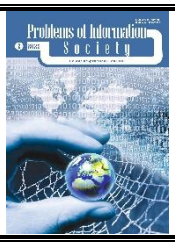

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Formation features of the intellectual potential

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ABSTRACT

In the context of the recent revolutionary technological changes observed in the world economy, international competition has increased even more. To be ready for the increasing competition in the world in the coming years, the priority task of each country is to form the intellectual potential of the population, which is an integral part of its human capital. To this end, education in accordance with the requirements of the 21st century, a creative and innovative society that promotes innovations, and a healthy lifestyle of citizens are the main conditions. This article focuses on the role of intellectual potential for the sustainable development of society and the national economy and highlights the issues of its formation. Cross-country comparisons are fulfilled according to the education level index of the population, the number of students in higher education institutions per 10,000 people, the number of educational institutions and those studying in them, the weight of the older generation of the population with higher education and who are involved in continuing education. The article collects and systematizes statistical data that play a source role in the subsequent analysis and assessment of the processes of formation of the country's intellectual potential. It also examines the state of education and scientific potential characterizing the intellectual potential of society, provided important results of fundamental and applied research conducted in scientific organizations and institutions of Azerbaijan, and some indicators used in assessing the activities of scientific organizations. It mentions the necessity of improving the most important components of the intellectual potential of society, such as education and scientific potential.

1. Introduction

Today, the main source of economic development is intellectual potential (IP), which depends on the quality of labor resources. Because it is human capital that determines innovation opportunities. In response to the increase in the volume of high-tech production in modern times, the importance of the intellectual component of human capital has become relevant, and interest in the formation, development and assessment of the intellectual potential of society has increased (Zhilenkova et al., 2018).

Many studies review IP as a component of human capital, which includes the creative and productive working ability of a person, and determines the efficiency and competitiveness of the national economy. In this regard, creating conditions for the reproduction of IP becomes the main tendency of macroeconomic policy, and its importance is even considered one of the leading areas compared to other types of potential. IP has a direct impact on the economic development of the country. The basis of IP is the knowledge and cultural level that allows for a radical change in economic efficiency and competitiveness (Zhilenkova et al., 2018; Gasimova et al., 2024; Sultanbaeva et al., 2013; Ismayilov et al., 2018; Hajirahimova et al., 2023; Khashimov, 2014).

The potential of a state is determined by its natural, industrial, economic and cultural and human resources, and the effective use of these resources is the most important object of state regulation. It should be noted that human resources, being the main production factor, competitiveness of the state and economic growth, act as a key feature of the development of modern society. The transition to an innovative digital economy requires a change in the approach to human resources. Therefore, *the theory of human capital*, one of the main theories used in the assessment of IP, has begun to be studied in more depth. According to this theory, knowledge and skills directly constituting the essence of a person's intellectual characteristics bring income (Gasimova et al., 2024; Sultanbaeva et al., 2013).

Currently, human capital in all countries determines the pace of scientific and technological progress and economic development. In the modern era, the production of competitive goods on the world market and ensuring sustainable economic growth are achieved mainly through the purposeful development of human capital. For an innovative-digital economy, intellectual assets, rather than the material ones, are of the greatest value, and therefore, the development of human capital is one of the most important conditions determining the relevance of this research for Azerbaijan. As an integral part of human capital, the country's intellectual capital is shaped in the scientific-technical and higher education spheres. Consequently, in recent years, special attention has been paid to the development of education and science in our country, and one of the priorities of the state policy is the further development of the country's human capital and strengthening of IP (McGuirk et al., 2015; Gennaioli et al., 2013).

Hence, the formation of intellectual human capital is one of the main goals in the state documents representing the development strategy of the rapidly modernizing Republic of Azerbaijan for the next decade. Thus, the "State Strategy for the Development of Education in the Republic of Azerbaijan" adopted in 2013 specified that there is a need to take new steps in the education system in the Republic of Azerbaijan to respond to the challenges of human capital development and to bring the quality indicators of overall education into line with European standards. In order to improve the quality of education, it is necessary to restructure the education management system, develop human resources in this area, and increase the prestige of the teaching profession. Moreover, new long-term challenges for the development of human capital in Azerbaijan necessitate the implementation of important measures in financing the education sector (Decrees of the President of the Republic of Azerbaijan, 2013).

To this end, access to higher education has been expanded in the country in recent years, higher education institutions have been adapted to the requirements of the labor market, the management model in higher education institutions has been improved, and work has been implemented to increase the rating of higher education institutions and strengthen their role in society as education-research-innovation centers (Muradov, 2021).

In this context, the "Azerbaijan 2030: National Priorities for Socio-Economic Development" approved by the Decree of the President of the Republic of Azerbaijan dated February 2, 2021 states that "in order to be ready for increasing competition in the world in the coming years, the priority of each country is to form highly competitive human capital. Thus, modern education, favorable conditions that encourage innovation and people's health are the main conditions. For the successful implementation of this priority, the following three goals shall be achieved: education in accordance with the requirements of the 21st century, a creative and innovative society, and a healthy lifestyle of citizens. It is through education that the share of human capital in national wealth should be continuously increased, and special importance should be given to "lifelong education" based on the harmonious development of competence, social habits, and skills in the strategic period. In order to create human capital with high professional skills through strong education, the competitiveness of higher education institutions at the international level in terms of quality should be ensured. Furthermore, the education system should focus on instilling digital skills in the young generation from school age, in order to prepare them for the future era of digital technologies, and to create new, fundamentally different from the current skills, specialties and professions. People's opportunities to receive high-quality education should be expanded, personnel training should be adapted to the requirements of the labor market, and specialists in accordance with international certificates should be trained within the framework of measures to develop the vocational training system (Decrees of the President of the Republic of Azerbaijan, 2021).

2. Related work

(Zhilenkova et al., 2018) presents the monitoring results of the formation processes of intellectual capital of society. Cross-country comparisons are implemented regarding the education level index of the population, the number of students, the specific weight of the adult population with higher education and the involvement of the population in ongoing education, and the calculation of the integral indicator of intellectual potential. The authors emphasize the need to improve the most important components of the intellectual potential of society, such as education and scientific potential.

(Sultanbaeva, 2013) analyzes and assesses the ways of forming the national potential of Kazakhstan. The article considers the creation of a knowledge society in order to increase the intellectual potential of Kazakhstan, as the prerequisites contributing to this, increasing the scientific and innovative potential, increasing the population's access to education, and increasing citizens' access to information equality.

(Khashimov, 2014) discusses the role and importance of the human factor in the development of society, increasing the volume of science: the issues related to the increase in capitalization of intensive production and knowledge, it also presents the structure and indicators of intellectual potential.

(Kakhovska, et al., 2020) presents the problem of using intellectual capital of economic entities on the basis of intellectual resources to form intellectual potential, increase its efficiency and impact on the development of the national economy. It analyzes the development of intellectual resources and the formation of intellectual potential of economic entities on this basis.

