ТЕОРЕТИЧНІ ТА МЕТОДОЛОГІЧНІ ЗАСАДИ ПРОФЕСІЙНОЇ ОСВІТИ

UDC 001.895; 378.147.88; 004.051; (479.24) DOI: 10.32342/2522-4115-2023-2-26-1

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INNOVATIVE TRANSFORMATIONS IN HIGHER EDUCATION SYSTEM OF AZERBAIJAN IN 2005/06 – 2022/23 ACADEMIC YEARS

Innovative transformations taking place in the educational sector of Azerbaijan have been causing legal, organizational, economic, social, technical and technological problems that need to be solved. This article also examines innovative didactic methods, and their advantages are compared with the possibilities of information technology in the educational process.

The **purpose of the article** is to investigate various technical and economic indicators of higher education in Azerbaijan and to study the innovative transformations in the higher education system of Azerbaijan during the 2005/06 - 2022/23 academic years.

The conducted PEST analysis of political, economic, social and technological factors demonstrated the presence of both positive and negative evaluations of the use of ICT in the Azerbaijanian higher education system. The SWOT analysis identified the strengths, weaknesses, opportunities and threats of innovative educational processes in the universities of Azerbaijan. The basis for the analysis was the statistical data of the State Statistics Committee of Azerbaijan, electronic pages and posts of the AGORA and Edu.az organizations on Facebook. To identify the role of the higher education system in the national economy of Azerbaijan and analyse the current situation, the author used data for 2005/06 – 2022/23.

As findings of the conducted research, it has been concluded that Azerbaijan has not yet created its own model of higher education development and this problem needs a scientifically grounded solution. Based on the research results, the author has recommended the following: creating joint information resources for higher education institutions, which will contribute to the development of educational technologies and the introduction of electronic learning; building up online interaction between students and the professional community; more widely introducing ICT for the organization of interaction in social networks, establishment of social contacts in distance learning, working with electronic sources; forming interuniversity laboratories as centres of collective activity, which will ensure the elaboration of academic cooperation; constantly updating and improving educational programs, plans and study content; establishing a system for assessing knowledge and testing students' competencies, forming a unified national system for assessing knowledge; creating an information base of specialists who have obtained degrees abroad with the view of making teams for the implementation of scientific projects of an international level; developing scientific and technical cooperation in the direction of elaboration of joint training programs with post-Soviet countries.

Keywords: higher education; higher education system of Azerbaijan; socio-economic indicators of higher education in Azerbaijan; organizational, legal, socio-economic, technical and technological transformations in the higher education system of Azerbaijan; descriptive statistics.

Абасова Саміра Гусейн кізі. Інноваційні перетворення в системі вищої освіти Азербайджану у 2005/06 – 2022/23 навчальних роках

Інноваційні перетворення, що відбуваються в освітній галузі Азербайджану, спричиняють правові, організаційні, економічні, соціальні й техніко-технологічні проблеми, які потребують вирішення. У цій статті також розглядаються інноваційні методи навчання, а їхні переваги порівнюються з можливостями інформаційних технологій у освітньому процесі.

Метою статті є дослідженні різноманітних техніко-економічних показників вищої освіти Азербайджану, вивчення інноваційних перетворень у системі вищої освіти Азербайджану в 2005/06 — 2022/23 навчальних роках.

Проведений PEST-аналіз політичних, економічних, соціальних і технологічних факторів продемонстрував наявність як позитивної, так і негативної оцінки використання ІКТ у системі вищої освіти Азербайджану. SWOT-аналіз виокремив сильні, слабкі сторони, можливості та загрози інноваційних освітніх процесів в університетах Азербайджану. Підґрунтям для аналізу слугували статистичні дані Державного комітету статистики Азербайджану, електронні сторінки та сторінки організацій AGORA та Edu.az у Facebook. Для виявлення ролі системи вищої освіти в національній економіці Азербайджану та аналізу сучасної ситуації автором були використані дані за 2005/06 — 2022/23 н. р.

