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**SCIENTIFIC AND TECHNOLOGICAL PROGRESS
IN THE SERVICE OF PUBLIC ADMINISTRATION OF PUBLIC EDUCATION
IN THE MODERN PERIOD OF HISTORY**

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Abstract. This article is devoted to an interesting topic. By the current period of history, the consideration of various issues of the functioning of higher education not only from pedagogical positions, but above all from the side of government authorities looks very relevant. Thus, the idea of relying on the educational process as a whole on the achievements of high technologies turns out to be timely. This idea runs like a red line through all the work, in particular, additionally explaining the phenomenon of internationalization of public administration. It organically leads readers to think about the internationalization of public administration in the field of higher education, because the redistribution of roles between the four models/schemes of universities is considered on a global scale.

We also consider the merit of the author of the article to be an indispensable reference to the modern period of history. Moreover, the potential connection with public education in our republic is indicated locally, if necessary. And this, in our opinion, is by no means an artificial “adaptation” of the chosen topic to the realities of higher education in Azerbaijan. On the contrary, it is possible to draw a conclusion about the creative approach of the author. In general, it should be recognized that the presented work is written at the proper theoretical level, but at the same time it differs in both scientific and accessible language for the general reader.

Key words: public administration, higher education, scientific research, prototypes, design bureau

Introduction. The middle of the second decade of the 21st century makes significant adjustments to the system of public administration of public education. The role of the world's universities in the transfer of knowledge to the younger generation is especially increasing in connection with the era of globalization. This process has also affected public education in Azerbaijan, where scientific and technological progress, artificial intelligence and all their accompanying technologies urgently require the consolidation of joint efforts of specialists in various fields of public life. This applies entirely to the field of public education. For example, back at the turn of the 20th and 21st centuries, the main guideline was set for the development and improvement of academic activities, whereas in the current period of history, the state is mainly concerned about recruiting new personnel. We hasten to warn you right away: back in the days of the rule of the Soviet Empire, the slogan “Cadres decide everything” was proclaimed in Azerbaijan. It has maintained its power and effectiveness for many decades. However, the significant difference was that it was a personnel policy that was not based on high-tech achievements, which, on the contrary, has become a stable prerogative of modern times for public administration. Previously, technology for government managers was a goal in which the staff simply did not see themselves on the way to achieving it, but from now on the focus of the individual is focused on the process itself, personal professional growth, and not solely on its result. In other words, the state. A higher education manager exercises his powers and abilities in harmony with himself. This is worth a lot, as it gradually leads to a significant increase in human resources, as well as the requirements for it.

It is well known that the process in schools and universities under the auspices of the government has its own specific features. We are no longer talking about the division of functions by periods in schools (primary education and further by years). Therefore, all the attention in this article will be focused only on higher education. It is the task of our article to briefly show how it is managed by the state bodies of Azerbaijan.

First of all, we emphasize that the government is developing a general strategy for the scientific and technical development of higher education, mainly for the long term. The main goal of such a strategy is to achieve the competitiveness and independence of the state within the framework of statehood when creating and launching people with good knowledge of their business. So the effectiveness of this strategy primarily depends on the competent selection of high-class specialists. Following this path, the state basically reports on increasing the intellectual potential of its nation. Such a task is being set and solved on a global scale, but it is absolutely clear that it is being optimally implemented at the regional level. This means that it can and should be put on stream in Azerbaijan. Including in the field of higher education.

The purpose of this article is to analyze the current state of higher education governance in Azerbaijan, with a focus on developing a state strategy for the scientific and technological development of higher education. The article seeks to identify how the system of training specialists and developing personnel in higher education contributes to the country's competitiveness and independence, as well as how this contributes to strengthening the nation's intellectual potential.

The objectives of this article are:

1. To examine the impact of globalization on the higher education system, including management and training processes in Azerbaijan.
2. To analyze changes in the state personnel policy in higher education, taking into account scientific and technological progress and technology.
3. To evaluate current approaches to recruiting and training personnel in higher education and their compliance with the modern requirements of the global labor market.
4. To identify key features of the state strategy for scientific and technological development in the context of enhancing the country's intellectual potential.

Discussion and results. In their study, the authors (Renze, Don 2020) emphasize that similar approaches to internationalization are leading to a gradual convergence of higher education systems, their practices, and governance mechanisms. They propose that the spread of internationalization in higher education and the associated convergence processes be considered a key research problem. This approach allows them to move beyond the description of individual national cases and focus on broader structural and institutional changes. The authors focus on questions aimed at a deeper understanding of internationalization and higher education governance: To what extent can the assumptions, values, and practices underlying the internationalization of higher education be understood from the perspective of a global community? And to what extent do these processes reflect the formation of common norms, standards, and governance models shared by different countries and regions?

School years are the first step in life, a springboard into the social environment. Higher education is a tool in the implementation of the main tasks of scientific and technical progress, and the state is a regulator of conditions for its development and improvement. But advanced political scientists, politicians and cultural scientists look at this problem more broadly: namely, government officials are seriously considering the issues of ensuring the availability of the latest technical means for the masses, their nation, while adapting to modern risks of STP.