(Imaykin, 2007) is devoted to the urgent problem of intellectual capital management. The author emphasizes the fundamental importance of education in the formation of intellectual capital. The article analyzes the state of education, identifies the main problems and proposes solutions to them.

Human capital plays an important role in the field of economic growth. The development of human capital and a knowledge-based economy is fundamental for developing countries. The authors use a new hybrid AHP-TOPSIS method to rank human capital indicators by a normalized decision matrix of each organization's activities (Abdul Kadar Muhammad Masum et al., 2019).

Problem statement. This article comprehensively analyzes the formation features of the intellectual potential in Azerbaijan. Some indicators used in the field of education and scientific potential in the assessment of the processes of IP formation are explored and statistical data are analyzed. Therefore, it is important and relevant to examine the scientific-theoretical problems of education and scientific potential, which are considered the main elements of IP, and to study them as an object of scientific research.

3. Materials and methods

3.1. Research method

In order to examine the characteristics of the formation of IP, this study implements the analyses based on statistical materials, such as the population education level index, the number of students per 10,000 population in higher education institutions, the number of educational institutions and those studying in them, the share of the older generation with higher education and who are involved in continuing education, and other indicators; it also studies the state of education and scientific potential characterizing the intellectual potential of society, and presents important results of fundamental and applied research conducted in scientific organizations and institutions of Azerbaijan and some indicators used in assessing the activities of scientific organizations.

The research uses materials from the State Statistical Committee of Azerbaijan (SSC), the Ministry of Science and Education of the Republic of Azerbaijan, reports of ANAS, and state documents as the main sources. In addition, it refers to scientific theoretical approaches and published articles on the formation and assessment of intellectual potential in the world.

3.2. Problem solution

This work collects data from the materials of the SSC, reports of ANAS, education indices of countries and Human Development Reports. Based on the collected data, tables are generated for the main components of the IP, such as the education level index of the population, the number of students per 10,000 population in higher education institutions, the number of educational institutions and those studying in them, the educational level and distribution of the employed population by age groups, the share of the older generation with higher education and involved in continuing education, the distribution of state and non-state higher education

institutions, research specialists by age groups and gender, and personnel potential by age limits in ANAS and other scientific organizations of the republic. Based on these tables, indicators are compared by year.

Educational and scientific potential is becoming an increasingly powerful driving force for social and economic development, increasing the efficiency and competitiveness of the economy at the modern stage of society's development. It should be noted that at each historical stage, the progress of society directly depended on the development of education and the correct assessment of its importance. At all times, the needs of society have accelerated the development of education, and scientific and technological progress has set more complex tasks for the education system to solve. In the modern era, where globalization is widespread, competition in the socio-economic activities of the information society is increasing, and natural resources are decreasing over time, the role of education is increasing. As stated in the "State Program on Increasing the International Competitiveness of the Higher Education System in the Republic of Azerbaijan for 2019-2023", improving higher education in our country in accordance with international experience is of particular relevance in order to prepare competitive specialists in line with new economic challenges in the context of globalization and achieve sustainable and sustainable development of human capital (Decree of the President of the Republic of Azerbaijan, 2012).

In the "Azerbaijan 2020: A Look into the Future, a Concept of Development" prepared by the order of the President of the country Ilham Aliyev, the progress of education, science and culture also occupies a special place among the goals of the new development stage (Huseynova, 2017).

When managing modern economic systems, whether a region or an individual enterprise or company, it becomes clear that such a type of capital as intellectual capital plays a decisive role in maintaining a competitive position today and successful development tomorrow. However, such development is not possible without an adequate system for training highly qualified specialists with innovative and non-standard thinking required by the market. A properly structured education system and a system of workforce training are important factors contributing to sustainable economic development. The transition of the world economy to an economy based on knowledge, information technologies and intellectual labor leads to the need to reconsider the mechanisms of management of economic systems and to formulate new approaches to their regulation (Imaykin, 2007).

Recently, studies devoted to intellectual capital issues have been attracting attention. Solving the problems of studying, managing and forming intellectual capital is of primary importance for both theorists in the field of economics, as well as for practical economists and managers (Huseynova, 2012).

In (Daineko, 2004), knowledge and human intellectual abilities are shown as the most effective factors of economic growth in a knowledge-based economy, and the characteristics of such an economy are expressed as follows: economic growth is a direct result of innovation and an efficiently organized innovation process; science, education and production processes are combined at the rapid pace of development of the knowledge and information sector, which is the main subject and product of labor; intellectualization of labor occurs, knowledge and intellectual abilities acquire a productive character; changes occur in the structure of capital, financial capital is replaced by human and intellectual capital.

Let's analyze the components of educational and scientific potential that is vital in the formation and development of the country's human capital.

3.3. Educational potential

In the modern era, forming an education system in accordance with the requirements of the globalized world is one of the main factors determining the country's international competitiveness. Azerbaijan's integration into the civilized world and ensuring socio-economic development in the country largely depend on the development of science and education, the level of mastery of new scientific knowledge, techniques and technologies, etc. The realization of these factors primarily requires the training of highly qualified personnel in various sectors of the economy (taking into account the demands of the time). As mentioned above, one of the main elements in the structure of intellectual capital is educational potential.

Knowledge is the basis for the development of intellectual capital. Accepting and processing new knowledge, a person develops his/her intellectual abilities. The labor market is one of the indicators enabling us to obtain information about the current assessment of the intellectual capital of certain types of professional activity and make

decisions about choosing a profession, areas of additional education, etc. A new situation has formed in the labor market in Azerbaijan. Now, in accordance with the requirements of the current socio-economic development in the country, new specialties are emerging, and there is a need for new professionals. The education system, especially higher education, must quickly respond to such changes and not lag behind the renewal process. However, the characteristics of the labor market, specifically investments in education, lead to disproportions in the accumulated intellectual capital and the required intellectual capital.

Among the factors leading to the development of human capital in scientific literature, the most important place is occupied by the efficiency of investments in people's education, particularly vocational education, and the preparation of competitive personnel who meet the requirements of the labor market. In the "Digital Development Concept in the Republic of Azerbaijan", approved by the Decree of the President of the Republic of Azerbaijan dated January 16, 2025, one of the main tasks facing the country is the training of personnel who meet the requirements of the labor market and the improvement of existing personnel potential [Decree of the President of the Republic of Azerbaijan, 2025).

As a result of the research, it is determined that the close relationship between the labor market and the personnel training system is of great importance for the socio-economic development of society. Thus, the quantitative and qualitative adaptation of professional personnel training to the market economy, the connection of vocational training with regular education, the strengthening of vocational activities, the professionalization of secondary education, and the organization of the active participation of employment services in the training process are among the important problems that need to be solved (Guliyev, 2013).