Унаслідок проведеного дослідження зроблено висновок про те, що в Азербайджані дотепер не створено власної моделі розвитку вищої освіти, і ця проблема потребує науково обґрунтованого вирішення. За результатами дослідження автором рекомендовано: створити спільні інформаційні ресурси для закладів вищої освіти, що сприятиме розвитку освітніх технологій та запровадженню електронного навчання; розвинути онлайн взаємодію між студентами та професійною спільнотою; ширше запроваджувати ІКТ задля організації взаємодії в соціальних мережах, встановлення соціальних контактів у дистанційному навчанні, роботі з електронними джерелами; формувати міжуніверситетські лабораторії як центри колективного користування, що забезпечить розвиток академічної співпраці; постійно оновлювати та вдосконалювати навчальні програми, плани й навчальний контент; налагодити систему оцінювання знань і перевірки компетентностей студентів; сформувати єдину національну систему оцінювання знань; створити інформаційну базу фахівців, які здобули освіту за кордоном, на цій основі формувати команди для реалізації наукових проєктів міжнародного рівня; розвивати науково-технічне співробітництво в напрямі розробки спільних програм навчання з пострадянськими країнами.

Ключові слова: вища освіта; система вищої освіти Азербайджану; соціально-економічні показники вищої освіти Азербайджану; організаційні, правові, соціально-економічні, техніко-технологічні перетворення в системі вищої освіти Азербайджану; описові статистики.

Statement of the problem. Innovations in the field of higher education can't be imagined without the creation of an innovative university system. The innovation process covers all the levels of management, from state innovation policy to the introduction of innovation directly into the educational process. Consequently, the main task of innovative transformations in the field of higher education is the creation of an effective mechanism for training young specialists for the economy of a particular country.

A striking example of the introduction of innovation is the computerization of education, the use of new information technologies, and the introduction of new forms of education.

The introduction of innovative elements into the field of higher education helps university graduates develop their professionalism and integrate into the emerging information society. In this regard, innovative transformations manifest themselves not only in political, legal, organizational, socio-economic, technical and technological aspects, but also in its qualitative component – in the pedagogical sphere.

Presentation of the main study material.

1. Political, legal, organizational, socio-economic, technical and technological changes in the higher education system of Azerbaijan.

An expert in the field of education, MR. K. Asadov, in an interview with an Azedu correspondent, noted that in order to strengthen the country's competitiveness, it is necessary to have the share of specialists with higher education accounting for 30% of the active working population. Azerbaijan currently ranks last in terms of the number of students per 10 thousand citizens of the country. According to statistics at the beginning of 2022, the active working population in Azerbaijan amounted to 5.3 million people. Specialists with higher education make up 16.6% ["Azərbaycanda ali təhsilli insanların sayı çox azdır", 2023].

Let us consider external factors influencing the quality of higher education in Azerbaijan (Table 1). As can be seen from Table 1, bilateral state programs for training specialists in bache-

lor's and master's degrees have their own positive trends: the Azerbaijan national economy prepares specialists for finance, computer science, energy, transport and logistics, ecology, architecture and design, education management, advanced chemical engineering, data science and analytics, public medicine, aviation and space, agriculture and other fields.

Innovative transformations in higher education system began with an increase in the number of students in the following areas (Table 2): training of specialists in the field of agriculture (agrochemistry, bioengineering, automation of dairy production, etc.) and in the field of health and medical care (cosmetology, genetic engineering, gynecology, oncology, dermatology, etc.). The number of students in the following areas of knowledge is also growing – social management, social insurance, municipal management, financial insurance, banking, etc. In recent years, interest in the study of folk music (national folk popular music) and mugham (Azerbaijanian philosophy of music and singing) has been increasing as well.