In turn, the university is number 4.0. it is already designed for the highest level of technological progress, which modern society can achieve only in the distant future. In other words, getting higher education in the project. Ideally, it should correspond to the spirit and letter of the highest technical order. For managers, its implementation in the practice of state building is objectively a very distant prospect.

Research on the internationalization of higher education (IHE) has historically and continues to be dominated by scholars from Europe and North America. This is due to the European origins of the concept of internationalization and the leading role of the United States as the primary destination for international academic mobility in the 20th century. As a result, Western countries control the bulk of knowledge production in this field. Although some Asian regions (China, Hong Kong, and Japan) are gradually increasing their contribution to IHE research, their share remains limited, and Southeast Asian countries are even less represented. This underscores the need to analyze the current state of IHE research in Southeast Asian countries to identify underresearched topics and stimulate the region's scholarly contribution (Alex, 2021).

Bulut-Shanin et al. (Bulut-Shanin, 2022) consider international mobility of students and academic staff as one of the most significant and visible dimensions of the internationalization of higher education. They emphasize that mobility programs not only facilitate cross-border exchange of knowledge and academic experience but also contribute to the harmonization of educational standards and institutional practices. In this context, the Erasmus+ program, developed and implemented based on the extensive experience of the European Union, is highlighted as a particularly influential instrument. The authors note that Turkey is among the countries that have substantially benefited from participation in Erasmus+, as the program has provided Turkish universities with structured opportunities for international cooperation, curriculum development, and institutional capacity building. As a result, Erasmus+ has become a key driving force accelerating the internationalization processes within Turkish higher education, strengthening global engagement, and enhancing the international visibility and competitiveness of Turkish universities. Such an object is one of the operational ways of interaction and interdependence of different participants of innovations in the field of modern technologies, which are primarily aimed at obtaining a positive result from the commercialization of knowledge. Obviously, the task set in this way, in our opinion, should most of all concern not so much professional university teachers (school teachers, mentors, classroom teachers, etc.) as government managers, since the standardization of knowledge is based on economics. The levers of business and the mechanisms of new technological tools being introduced into this production should be actively involved here.

We can, at our discretion, assume that modern scientists of various specialties – politicians, political scientists, managers and cultural scientists - are concerned not only about the above-mentioned aspect, but also about a related one, that is, for example, modifications of structures in business with the idea of uniting state organizations, on the one hand, and their extensions on the other hand. It is not for nothing that the author of the outlined theoretical position pointed out that the commercialization of knowledge in the field of higher education should be closely linked to the educational and government line called “lifelong learning”, which means lifelong learning.

It is important to emphasize that there should be no unhealthy competition between the four university models. And this, of course, is already part of the functions of local government. We are referring to the fact that universities will compete for the right to be the first to transfer knowledge to students. Here is a specific example related to higher education in Azerbaijan. It is well known that the universities of the republic are clearly and traditionally divided into technical and humanitarian ones. Meanwhile, the division by profile also takes place within the university faculties themselves. For example, the curriculum of the Slavic University in Baku is almost identical to the course of the Faculty of Philology of the Republican State University. But in fact, the same situation persists in some metropolitan universities, where Azerbaijani students with an appropriate technical background receive education.

Now let us imagine the following situation: for example, the BSU in these core disciplines enters into an open confrontation with the BSU only on the grounds that the first university is a kind of “oasis of Slavic culture”. The same competition with a negative connotation may exist between uni-

versities with an inhumane profile for the right to use the latest technical achievements more or less in their work. In our opinion, the pursuit of such installations on the ground is a disastrous path. First of all, as we understand it, for the development of national science, growth and nurturing of highly qualified personnel in the future. If competition between universities is acceptable, it is only to the extent that it does not interfere with work.

To illustrate, let us take the activities of the republican media or social networks. To a certain extent, they are able to reproduce not only the realities of public life, but also create an illusory picture of the accessibility of success, in particular, in the field of higher education. There is an element of public administration in this process, when, through the manifestation of the cult of false achievements in specialists from different universities, but with a single profile, they arouse a desire to specifically match something, look up to the best, compare, compare facts. As a result, the personal initiative of the professionals in their field is lost, they are overshadowed by the psychological “theory of achievements”.

According to a similar scheme, equalization between these four university models is unacceptable. The reverse process follows, when neither side achieves the desired success in education. In any case, there is activity with a minus sign. How can we avoid this negativity? The concepts from “1.0” to “4.0” should not be compared mechanically in an arithmetic sequence, but rather saturated with the latest technical means. In this case, the republican universities will openly resist the inert educational process, because it is the STP that will be at the service of public administration. And, of course, its employees have the responsible task of rationalizing the placement of technological accessories at universities.