(Mushtagov, 2021) shows important role of education in the preparation of the qualified workforce required to ensure economic and social development, as well as the importance of the factor of quality assurance in education due to technological changes in the labor market and the adaptation of higher education institutions to the requirements of the labor market. It also notes one of the most serious problems of the labor market in both developed and developing countries to be the mismatch between the specialties in demand and the professional quality of personnel offered by educational institutions. Consequently, the imbalance between demand and supply has led to the emergence of a problem such as unemployment of highly educated personnel. Therefore, in order to solve the problem, the right policy should be implemented in the field of higher education, the most important goal of the educational process is to achieve quality in education, the results of international experience should be studied, the social order facing education, as well as the opportunities and needs of teachers and students should be taken into account.

For the development of human capital in accordance with the requirements of the modern era, it is important to strengthen, modernize, improve the quality of general education, and involve information and communication technologies in the process of forming sustainable human capital. It is possible to analyze the existing educational potential in each country as one of the main characteristics of intellectual capital and identify the main problems for its improvement. The main qualitative characteristic of labor in the labor market, which characterizes the employment of the population, is considered to be the level of education. The level and quality of education are one of the most important components of the country's intellectual capital (Imaykin, 2007).

It should be noted that the measurement system for assessing IP in the processes of forming the intellectual capital of society is created on the basis of existing reliable sociological and statistical data. Measurement involves indicators of two main areas: science and education, which directly represent the IP of the entire society. Data on the number of citizens studying in educational institutions are collected by the Institute for Statistics of the United Nations Educational, Scientific and Cultural Organization (UNESCO) on the basis of data provided by relevant government agencies around the world (Gasimova et al., 2024; Hajirahimova et al., 2023; Hajirahimova et al., 2024).

The development index of the human development index of a society is the most important component of a more general indicator, conceptually called the human development index (HDI). The HDI is an indicator characterizing the social development of a country - the health (life expectancy), education (literacy) and real income (per capita income) of its citizens. According to the HDI, Azerbaijan ranked 89th in 2023/2024 with a score of 0.760. The country is included in the category of countries with a high HDI indicator (Zhilenkova et al., 2018; Hajirahimova et al., 2023;

Human development report 2023-2024).

From the point of view of human development, a high indicator of the level of education of the population indicates a competitive advantage in international comparisons.

Fig. 1 illustrates an international comparison of the level of education of the population in Azerbaijan (Education İndex by Country 2025).

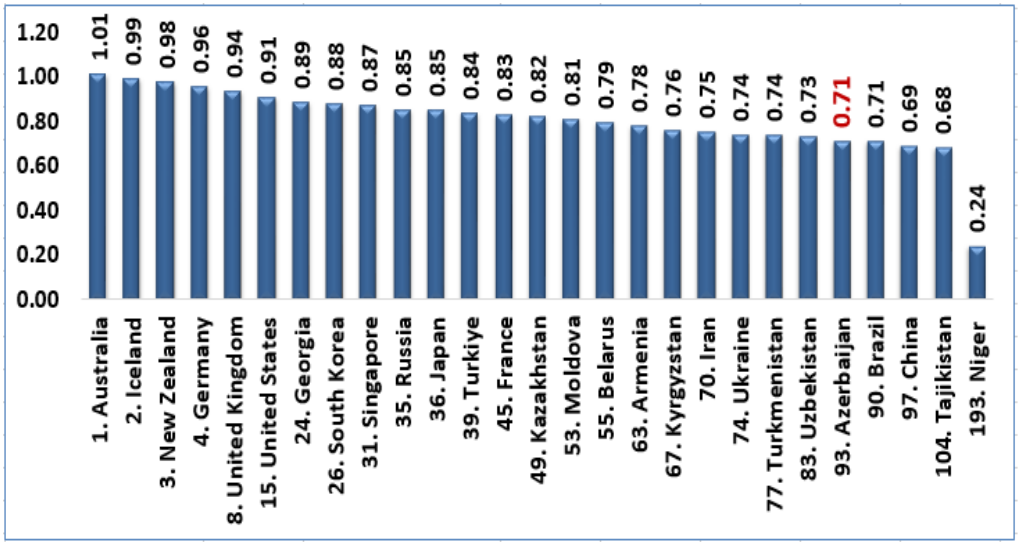

Fig. 1. Ranking of countries by level of education of the population

As can be seen from the graph, Azerbaijan ranks one of the last in terms of education level compared to the countries of the Commonwealth of Independent States (CIS).

The most important characteristic of the intellectual potential of the population is the specific weight of students (per 10 thousand populations). The dynamics of the number of students per 10,000 populations in higher education institutions in the CIS member countries by years is shown below in fig. 2 (Education, science and culture in Azerbaijan, 2023).

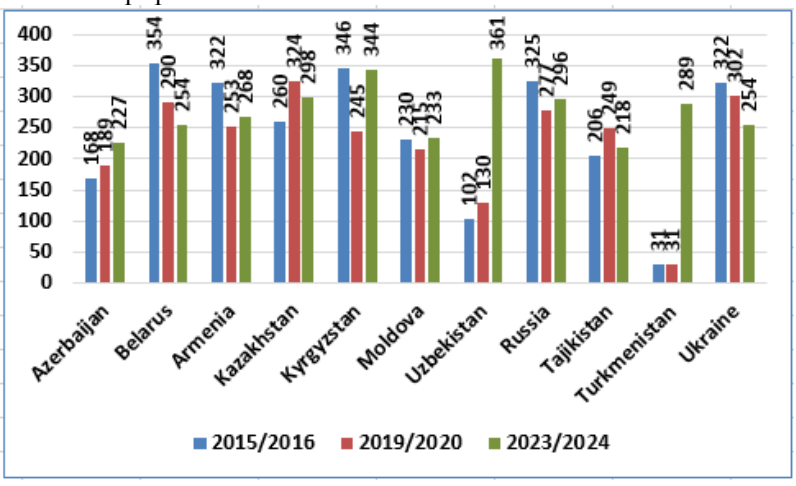

Fig. 2. The number of students per 10,000 populations in higher education institutions in the CIS member countries

The graph shows that the number of students per 10,000 populations in Azerbaijan is increasing and currently stands at 227. It should also be noted that in Armenia and Moldova, whose populations are approximately three times smaller than those in our country, the number of students per 10,000 populations is higher than that of students per 10,000 populations in Azerbaijan. Compared to the population of the CIS countries, Azerbaijan is in the middle ranks in terms of the number of students per 10,000 populations (Education, science and culture in Azerbaijan, 2023).

The number of educational institutions and students in the CIS member countries as of the beginning of the 2023/2024 academic year is shown in Table 1 (Education, science and culture in Azerbaijan, 2023).

Table 1. Number of educational institutions and students in the CIS member countries

Countries	General educational institutions		Secondary specialized educational institutions		Higher education institutions	
	number of educational institutions, thousand	number of students, thousand people	number of educational institutions	number of students, thousand people	number of educational institutions	number of students, thousand people
Azerbaijan	**4.4**	**1705**	**59**	**66**	**51**	**231**
Belarus	2.9	1090	224	113	49	233
Armenia	1.4	425	97	34	57	80
Kazakhstan	7.6	3700	711	548	112	593
Kyrgyzstan	2.4	1491	135	121	58	223
Moldova	1.2	333	48	32	21	57
Uzbekistan	10.8	6445	727	324	219	1315
Russia	41.3	17997	3956	3134	741	4345
Tajikistan	4.0	2232	84	87	46	218
Turkmenistan	1.9	1017	42	26	25	70
Ukraine	14.0	4103	248	282	386	1047

As Table 1 shows, Azerbaijan is ranks in the middle in terms of the number of students in general education institutions, the number of students in secondary specialized education and higher education institutions.