Table 1
External factors influencing the higher education system of Azerbaijan (POEST analysis)

Positive aspects	Negative aspects					
Political and lega	al factors					
 Availability of government programs for training specialists for the country's economy; bilateral agreements on training Azerbaijan students in Turkey and the UK; state support for higher education programs in Germany and Korea. 	 Many Azerbaijan students do not return home or go abroad after 3-4 years; many Azerbaijan students continue their studies in PhD programs and subsequently lose contact with the country. 					
Organisational	factors					
 The emergence of new specialties – bioengineering, genetics, banking, etc.; expanding the range of specialties in the field of engineering and technology, information technology. 	 Graduation of only 100 specialists per year, including lawyers and doctors; graduation of more than 5,000 managers and economists every year. 					
Economic fa	ctors					
 The increased number of students from the CIS countries, except Kyrgyzstan and Turkmenistan; the increased number of Azerbaijan students studying at universities in Hungary, Romania and Latvia under the state program; the number of foreign students studying at Azerbaijani universities, which is 5 times higher than the number of Azerbaijanian students abroad. 	 The decreased number of Azerbaijan students studying at universities in former USSR countries; the number of master's students from Azerbaijan studying abroad by state program, which is approximately 5 times higher than the number of bachelors. 					
Social factors						
 Over the past 24 years, the increased number of specialists in the field of social sphere; an increased interest in the study of folk music and mugham (the philosophy of classical music and singing); preparation of specialists in the field of art: cinematography, film theory, animation, etc. 	 Republican universities, which are mainly located on the Absheron Peninsula (more than 80%); the opportunity to obtain an education loan for students in the last 2-3 years; the number of female bachelors from Azerbaijan studying abroad, which is approximately 2 times less than of males. 					
Technical and techno	r ~					
 The opportunity to develop information technologies, which in turn has a positive effect on the spread of distance learning, as a result of the launch of satellites; providing all universities with technical equipment, PCs and high-speed Internet. 	 The lost interactive tet-a-tet connection between a teacher and a student; changes in the quality of teaching from socio- psychological teaching methods to technical and technological methods. 					

Source: [С.Г. Абасова, 2014; S.H. Abasova, S.O. Shamkhalova, 2019; "Azərbaycan Respublikası Prezidenti", 2015]

And consequently, the number of not only domestic, but also foreign students in this area has increased. Students continued to study the English, French, German and Eastern languages (Persian and Arabic). The number of students has also increased in the sphere

ISSN 2522-4115 (print) ISSN 2522-9133 (online)

of studying Slavic languages (Bulgarian, Polish, Slovenian, Czech), and the languages of Far East (Chinese, Korean and Japanese) (Table 2).

Table 2
Number of students (bachelors and masters) in state and non-state higher educational institutions by groups of specialties

Number of students – total, persons	2010/11	2015/16	2020/21	2021/22	2022/23	In 2022/23 to 2010/11, %
total, persons	140241	161234	198707	212173	222809	158.8
	Incl	uding groups	of specialtie.	s:		
education	16976	40863	47733	47304	47919	282.3
humanitarian and social sciences	6945	19589	25669	27387	29493	424.7
culture and art	1951	4840	6688	7124	7425	380.6
economics and management	12976	36439	41940	43378	44505	342.9
natural sciences	2654	8423	9223	10163	10646	401.1
technical and technological sciences	12876	35867	42434	46603	49696	385.9
agriculture	879	1997	4734	5457	6013	684.1
health, welfare and services	4605	13216	20286	24757	27112	588.8

Source: ["Education, science and culture in Azerbaijan", 2023, p. 153]

There has been an increase in the number of foreign students (bachelors and masters) over the past 12 academic years (Table 3).

Table 3

Number of foreign citizens (CIS and other countries) educated at bachelor and master degrees in state and non-state higher educational institutions (persons)

Total	2005/06	2010/11	2015/16	2022/21	2021/22	2022/23	In 2022/23 to 2010/11
	3073	4723	3425	5256	5765	6223	131.76
			Inclu	ding:			
From CIS countries	276	413	606	718	705	705	170.7
Belarus	5	-	7	9	22	11	220.0*
Kazakhstan	23	24	48	42	55	72	330.0
Kyrgyzstan	4	21	6	15	14	13	61.9
Moldova	11	3	2	5	8	5	166.7
Uzbekistan	5	8	26	33	24	20	250.0
Russia	169	218	274	425	475	447	205.0
Tajikistan	-	2	3	34	8	39	1950.0
Turkmenistan	53	124	204	131	74	59	47.6
Ukraine	6	13	36	24	25	39	300.0
From other countries	2797	4310	2819	4538	5060	5518	128.0

