bachelor's Degree.

Universities and professional educational organizations (technical schools and colleges) were able to legally create structural units that provide practical training for students on the basis of organizations operating in the profile of the educational program. The purpose of creating basic departments is the practical training of students in the corresponding educational program through the implementation by the educational organization of a part of the educational program of the corresponding profile.



The formation of multifunctional centers of applied qualifications has been launched to train young people and working specialists on short vocational training programs. Creation of such centers is a promising direction for solving the problem of staffing industries and should ensure bridging the gap between the needs of the economy in skilled workers and the real level of their training.

Conclusions and suggestions

Uzbek higher education has long been in need of serious renovation - everyone agrees with this thesis: from officials to students and rectors. To solve this problem, the Ministry of Education and Science of Uzbekistan is carrying out a comprehensive reform, in which three levels can be distinguished. First, the department conducts diagnostics of higher education through performance monitoring.

Then, optimization programs are developed for the identified weak educational institutions, and the leading universities receive state support to enter the international market. At the same time, the Ministry of Education and Science is retraining rectors so that modern management practices are introduced in Uzbek universities. Monitoring the effectiveness of universities was conceived as the first step towards a serious change in Uzbek higher education. After all, in order to reform, you need to understand what, in fact, is available, from which you need to get rid of in the first place. It is no secret that Uzbek higher education is extremely heterogeneous: universities teach seemingly the same specialties, but graduates differ greatly in their level of knowledge and skills.

In practice, this is an educational program jointly developed and approved by the partners of the network, in the implementation of which the resources of the participants are consolidated: material and technical, educational, methodological, personnel, etc. with the aim of their optimal use to ensure an increase in the availability and quality of education. Networking not only stimulates the development of the lifelong education system, but also allows the educational system is flexible to respond to changes in demand for educational programs.

The following steps should be taken to solve the identified problems: introduction of online modules of professional programs, strengthening partnerships between universities, which should lead to online e-learning, encourage particularly successful students and, finally, attract business to investment.

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