Let's examine several statistical indicators in order to predict the development of the labor market in Azerbaijan. In particular, let's look at the number of students in higher and secondary specialized education institutions.

According to the report prepared by the State Statistics Committee for January-December 2023 on social and economic development, it can be noted that in recent years, an increase in student enrollment in the country's higher education institutions has been observed. Thus, the number of students admitted to the bachelor's level of higher education increased by 4.7% compared to 2022 and amounted to 52.9 thousand people. Admission was carried out in accordance with the list of broad-profile specialties. The share of those admitted to education on a paid basis in the total number of students admitted to bachelor's degrees was 49.8%, of which 76.6% referred to state higher education institutions (State Statistical Committee of the Republic of Azerbaijan, Socio-Economic Development, 2023).

In addition to Azerbaijani citizens, 7.7 thousand students from 93 foreign countries study in the country's higher education institutions. Among foreign students, citizens of Turkey, Iran, Russia, Georgia, India, the Islamic Republic of Pakistan, the Syrian Arab Republic, Iraq and Nigeria predominate. By the beginning of the 2023/2024 academic year, the number of students studying abroad under the state program was 997 people. 33.1% of young people studying abroad are graduates of schools located in Baku, and 66.9% are graduates of schools located in various regions of Azerbaijan. Most of the students study in higher education institutions in Turkey, Hungary, Russia and the People's Republic of China [26]. As a result of measures taken in the field of development of higher education, the number of students admitted to higher education institutions increased by approximately 1.4 times compared to 2015/2016, and amounted to 52,880 people in the current year. The number of students studying during that period increased by approximately 1.5 times, from 161 thousand to 231 thousand. Table 2 provides a comparative statistical analysis of students enrolled in and graduated from public and private higher education institutions (Education, science and culture in Azerbaijan, 2023).

Table 2. Public and private higher education institutions (at the beginning of the academic year)

Indicators	2015/2016	2019/2020	2023/2024
Number of higher education institutions	54	52	51
Number of students in higher education institutions (people)	161234	187654	231437
Number of students per 10,000 population	168	189	227
Number of students admitted to higher education institutions (people)	33645	44324	52880
Number of specialists graduating from higher education institutions (people)	33705	37562	48421
Number of those who received a bachelor's degree out of the total number of specialists graduating from higher education institutions (people)	28985	31468	39247
Number of those who received a master's degree out of the total number of specialists graduating from higher education institutions (people)	4720	6094	9174

Source: Prepared by the authors based on data from the State Statistics Committee

Compared to 2015/2016, the share of students admitted to higher education institutions in 2023/2024 increased from 20.9% to 22.9%, the share of specialists graduating from higher education institutions increased from 20.9% to 20.92%, and the share of those receiving a master's degree from the total number of specialists graduating from higher education institutions increased from 2.93% to 3.96%. During this period, the share of those receiving a bachelor's degree from the total number of specialists graduating from higher education institutions decreased from 17.98% to 16.96%.

The reforms implemented in the country since 2016 have entered a new qualitative stage, and the main goals are expressed in the "Strategic Roadmaps for the National Economy and Key Sectors of the Economy". Providing the population, including youth, with a competitive workforce, the economy, developing social dialogue through institutions that ensure the implementation of flexible policies in the labor market, and achieving an increase in inclusive employment are identified as the main strategic goals and priorities. As noted, the institutions that train personnel for the labor market are educational institutions. Table 3 shows the distribution of students admitted to state and non-state higher education institutions by specialty groups (Education, science and culture in Azerbaijan, 2023).

Table 3. Distribution of students admitted to state and non-state higher education institutions by specialty groups (at the beginning of the academic year)

	2015/2016		2019/2020		2023/2024	
Number of students admitted to higher education institutions:	Bachelor's degree	Master's degree	Bachelor's degree	Master's degree	Bachelor's degree	Master's degree
Total (people)	**33645**	**4953**	**44324**	**6998**	**52880**	**14183**
including by specialty groups:						
educational specialties group	9026	561	11612	766	11357	1004
humanitarian and social specialties group	4539	639	5843	803	7074	1089
culture and art specialties group	931	177	1433	244	1692	368
economics and management specialties group	6663	1994	9182	2403	10031	5884
natural sciences specialties group	1436	560	1993	664	2408	1056
technical and technological specialties group	7614	795	9066	1403	11700	3360
agricultural specialties group	571	92	1090	128	1748	298
health, welfare and service specialties group	2865	135	4105	587	4833	422
basic (base higher) medical education specialties group					1071	594
special purpose specialties group					966	108

Source: Prepared by the authors based on data from the State Statistics Committee

As can be seen from the table, the most popular specialty groups are education specialties, economics and management specialties, and technical and technological specialties. Compared to 2015/2016, in 2023/2024, the share of students in the education specialty group decreased from 26.8% to 21.5%; the share of students in the economics and management specialty group decreased from 19.8% to 19%; the share of students in the technical and technological specialties group decreased from 22.7% to 19%. During the period under review, the share of students in the educational specialties group at the master's level decreased from 11.3% to 7.1%. The share of students in the economics and management specialties group increased from 40.3% to 41.5%; the share of students in the technical and technological specialties group increased from 16.1% to 23.7%.

The group of specialties in basic (base higher) medical education was included in the group of health, welfare and service specializations until the 2022/2023 academic year, and the group of special-purpose specialties was included in the group of technical and technological specializations.

In order to assess the state and level of development of the educational sector, this statistical information should be collected, analyzed, the latest innovations in the labor market should be taken into account, flexibility in adapting to changes should be increased, and the results should be used in the decision-making process. Moreover, the division of specialties in vocational, secondary and higher schools should be prepared more correctly and taking into account the results of research conducted in this area. Taking into account the results of the research, the number of specialties and admission plans in higher schools should be reviewed, importance should be given to specialties that are more in demand in the labor market, and the number of unnecessary specialties should be reduced or eliminated. Consequently, the conceptual and architectural-technological foundations of the labor observatory for intellectual potential should be developed.

The educational calendar of the Ministry of Science and Education of the Republic of Azerbaijan for 2023 indicates that 72 vocational education institutions admitted students in 128 specialties, and 20,563 people were admitted. Of these, 13,632 were male and 6,931 female. 17,022 people were admitted to state-ordered and 3,541 people were admitted to paid vocational education institutions. The number of those admitted increased by 8% compared to the previous year. It should be noted that in the 2023/2024 academic year, students were admitted to 19 specialties at the level of higher technical vocational education and 1,209 people were admitted. Of the 24 people who graduated from the aforementioned level of vocational education in that year, 22 participated in the competition to receive higher education. 21 of them gained the right to higher education, 10 of whom were admitted at the expense of state funds, and 11 were admitted on a paid basis (Ministry of Science and Education of the Republic of Azerbaijan, 2023 Educational Calendar).