^{*}To 2005/06

Source: ["Education, science and culture in Azerbaijan", 2023, p. 179]

The number of students from Tajikistan has grown almost 2000 times, and the increase in the number of students from Ukraine is mainly due to the military situation – many students, indigenous residents of Azerbaijan and some Ukrainian students, are now continuing their education in Azerbaijan. Students from Kazakhstan and Uzbekistan are mainly grandchildren and great-grandchildren of Azerbaijanian repatriates in the 1930s, who receive education in their historical homeland.

Table 4
Number of foreign citizens (other countries) educated at bachelor and master degrees in state and non-state higher educational universities (persons)

	2005/06	2010/11	2015/16	2022/21	2021/22	2022/23	In 2022/23 to 2010/11, %
From other countries	2797	4310	2819	4538	5060	5518	128.0
USA	2	4	2	5	9	8	200.0
Germany	1	5	3	2	3	1	20.0
Bangladesh	_	2	1	37	31	14	700.0
United Kingdom	1	1	_	1	3	3	300.0
Chad	_	-	1	-	4	4	
China	107	130	111	54	79	80	61.5
Afghanistan	1	7	16	31	44	54	771.4
Palestine	_	8	10	2	23	18	225.0
Algeria	_	_	3	1	2	1	
Philippines	_	1	_	2	1	3	300.0
France	_	_	_	2	2	1	
India	18	69	8	20	116	190	275.7
Jordan	3	13	25	1	29	33	253.8
Iraq	8	95	117	59	291	205	215.8
Iran	237	845	251	1191	1038	1116	132.1
Israel	2	9	6	9	7	5	55.6
Indonesia	_	_	3	9	5	5	
Canada	_	_	1	2	2	2	
Colombia	_	_	1	3	2	1	
Cameroon	_	_	1	4	7	3	
(South) Korea	3	15	6	10	7	7	46.7
Gambia	_	_	3	1	2	7	
Ghana	_	_	_	5	6	11	
Lebanon	_	2	1	12	5	4	
Libya	_	_	_	1	3	2	
Liberia	_	_	_	2	3	3	
Mongolia	_	_	_	2	2	2	
Mexico	1	2	_	1	3	3	300.0
Egypt	3	1	4	14	16	25	2500.0
Mozambique	_	_	1	1	4	4	
Nigeria	15	20	31	88	91	94	470.0
Pakistan	25	25	24	77	87	116	464.0
Saudi Arabia	1	_	_	25	3	5	
Sudan	9	12	9	6	14	21	175.0
Syria	11	17	28	13	134	155	911.7
Sri Lanka	_	-	_	12	10	7	
Turkey	2094	2880	1817	2270	2433	2846	98.8
Yemen	8	8	6	17	22	24	300.0

Source: ["Education, science and culture in Azerbaijan", 2023, p. 179]

As can be seen from Table 4, the number of students from Turkey is the highest. Students from Turkey studied mainly together with Azerbaijan students at the Azerbaijan Institute of National Economy Management under Azerbaijan Cabinet of Ministers (1992-2001). Then this institute was transferred as the Faculty of Business Administration to Azerbaijan State Economic University – UNEC (2001) [C.Г. Абасова, 2014]. Turkish students have also been studying at Caucasus University since 1996 and studying not only economic courses, but also engineering ones. Students from African, Southeast and Arab countries mainly study at Azerbaijan Oil Academy (formerly AzINEFTECHIM), students from Iran and Iraq receive technical and technological education. Students from the USA and Europe mainly study at art universities.