First of all, the republic’s higher education sector should be provided with all possible technological innovations by the state management apparatus. Moreover, in both humanitarian and technical universities in Azerbaijan, preference should be given to project work, laboratory and practical classes. In the current period of history, for example, organizations such as business clubs, incubators, and parks with technical equipment are actively contributing to this. Further, for example, in universities, conducting conversations between teachers and students is one of the most important methods. However, the hours allocated to this form of work may not always meet the needs of students in practice. Organizations or enterprises of public administration today have the opportunity to set up specialized platforms on the ground for conducting conversations and communication.

Those universities that, regardless of digital graduation, have more or less connection with business, various scientific and research units and centers, with proper government management, firstly, can benefit from the result of scientific research. Secondly, the status of universities will increase, which means the automatic transition of 1.0. to the next digital grade. Thirdly, the scientific knowledge transmitted by universities of all four ranks does not become the property of private individuals. With good public administration, universities of the above-mentioned models should not turn into a “private shop”. On the contrary, they become public knowledge. Further, universities moving from one digital category to another are becoming competitive in the international market of services. When this process is regulated by government management bodies, it actually promotes the active growth of qualified personnel. This, of course, applies to both faculty and students. By the way, their IQ level is measured not only by current semester grades and exam scores, but also by presentations at conferences of various scales – from intra-university to international. They are usually organized not by the university authorities, but by government management bodies. In any case, it's clear that the second one overlaps the first one here. Their main functions include contractual principles, which are fixed in official documents and subsequently distributed to universities as orders or recommendations (Ahmadzadeh, 2000).

When government agencies, in turn, rely on the latest technological advances, the perspective of scientific and pedagogical research itself changes accordingly. Under the guidance of experienced

educators and government officials, they become interdisciplinary. The horizons of work are expanding. That is, equipped with the latest technology, universities (especially those designated with the letter 3.0 or 4.0.) most often turn out to be financially advantageous. Objectively speaking, the logic is elementary: the higher the status of the university and its technological equipment, the easier it is for the state to find alternative financial sources for the successful continuation of scientific research by both established teachers and capable students. Indeed, the state stands guard over public administration in this case, because it allows professionally competent regulation of the process of research activities combined with the outflow of personnel. The fact that they are moving from university to university due to increased rates is out of the question. This phenomenon, popularly referred to as staff turnover, is observed throughout the civilized world, including higher education in Azerbaijan. But government authorities in the modern period are certainly concerned about these negative phenomena and, ideally, ways to put a firm barrier to it (Sursock, Smidt, 2010).

Now let's think about it: these scientists write about higher education in relation to the Russian Federation. And they don't hide it, because the present provision is the purpose of their article. However, it is quite obvious to us that this situation is all the more applicable to higher education in our republic, as it fully meets both the realities of the day and multiculturalism as the most important strategy of the Government of Azerbaijan. It is no secret to anyone these days that, unlike other republics of the Transcaucasia and even many Western European countries, multiculturalism has become the norm of behavior in society and a way of life indicative of other countries of the world since the reign of the national leader of the Azerbaijani people, Heydar Aliyev.

This state of affairs could not but have a positive impact on higher education. Even the domestic sector of a number of universities in the republic is distinguished by its multinational student body. From here, a chain reaction makes itself felt: the selection of qualified teaching staff - multinational membership in student groups - the performance of independent work by the latter - management control. And such a chain, supported by the technical rise of recent years, allows us to recognize that all of the above in its links are indisputable components of success in scientific research at Azerbaijani universities. We are also convinced that the above-mentioned role of scientific research in the field is, of course, enhanced by the attention of government.

First of all, we state that the forms and methods of mutual action in the field of national higher education are interconnected with the strategy of the state. It, in turn, is successfully implemented thanks to scientific discoveries, on the one hand, and the technical support of universities of all models, on the other. It is clear that without additional cash injections, organizational procedures will be suspended. And already, of course, not only within our republic, but also on the scale of the entire modern civilized world. The essence of the matter lies in various ways of state support for universities through the transfer of necessary funds for scientific research. Moreover, it should be assumed that financial assistance should be classified according to a specific institution, since technical equipment is still unevenly distributed in educational institutions of our republic (De Wit, 2020).

We are referring to the fact that republican universities are funded in such a popular and effective form as grants. Government officials claim that grants have both individual and package forms. The first ones are intended for sole use (in some cases, the performer is a small group of researchers). The latter are used for large teams, more often units of a scientific, theoretical or practical nature. The support of national higher education through grants allows universities to increase their scientific and practical potential in the near future (On reforms carried out in the field of higher education within the framework of the Bologna process).

Conclusions. Another and no less useful form of active support of technical potential for universities nowadays is the organization of partnership by the state. By analogy with the receipt and distribution of grants, this form is also divided into private and public sectors. But in any case, this is a partnership mechanism in which three structures cooperate: the government, the business plan

and educational institutions. If technological innovations are put at the center here, then all the more so with the help of a skillful state. The factor of commercialization of higher education is increasing. We have already had the opportunity to talk about how important and essential this is in this article.

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