In the 2023/2024 academic year, competency-based education programs were developed for a total of 6 new specialties: computer networks and network administration, operation of agricultural and construction equipment (machinery), communication installer-cableman, combi and air conditioner master, planer and engine mechanic, and milling production machine operator at the higher technical vocational education level. When creating new specialties and programs, the requirements from employers, as well as the general socio-economic development trends of the region where the specialty is taught, were taken into account and adapted to the requirements of the labor market. Correspondingly, training has begun in 20 vocational education institutions in a total of 48 groups under the dual education program (traineeship with a master). Currently, 872 students are studying in the program. Up to 100 employer partners support the program covering 12 regions. There are 22 specializations in the program, covering various fields such as industry, tourism, services, and agriculture (Ministry of Science and Education of the Republic of Azerbaijan, 2023 Educational Calendar).

According to the SSC report, by the beginning of the 2023/2024 academic year, 65.6 thousand students (with 1.5% increase compared to the previous academic year) were studying in 59 secondary specialized educational institutions operating in the country, 62.5% of whom were female. The number of students studying in state and non-state higher education institutions providing bachelor’s and master’s degrees in Azerbaijan, as well as in scientific organizations and medical institutions was 231.4 thousand people, of whom 51.1% were female. Compared to the previous academic year, the number of

students increased by 8.6 thousand people or 3.9%. The dynamics of students by type of educational institution is shown in fig. 3 [(Education, science and culture in Azerbaijan, 2023; State Statistical Committee of the Republic of Azerbaijan, Socio-Economic Development, 2023).

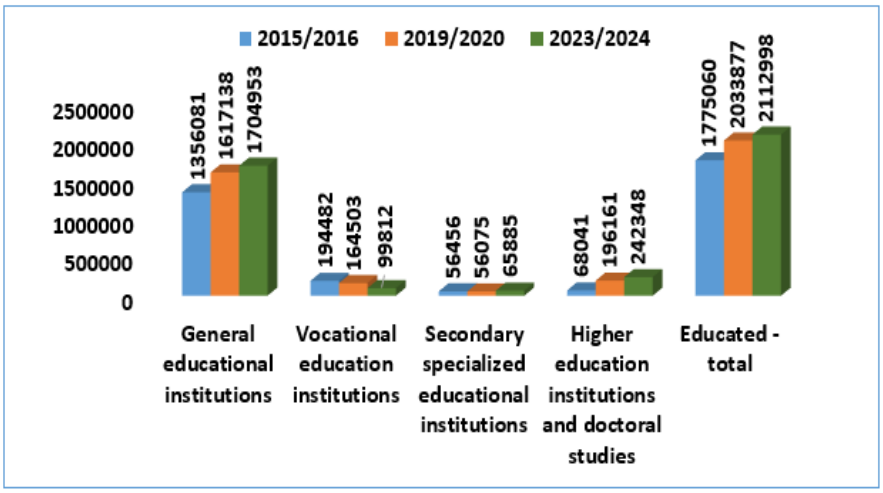

Fig.3. Number of students by type of educational institution

The calculations show that compared to 2015, the share of students studying in general education institutions in 2023 increased from 76.4% to 80.7%, and the share of students studying in higher education institutions and doctoral studies increased from 9.5% to 11.5%. During this period, the share of students studying in vocational education institutions decreased from 9.2% to 5.6%, and the share of students studying in secondary specialized education institutions decreased from 3.2% to 3.1%. This indicates that the main problem with the labor market is education.

As can be seen, over the past ten years, unlike vocational education institutions and secondary specialized education institutions, an increase in the number of students studying in general education institutions, higher education institutions and doctoral studies has been observed.

One of the indicators of intellectual potential is the level of education of the population. Statistical indicators show that as a result of successful reforms, the level of education of the population is increasing year by year, and according to the State Statistical Committee, currently 974 out of every 1,000 people aged 15 and over have higher, secondary specialized, vocational and secondary education. Of these, 162 people have higher education. Table 4 illustrates the dynamics of the level of education of the population aged 15 and over for 2023/2024(Education, science and culture in Azerbaijan, 2023).

Table 4. Education level and distribution of the employed population by age group (thousand people)

Age groups	Employed population	including by education						
		higher education	secondary specialized education	vocational educated	complete secondary education	general secondary education	primary education	no education
Cəmi	**4963.3**	**836.8**	**560.9**	**287.9**	**2942.9**	**292.8**	**39.7**	**2.3**
15-19	91.9	-	5.6	2.4	68.6	15.1	0.1	0.1
20-24	442.4	79.7	53.2	21.2	242.2	**45.6**	0.3	0.2
25-29	660.3	**166.1**	79.0	24.9	350.2	39.0	0.8	0.3
30-34	**756.0**	99.1	60.3	37.0	**527.5**	29.5	2.2	**0.4**
35-39	679.7	96.7	43.9	**42.9**	473.6	19.2	3.0	**0.4**
40-44	626.6	75.8	62.7	39.2	414.4	30.4	3.9	0.2
45-49	572.8	96.7	71.6	37.9	339.9	22.6	3.9	0.2
50-54	550.4	78.1	**81.6**	29.8	332.5	24.3	3.9	0.2
55-59	382.4	112.0	76.4	27.6	128.0	32.2	6.1	0.1
60-64	154.8	27.5	20.4	18.2	60.9	20.0	7.7	0.1
65+	46.0	5.1	6.2	6.8	5.1	14.9	**7.8**	0.1

As the table shows, the 30-34 age group has the highest employment rate (756.0) among the employed population by age group. The calculations show that only 16.9% of the employed population has higher education, 11.3% secondary specialized education, and 5.8% vocational-specialized education, while 66.0% has secondary and primary education. The analysis of the educational level of the employed population by age group shows that those with complete secondary education predominate in all age groups. Similarly, those with higher education in the 25-29 age group, those with secondary specialized education in the 50-54 age group, those with vocational education in the 35-39 age group, those with complete secondary education in the 30-34 age group, those with general secondary education in the 20-24 age group, and those with primary education in the 65+ age group are more prevalent than other age groups.

According to statistics, the highest involvement of the population in continuing education among European countries is observed in Luxembourg and Norway (Zhilenkova, E.P. et al., 2018). Continuing education is the process of increasing the educational potential of an individual throughout life, that is, it involves people's lifelong, continuous education, training and acquisition of new knowledge. One of the factors that makes continuing education important in the current era is the rapid development of science and technology, the rapid obsolescence of the resulting knowledge and the need for its periodic updating and completion.