 ${\it Table~5}$ Number of Azerbaijan citizens educated at universities of former USSR countries by state line

	2005/06	2010/11	2015/16	2020/21	2021/22	2022/23	In 2022/23 to 2010/11, %
Total including:	1182	2055	2998	975	717	1004	48.9
In CIS countries	328	673	320	230	213	193	28.7
Belarus	_	105	36	1	_	_	
Kazakhstan	_	_	_	5	_	_	
Latvia	_	_	1	15	8	11	11 times*
Russia	245	507	247	223	213	193	38.1
Ukraine	83	61	37	1	_	_	
In other countries	854	1382	2678	745	504	811	58.7

*To 2015/16

Source: ["Education, science and culture in Azerbaijan", 2023, p. 182]

As can be seen from Table 5, the number of Azerbaijan students receiving higher education abroad has noticeably decreased over the past 12 years. Azerbaijan students have recently received degrees in five countries of former USSR: Belarus, Kazakhstan, Latvia, Russia and Ukraine.

Table 6 illustrates the number of Azerbaijan students studying in other foreign countries by state program for higher education. As can be seen from Table 6, despite the pandemic, the number of students studying in China increased by 157.1% in the 2022/23 academic year compared to the 2010/11 academic year. There is an increase in Azerbaijan students in Hungary and Romania. Despite the numerical advantage of Azerbaijan students in Turkey compared to other countries, there has been a general downward trend in number of students in this country in the 2022/23 academic year compared to the 2010/11 academic year (by 54.8%).

Table 6
Number of Azerbaijan citizens educated at universities of foreign countries by state line

	2005/06	2010/11	2015/16	2020/21	2021/22	2022/23	In 2022/23 to 2010/11, %
Total	1182	2055	2998	975	717	1004	48.9
In other countries, including:	854	1382	2678	745	504	811	58.7
USA	_	25	57	3	4	3	12.0
Germany	_	111	316	8	3	_	
United Kingdom	_	136	621	12	12	1	0.7
China	16	28	39	51	20	72	257.1
Spain	_	1	19	1	1	1	
Korea	_	34	14	3	3	5	14.7
Hungary	_	_	12	370	145	327	2725.0*
Romania	4	_	1	7	3	10	1000.0*
Turkey	751	839	907	260	300	379	45.2

*To 2015/16

Source: ["Education, science and culture in Azerbaijan", 2023, p. 182-183]

It should be noted that according to the state program "On Education of Azerbaijanian Youth People in Foreign Country Universities in 2022-2026" ["Azərbaycan Respublikası Prezidenti", 2022] Azerbaijan students (381 persons) entered 81 universities in 17 countries in the 2023/24 academic year ["Agora – analytic collective", 2023]. 82% of students will receive master's degrees from universities in the UK, Turkey, the USA, Italy, Germany, Australia, the Netherlands, Singapore and other countries. The most popular specialties include information technology for bachelors, and finance and economics for masters.

As for innovations in the field of teaching, it should be noted that today interactive forms of teaching are actively used with ICT technologies [S.H. Abasova, 2023]. If the teaching method actively uses interpersonal communication and dialogue between the teacher and students,

ISSN 2522-9133 (online)

then the learning process by ICT organizes the education remotely, despite the distance. Unfortunately, in the conditions of distance education, it is not possible to achieve some results with direct contact between the teacher and students. The quality of tet-a-tet teaching contributes to [С.Г. Абасова, 2014; S.H. Abasova, S.O. Shamkhalova, 2019]:

- gaining experience of working in a team and realizing leadership qualities in a social group;
- increasing the social and business activity of students:
- developing creativity in problem solving;
- stimulating the development of intellectual abilities;
- forming a respectful attitude towards different participants' points of view.

But it should be noted that smart technologies are able to instantly respond to ongoing changes in the context of globalization. To implement education using smart technologies, you will have:

- technological equipment of universities with modern instruments and information technologies;
- a completely new social approach between the teacher and students, ensuring a high level of educational development;
- a new economic approach that involves the effective activities of specialists in various fields in the future.
- 2. Assessment of innovative transformations in Azerbaijan higher education system Innovative transformations cover not only technical and technological, economic, organizational, legal, and social problems that need to be solved, but also extend to qualitative components [C.F. Aбacoba, 2014] – innovative teaching methods, psychological teaching techniques and management of social groups (Table 7).