Azerbaijan is one of the European countries with a low role in continuing education; a very small percentage of the population is involved in continuing education. This is due to the lack of measures to involve the population in the processes of continuing education and development of intellectual potential and, first of all, to the insufficient establishment of cooperation processes in the practice of interaction between different levels of the education system in the country. The lack of a clear system of relations, geographical inequalities, ignorance of the importance of continuous education and advanced training of the workforce of producers, etc. can be identified as the reasons for this deficiency. Currently, like many countries, Azerbaijan is implementing a national education concept that defines the development directions for sustainable and supportable education and state programs that include the development of all areas of the education system.

Creating conditions for self-education and self-realization of young citizens involves the discovery and realization of the intellectual and creative potential of young people, the formation of structures interested in the accumulation and enrichment of intellectual capital. The solution to this problem is possible as a result of creating favorable conditions for the training and development of the most highly qualified scientific and practical specialists in educational institutions (schools, higher education institutions, etc.), as well as the constructive involvement of young people in research work. In the near future, in connection with the formation of the digital economy, continuous vocational education and advanced training will have to cover a large part of the population, which will ensure both the level of professional knowledge and an increase in labor productivity with a smaller number of workers (Zhilenkova, E.P. et al., 2018).

The education system in Azerbaijan is developing through integration into the global education system based on national, moral and universal values. In recent years, the funds allocated to the education sector have also been increasing year by year. Thus, in 2023, 4,407.2 million manats were allocated from the state budget for education. This is 710.8 thousand manats more than in the previous year. It should be noted that 4 billion 549.9 million manats were allocated from the state budget for 2024 for the implementation of 10 programs covering 102 measures in the education sector. This is 142.8 million manats or 3.2% more than in 2023. This also shows that science and education are a priority area for the country (Decree of the President of the Republic of Azerbaijan on a number of issues related to the implementation of the Law of the Republic of Azerbaijan No. 1028-VIQ dated December 5, 2023 "On the State Budget of the Republic of Azerbaijan for 2024", December 26, 2023).

3.4. Scientific potential

Today, one of the elements characterizing the intellectual potential of the country and society is considered to be scientific potential. It is necessary to create conditions for Azerbaijan's scientific potential to find its place in the country's economic development. There are all kinds of potential opportunities for Azerbaijani science to

enter the world arena and ensure its worthy representation in the international scientific space. Scientists and intellectual elite of the Republic of Azerbaijan, which has a high economic development dynamics, face many complex and strategically important issues. Currently, the intellectual potential, which determines the strategy of Azerbaijani science and education, surpasses even rich natural resources in terms of its importance and the dividends it brings (Gasimova, R.T., et al., 2024).

The field of scientific research, which is one of the structural components of the intellectual potential, is the main one in assessing Azerbaijan's scientific potential. As mentioned, since scientific enterprises and organizations are the field of scientific research, the assessment of the activities of scientific organizations is carried out on the basis of expert analysis, as well as analysis and comparison of indicators for assessing the activities of scientific organizations. These indicators are the main ones in assessing the country's intellectual potential.

In assessing the activities of scientific research institutions in Azerbaijan, criteria such as the structure of scientific organizations, scientific results, financial results, personnel structure, etc. and numerous indicators (publication activity, contribution in international scientific and technical cooperation, training of scientific personnel, use of advanced technologies, innovation infrastructure, etc.) are used. To analyze the state of IP in Azerbaijan and assess IP, below is considered the important results of fundamental and applied research conducted at ANAS and other scientific and educational institutions of our republic, as well as other indicators in the activities of scientific organizations.

The main indicators representing the state and level of development of education, science, culture in the Republic of Azerbaijan are represented in the statistical compilation of the State Statistics Committee for various years and in the reports prepared by ANAS for 2023 (table 5 and fig. 4) (Education, science and culture in Azerbaijan, 2023; Report on the activities of the Azerbaijan National Academy of Sciences for 2023, I, II, 2024).

Table 5. Distribution of research specialists by age group and gender by the end of 2023

	Researchers			With scientific degree					
				Doctors of science			Doctors of philosophy		
	total	males	females	total	males	females	total	males	females
Total number of researchers (people)	**14062**	**5546**	**8516**	**1382**	**1012**	**370**	**5467**	**2487**	**2980**
of them:									
under 30	1604	580	1024	20	19	1	61	13	48
aged 30-39	2920	1066	1854	32	20	12	694	256	438
aged 40-49	2999	868	2131	146	92	54	1485	504	981
aged 50-59	2573	908	1665	241	138	103	1302	537	765
aged 60-69	2547	1318	1229	460	354	106	1214	708	506
aged 70 and over	1419	806	613	483	389	94	711	469	242

The calculations show that 39.4% of researchers are male and 60.6% are female. Analysis of researchers by age group shows that male researchers are more prevalent in the 60-69 age groups (51.5%), while female researchers are more prevalent in the 40-49 age group (70.1%). Among researchers, males with PhDs are more prevalent than females. Thus, 73.2% of males with PhDs and 26.8% of females with PhDs. Male researchers with PhDs outnumber female researchers in all age groups. In the 30-59 age group, female researchers with PhDs outnumber male researchers, and in the 60-70 age groups and above, male researchers outnumber female researchers. Male researchers with a doctoral degree under the age of 30 account for 95%, while female researchers with a doctoral degree in the same age group account for 5%. There has been a decrease in the number of researchers with a scientific degree compared to the previous year.

Thus, while the number of researchers with a scientific degree in 2022 was 7207, in 2023 their number decreased to 6849.

According to the ANAS report, in 2023 the total number of employees working in scientific institutions under the jurisdiction of ANAS and other scientific organizations of the republic accounted for 9010. The total number of scientific employees is 4205, including 504 doctors of sciences or 1740 doctors of philosophy. The composition of ANAS consists of 142 members, including 56 full members and 86 corresponding members (Report on the activities of the Azerbaijan National Academy of Sciences for 2023, I, II, 2024).

According to the report of the State Statistics Committee, by the beginning of 2024, 131 scientific organizations and enterprises providing various scientific and technical services were operating in the country. More than 19.9 thousand specialists were engaged in scientific research and development in these scientific institutions, 73.1% of whom were researchers. 36.6% of these specialists had a doctoral or Phd degree (Education, science and culture in Azerbaijan, 2023).

The analysis of the age limits of the personnel potential in ANAS and other scientific organizations of the republic shows that the total number of scientific workers aged 41-50 is 926 people, which is more than in other age limits. Scientists with a doctoral degree are mostly aged 70 and older, and scientists with a PhD degree are mostly aged 41-50 (Fig. 4) (Collection of reports and speeches on the report of the General Assembly of the Azerbaijan National Academy of Sciences report, III, 2023).

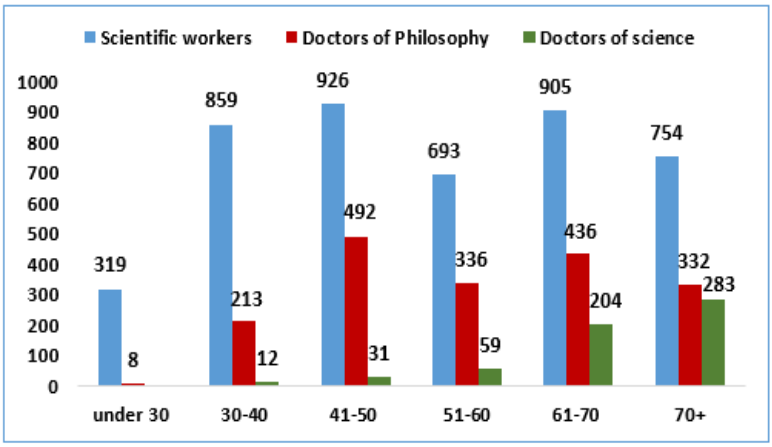

Fig. 4. Personnel potential by age in ANAS and other scientific organizations of the republic

4. Discussion

According to the report of ANAS, in 2023, 1627 scientific research works were carried out on 182 problems and 524 topics in scientific institutions and organizations, 184 important scientific results were obtained, 42 works were applied. 190 works were carried out under economic contracts, 75 grants were gained, 17 of which were with foreign scientists, and 61 patents were obtained, 11 of which were foreign. ANAS employees carried out the work envisaged under 76 grant projects with a total amount of more than 7 million manats, 29 of which were jointly with foreign scientists. In 2023, more than 500 books and monographs were published by the Academy's scientists, more than 9,500 articles and theses, including more than 3,000 abroad (over 1,000 of which published in impact factor journals included in the Web of Science and Scopus databases). More than 26,567 citations were made to the works of scientists (Education, science and culture in Azerbaijan, 2023; Report on the activities of the Azerbaijan National Academy of Sciences for 2023, I, II, 2024).

As noted, various approaches and criteria are used in the assessment of scientific activity in scientific organizations. The number of works published by scientific institutions and individual researchers, especially in scientific journals indexed in well-known international databases such as Web of Science (WoS) and Scopus, citations to them, and the Hirsch index are currently the most widely used criteria (Report on the activities of the Azerbaijan National Academy of Sciences in 2023, II, 2024).

According to the report on scientific activity of ANAS in 2023, the total number of articles published by scientific organizations of 6 scientific

departments of ANAS in 2023, including the number of articles published in journals indexed in WoS and Scopus, the number of references to articles, and the number of references per scientific worker are illustrated in Table 6 below [Report on the activities of the Azerbaijan National Academy of Sciences for 2023, I, 2024; Report on the activities of the Azerbaijan National Academy of Sciences in 2023, II, 2024; Collection of reports and speeches on the report of the General Assembly of the Azerbaijan National Academy of Sciences report, III, 2023.

Table 6. Some indicators of scientific departments for 2023

Scientific departments	Number of researchers	Number of articles		Number of citations	
		Total	WoS; Scopus	Total	Total number of citations per 1 researcher
Department of Physics, Mathematics and Engineering Sciences	945	1108	514	19092	20.2
Department of Chemistry	665	407	236	4900	7.3
Department of Earth Sciences	451	309	79	1847	4.0
Department of Biology and Medical Sciences	2597	2374	326	4432	1.7
Department of Humanities	533	2078	36	5603	10.5
Department of Social Sciences	597	2177	303	1163	1.9
Total:	5788	8453	1494	37037	6.3

As can be seen from the table, the number of articles published in journals indexed in WoS and Scopus in the Department of Physics, Mathematics and Engineering Sciences is higher than in other departments in terms of the number of citations to articles and the number of citations per researcher.

In terms of indicators for exact and natural sciences, in the report for 2023 of the "Scimago Journal and Country Rank" database (an open access portal that uses data from the Scopus database to evaluate and analyze scientific fields by country), Azerbaijan is ranked 79th among 234 countries in the world for all scientific fields. Compared to the republics of the South Caucasus, Azerbaijan is leading (SCImago Journal & Country Rank (SJR), 2024).

These statistical indicators allow obtaining the data necessary for evaluating and analyzing the activities of scientific organizations. At the same time, these indicators play the role of the main source for monitoring the state of IP in the field of science and education, predicting the situation for the future, finding relationships between indicators, and providing proposals and recommendations to relevant state bodies or institutions that make decisions. The results of the activities of scientific organizations can be valuable in conducting theoretical research in the field of measuring and assessing IP.

5. Conclusion

The analysis of the current situation in the field of formation of the intellectual potential of the country gives grounds to say that the main source of economic development, the vector of development of society is IP, which depends on the quality of labor resources. Education and scientific potential, as elements characterizing the intellectual potential of society, are considered indicators of global competitiveness and innovative development. The policy of forming an education system in Azerbaijan that meets world education standards, monitoring the quality of teaching in higher and secondary schools, periodically analyzing existing problems in the field of education and paying special attention to the training of personnel that meets world requirements, and developing the national education system continues today.

For Azerbaijan, the competitive advantage in international comparison is a high indicator of the level of education of the population. Moreover, strengthening the role of Azerbaijan in continuing education compared to European countries is one of the necessary issues. The development of a continuing education system is an effective mechanism that creates favorable opportunities for a person to expand and renew his/her knowledge, skills and personal development.

Thus, for the development of educational potential as an element characterizing the intellectual potential of the country, it is necessary to solve the following issues:

– correctly determine the market needs of universities operating in Azerbaijan, train adequate personnel, establish relations with enterprises and companies, conduct scientific research, promote development in higher

education institutions in the "education-research-innovation" format;

– explore the impact of education provided to students on the country's economy, including the development of industry and technology;

– analyze the contradictions and problems that have arisen between the labor market and educational institutions in modern times, and show ways to solve them, bring the education system closer to the changing conditions of the labor market;

– ensure the participation of all interested partners of education in the formation and exchange of knowledge;

– establish educational and industrial cooperation with foreign partners of higher education, industrial companies, professional companies, state sectors, etc., in order to increase the potential of universities and their sustainability in international competition;

– strengthen the interaction and dynamism of science, business, labor market and educational services, taking into account the issues related to the essence and foundations of the market economy;

– assess the requirements of the labor market in personnel training, preparing highly qualified, innovative and advanced technologies-oriented personnel who can meet the requirements of the market and flexibly adapt to its requirements, etc.

It should also be noted that scientists are the most important element of the scientific and technical potential of the country and the region, and they have a special weight in the formation of a knowledge economy and strengthening the competitiveness of the country. In this sense, a great responsibility also falls on the scientists and researchers working in the country's scientific institutions and organizations.

In this regard, a strategy that can balance all the components that make up the IP should become a priority issue. Therefore, the most important elements should be improved. The elements of education and scientific potential, perceived as one of the generators of knowledge and participants in innovation processes in the scientific sphere, should, on the one hand, be a significant influencing factor, and on the other hand, under the influence of other elements, should occupy a kind of intermediate place in the structure of intellectual capital.

On November 11-22, 2024, one of the most spectacular events in the world, the 29th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP29), was held in the Republic of Azerbaijan. The events and discussions held under the chairmanship of Azerbaijan once again showed that COP29 laid the foundation for new thinking and a new civilization in all areas of society, including science. The contributions made by COP29 to the development of human capital in Azerbaijan will play a significant role in the further development of the country in the coming period, as well as in inter-national and inter-state relations. In conclusion, we should note that today the greatest wealth of every state is its intellectual potential, and countries with high intellectual potential play a leading role in the world.