Changes in socio-psychological techniques in the educational system

Table 7

Since 1990	Since 2000	Since 2020
Transition to the tet-a-tet system using the newest methods of social psychology	training courses with the help of multimedia personalized	Active use of information technology and the introduction of new psychological techniques in case of lack of eye contact

Source: [С.Г. Абасова, 2014; S.H. Abasova, S.O. Shamkhalova, 2019]

Table 8

SWOT analysis of innovative training at higher educational institutions of Azerbaijan

Strengths	Weaknesses
 Using new socio-psychological teaching 	 The use of information and communication technologies,
techniques in the course, the trainer can adjust	as well as the possibilities of network methods of distance
the topic of the subject in accordance with	learning depend not only on organizational tools, but also
the interests of the students and their level of	on the technical capabilities of communications, Internet
knowledge;	speed, and the availability of electric power;
– using distance learning programs by information	– it develops students' creative approaches to identifying
technology systems, students and trainees can	details, as well as solving proposed situations;
chat without the lecturer, which strengthens	– with the development of information technology, more
relationships and mutual assistance;	and more students are using phones and smartphones,
– students gradually turn into a subject and decide	and they must use their gadgets in the learning process.
for themselves what courses and when they can	
study and when they can pass the exam.	
Opportunities	Threats
 When using distance learning programs, a 	 Only a lecturer or a trainer organizes the procedure for
lecturer can monitor the students' questions in the	contacting the student during consultations or through
general chat and adjust the topic in accordance	communication via the Internet;
with the interests of the students;	– it is difficult to maintain constant attention and interest
 programs are being created for providing 	of students in the analyzed situation;
educational services (bachelor's and master's	– not every lecturer or trainer knows how to use non-
training programs) and technologies (distance	standard methods of analysis;
learning programs, interactive business games	– there is no unification of educational programs in various
using information technology etc.);	courses, which creates certain difficulties for students,
– with the expansion of the circle of consumers	especially for students at private universities. These courses
of educational services, encouragement has been	mainly include new ones in economics, sociology, psychology,
used as a method of active self-realization among	information technology and philosophy. There are no uniform
students.	textbooks, especially in the Azerbaijan language.

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Taking into consideration the above-mentioned, the author suggests evaluating innovative teaching methods using SWOT analysis (Table 8).

The problems of Azerbaijan higher education include the following:

- Many teachers who are over 45 years old do not update the curriculum, and they have been working with old training programs for more than 10 years. Lectures contain old topics; the methodological basis of teaching is weak.
- There are no teaching methods using students' mobile gadgets. If it is impossible to ban gadgets during the learning process, then they can be actively used in the educational process. The introduction of innovative technologies helps the student navigate the world of diverse information.
 - Not all teachers over 45 years old can successfully use innovative teaching methods.
- Students' sense of responsibility has been deteriorating over the years. It is necessary for lecturers, mentors and trainers to remind students several times about the deadlines for submitting the necessary documents, chapters of theses and dissertations.

Information technologies in education have qualitatively new opportunities for electronic, distance and mobile learning and are used in the following areas:

- solving educational problems;
- organization of independent research activities of students;
- implementation of the educational process in various conditions (business trips, pandemic, natural disasters, etc.).

Conclusion

- 1. Unfortunately, Azerbaijan has not created its own model for higher education development yet. It is necessary to create and form a national model of higher education.
- 2. The principle "the student will choose knowledge resources in order to adapt to new conditions and be able to find and correctly use various options for solving life problems" is gradually being replaced by the principle of "independent choice of solutions from numerous alternatives".
- 3. The creation of joint information resources contributes to development of educational technologies and e-learning introduction. It develops online interaction between students and the professional community.
- 4. The use of ICT promotes interaction in social networks, establishing social contacts in distance learning, and working with electronic sources.
- 5. The formation of a high level of higher education has been based not only on a high level of higher education by state support.
- 6. The development of cooperation and interaction between universities is possible through the formation of interuniversity laboratories as centers for the collective use.
- 7. It is necessary to constantly update and improve training programs, business games, programs etc.
- 8. It is critical to adjust the system of knowledge assessment and competency testing, and to form a unified knowledge assessment system;
- 9. The author proposes to create an information base about specialists who have been educated abroad. It is necessary to form teams to create potential content and involve them as supervisors for masters in order to raise scientific research to the world level.
- 10. It is vital to develop scientific and technical cooperation in development of joint training programs with CIS countries.

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The number of people with higher education in Azerbaijan is very small. Education expert Kamran Asadov expressed this opinion in his statement to AzEdu.az. (2023). Available at: https://azedu.az/az/news/75136-azerbaycanda-ali-tehsillilerin-sayi-cox-azdir (accessed 05 November 2023). (In Azerbaijanian).

2023. № 2 (26)

INNOVATIVE TRANSFORMATIONS IN HIGHER EDUCATION SYSTEM OF AZERBAIJAN IN 2005/06 – 2022/23 ACADEMIC YEARS

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Keywords: higher education; higher education system of Azerbaijan; socio-economic indicators of higher education in Azerbaijan; organizational, legal, socio-economic, technical and technological transformations in the higher education system of Azerbaijan; descriptive statistics.

Innovative transformations taking place in the educational sector of Azerbaijan cause legal, organizational, economic, social, technical and technological problems that need to be solved. This article also examines innovative didactic methods, and their advantages are compared with the possibilities of information technology in the educational process.

The purpose of the article is to investigate various technical and economic indicators of higher education in Azerbaijan and to study the innovative transformations in the higher education system of Azerbaijan during the 2005/06 - 2022/23 academic years.

The **objectives of the research** are as follows: 1) the study of legal, organizational, socio-economic and technological aspects of higher education in Azerbaijan; 2) expert evaluation of innovative policy of higher education in Azerbaijan.

The research **methods** are the analysis of statistical data, their grouping and comparison, and expert assessment of external (PEST analysis) and internal factors (SWOT analysis) that influence innovative transformations in the higher education system of Azerbaijan throughout 2005/06 – 2022/23.

The conducted PEST analysis of political, economic, social and technological factors demonstrated the presence of both positive and negative evaluations of the use of ICT in the Azerbaijanian higher education system. The SWOT analysis identified the strengths, weaknesses, opportunities and threats of innovative educational processes in the universities of Azerbaijan. The basis for the analysis was the statistical data of the State Statistics Committee of Azerbaijan, electronic pages and posts of the AGORA and Edu.az organizations on Facebook. To identify the role of the higher education system in the national economy of Azerbaijan and analyse the current situation, the author used data for 2005/06 – 2022/23.

As findings of the conducted research, it has been concluded that Azerbaijan has not created its own model of higher education development yet, and this problem needs a scientifically grounded solution. The problems of Azerbaijan's higher education have been described. These are as follows: many teachers who are over 45 years old cannot successfully use innovative teaching methods, do not update the curriculum, and they have been working with old training programs for more than 10 years; there are no teaching methods using students' mobile gadgets; students' responsibility has been deteriorating over the years, so lecturers, mentors and trainers must remind students several times about the deadlines for submitting the necessary documents, chapters of theses and dissertations etc.

Taking into consideration the research findings, the author has recommended the following: creating joint information resources for higher educational institutions, which will contribute to the development of educational technologies and the introduction of electronic learning; building up online interaction between students and the professional community; more widely introducing ICT for the organization of interaction in social networks, establishment of social contacts in distance learning, working with electronic sources; forming interuniversity laboratories as centres of collective activity, which will ensure the elaboration of academic cooperation; constantly updating and improving educational programs, plans and study content; establishing a system for assessing knowledge and testing students' competencies, forming a unified national system for assessing knowledge; creating an information base of specialists who have obtained degrees abroad in order to make teams for the implementation of scientific projects of an international level; developing scientific and technical cooperation in the direction of elaboration of joint training programs with post-Soviet countries.

Одержано 29.09.2023.