References

Abdul Kadar Muhammad Masum et al. A New Hybrid AHP-TOPSIS Method for Ranking Human Capital Indicators by Normalized Decision Matrix. Journal of Computer Science 2019, 15 (12): 1746.1751. DOI: 10.3844/jcssp.2019.1746.1751

Collection of reports and speeches on the report of the General Assembly of the Azerbaijan National Academy of Sciences report, (2023). III. Baku, Elm publishing house, 158. (in Azerbaijani)

Daineko, V.G. (2004) Intellectual capital: problems of accumulation and regulation in a knowledge-based economy. VSU Bulletin, 1: 193–203. http://www.vestnik.vsu.ru/pdf/hyman/2004/01/daneiko.pdf (in Russian)

Decree of the President of the Republic of Azerbaijan on a number of issues related to the implementation of the Law of the Republic of Azerbaijan No. 1028-VIQ dated December 5, 2023 "On the State Budget of the Republic of Azerbaijan for 2024", December 26, 2023 (in Azerbaijani)

Decree of the President of the Republic of Azerbaijan. (2012). "AZERBAIJAN 2020: LOOKING TO THE FUTURE" DEVELOPMENT CONCEPT (in Azerbaijani)

Decree of the President of the Republic of Azerbaijan. (2025). "Digital Development Concept in the Republic of Azerbaijan". https://president.az/az/articles/view/67938 (in Azerbaijani)

Decrees of the President of the Republic of Azerbaijan. (2013). State Strategy for the Development of Education in the Republic of Azerbaijan, October 24, 2013, https://president.az/az/articles/view/9779(in Azerbaijani)

Decrees of the President of the Republic of Azerbaijan. (2021). On Approval of "Azerbaijan 2030: National Priorities for Socio-Economic Development". (Publication of the People's Newspaper, No. 24). Baku, Azerbaijan. (in Azerbaijani).

Education İndex by Country 2025. https://worldpopulationreview.com/country-rankings/education-index-by-country

Education, science and culture in Azerbaijan. (2023). https://www.stat.gov.az (in Azerbaijani)

Gasimova, R.T., Hajirahimova, M.Sh., Abbasli R.N. (2024). Analysis of the current situation and identification of problems in the evaluation of intellectual potential. Problems of Information Society, 1(15): 25-41 (in Azerbaijani) http://doi.org/10.25045/jpis.v15.i1.04

Gennaioli N., La Porta R., Lopez-de-Silanes F., Shleifer A. (2013). Human Capital and Regional Development. The

Quarterly Journal of Economics, 1 (128): 105-164 DOI:10.1093/qje/qjs050

Guliyev, T.A. (2013) Human resources management (for the sake of people). "Nagyal Evi" Company, 828 https://www.scribd.com/document/489685703/97-pdf (in Azerbaijani)

Hajirahimova, M.Sh., Ismayilova, M.I. (2023). Analysis of intellectual potential measurement indicators. Problems of Information Society, 1(14): 53–65. DOI: 10.5815/ijeme.2024.01.02

Hajirahimova, M.Sh., Ismayilova, M.I. Assessment Methodology of Intellectual Potential I. J. Education and Management Engineering, 2024, 1: 16-24 DOI: 10.5815/ijeme.2024.01.02

Human development report 2023-2024. Available at: https://hdr.undp.org/system/files/documents/hdr2023-24overviewru.pdf

Huseynova, A.D. (2012). Evaluation of innovation activity potential of scientific organizations in Azerbaijan. Proceedings of the international scientific-practical conference "Actual problems of agrarian economy". Baku: Sharg-Garb, 428–432. (in Azerbaijani)

Huseynova, A.D. (2017). Human capital development: theoretical aspects and assessment methodology. Baku: "Chap ART" Publishing House, 28 p. (in Azerbaijani)

Imaykin, E.F. (2007). Educational potential as a basic element of intellectual capital development in the Perm region: status and problems. OSU Bulletin, 10: 59–64 http://vestnik.osu.ru/2007_10/10.pdf (in Russian)

Ismayilov, Ch., Abdullayev, A., Gurbanova, G., et al. (2018). Improving human resources for sustainable development: the Azerbaijani model. Baku: Science Development Fund under the President of the Republic of Azerbaijan, 252.

Kakhovska, O.B., Zyuza, A. (2020). Formation of intellectual potential of subjects of management in the national economy: the theoretical aspect. Економічний простір 155: 15-19 DOI: https://doi.org/10.32782/2224-6282/155-3

Khashimov, P.Z., Ibadullaeva, G.P. (2014). Intellectual potential as an important factor in the socio-economic development of the country. Modern Education, 4:18–23. (in Russian) https://cyberleninka.ru/article/n/intellektualnyy-potentsial-kak-vazhnyy-faktor-sotsialno-ekonomicheskogo-razvitiya-strany

McGuirk, H., Lenihan, H., Hart, M. (2015). Measuring the impact of innovative human capital on small firms' propensity to innovate. – Research Policy. 4 (44): 965-976 https://doi.org/10.1016/j.respol.2014.11.008

Ministry of Science and Education of the Republic of Azerbaijan, 2023 Educational Calendar. https://edu.gov.az/az/news-and-updates/20749-1 (in Azerbaijani)

Muradov, A. (2021). Development and Prospects of Higher Education in Independent Azerbaijan, "Azerbaijan" Newspaper, October 17, 2021. https://www.azerbaijan-news.az/az/pdf/list (in Azerbaijani)

Mushtagov, A. (2021) Quality assurance factor in the competitive human capital index. Azerbaijan School, 2 11–18. https://www.arti.edu.az/nodupload/editor/files/AJES-N2-2021.pdf (in Azerbaijani)

Report on the activities of the Azerbaijan National Academy of Sciences for 2023 (2024). I, Baku, Elm publishing house, 332. (in Azerbaijani)

Report on the activities of the Azerbaijan National Academy of Sciences in 2023 (2024). II, Baku, Elm publishing house, 376. (in Azerbaijani)

SCImago Journal & Country Rankhttps (SJR) https://www.scimagojr.com/countryrank.php?year=2022

State Statistical Committee of the Republic of Azerbaijan, Socio-Economic Development, 12, January-December 2023. https://www.stat.gov.az/news/source/doklad_2023-12.pdf (in Azerbaijani)

Sultanbaeva, G.S., Velitchenko, S.N., Lozhnikova, O.P. (2013). Intellectual capital as the basis for the development of a knowledge society. Almaty: Kazakh University, 236 (in Russian) https://pps.kaznu.kz/kz/Main/FileShow2/168507//1/0/2018//

Zhilenkova, E.P., Budanova, M.V. (2018). Monitoring of the processes of formation of the company's intellectual capital. The Eurasian Scientific Journal, 6(10): 1-11 https://esj.today/PDF/46ECVN618.pdf

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