



# ACTUAL PROBLEMS OF MODERN SCIENCE, EDUCATION AND TRAINING

[KHOREZMSCIENCE.UZ](http://KHOREZMSCIENCE.UZ)





## CONTENTS

### **Section 1. ACTUAL PROBLEMS OF HISTORY, PHILOSOPHY AND SOCIOLOGY.....4**

**TAJIEVA UMIDA RAJABBAEVNA /// THE EFFECT OF THE NATURAL ENVIRONMENT ON THE ECONOMIC SYSTEM AND THE PROCESS OF USE OF LAND AND WATER RESOURCES IN THE KHIVA KHANATE.....4**

**RAIMJANOVA UGILXON NOMANOVNA /// STRENGTHENING THE INSTITUTION OF THE FAMILY AS A PRIORITY DIRECTION OF SOCIAL PROTECTION OF THE FAMILY.....11**

**NAVRUZOV SAPARBOY, NURULLAYEVA NODIRA, BABAYAZOV UMIDBEK /// DASHHAVUZ AS AN CENTER OF THE KHANATE IN XIX CENTURY.....18**

**NAVRUZOV SAPARBOY, NURULLAYEVA NODIRA, OLIMOVA YULDUZ /// TATYANA ALEKSANDROVNA ZHDANKO IS AN OUTSTANDING SCIENTIST AND ETNOGRAPHER.....22**

### **Section 2. MODERN PROBLEMS OF PEDAGOGY AND PSYCHOLOGY.....26**

**HOJIEV RASULBEK BOYNAZAR OGLI, NORBOEVA DILNOZA ORZIKULOVNA /// CREATIVE THINKING IS AN IMPORTANT FACTOR OF SOCIAL DEVELOPMENT.....26**

**KODIRJON ODILOV /// ON THE ISSUE OF FORMATION OF NATIONAL EDUCATION AND YOUTH WORLDWIDE.....30**

**ISAKOVA MUAZZAM TULKINOVNA /// DEPENDENCE OF A PERSON'S ATTITUDE TO HEALTH ON AGE CHARACTERISTICS.....34**

**SIDDIKOV HASANBOY /// ORGANIZATION OF EDUCATIONAL WORK IN THE SYSTEM OF HIGHER EDUCATION AS A PEDAGOGICAL PROBLEM.....40**

**BAYCHAEV FAZLIDDIN KHUSENOVICH /// SOLVING PROFESSIONALLY PROBLEMS IS A GUARANTEE OF QUALITY PREPARATION FOR PRACTICAL ACTIVITY.....45**

### **Section 3. MODERN PROBLEMS OF TOURISM AND ECONOMICS.....51**

**ABDURAHMANOVA MUATTARKHON SHOKIR KIZI /// INDUSTRIAL DEVELOPMENT IS A KEY FACTOR IN REDUCING POVERTY.....51**

**GANIYEV BAHODIRJON SODIKJONOVICH /// SOCIO-PHILOSOPHICAL ASPECTS OF IMPROVING THE LEGAL CULTURE OF THE ENTREPRENEUR'S PERSONALITY.....55**

**LATIPXANOVA ELNORA ALIMXANOVNA /// INCREASING THE ACTIVITY OF BANKS IN THE CAPITAL MARKET.....59**



**SALIKHOV NODIR DJAMOLOVICH /// APPLICATION OF ECONOMIC METHODS OF MANAGEMENT TO IMPROVE THE QUALITY OF PRESCHOOL EDUCATION IN UZBEKISTAN.....64**

**Section 4. MODERN PROBLEMS OF TECHNICAL SCIENCES.....75**

**MUMINOV BAHODIR BOLTAEVICH, BEKMURODOV ULUGBEK BAKHROM UGLI /// MODELS AND ALGORITHMS TO SUPPORT QUEST CREATION.....75**

**Section 5. MODERN PROBLEMS OF PHILOLOGY AND LINGUISTICS.....84**

**AKHMEDOVA MEKHRINIGOR BAKHODIROVNA /// LEXICOGRAPHIC ANALYSIS OF ‘SPIRITUALITY’ SEMANTIC FIELD IN THE ENGLISH LANGUAGE.....84**

**ODINAEVA NILUFAR LUKMONOVNA /// TEACHING POLYSEMANTIC VOCABULARY OF THE ENGLISH LANGUAGE USING SHORT STORIES.....88**

**SAIDOV KHAYRULLA SHAVKATOVICH /// THE EXPRESSION OF LEXICAL UNITS IN ENGLISH AND UZBEK LANGUAGES AS A RESULT OF ECONOMY OF COGNITIVE STRUCTURES.....91**

**Section 6. ACTUAL PROBLEMS OF NATURAL SCIENCES.....96**

**TADJIEV JAMSHID JONIZAKOVICH, MUKUMOV ILKHOM UKTAMOVICH, ABDIRASULOV FARRUKH ABDIRASSUL OGLI, DUSTOV BEGNAZAR SAYFULLAEVICH /// A NEW LOCATION OF FERULA SUMBUL (KAUFFM.) HOOK.F. AND MOSSES IN THE TURKESTAN RIDGE.....96**

**Section 7. ACTUAL PROBLEMS OF MATHEMATICS, PHYSICS AND MECHANICS.....101**

**NAYMANBOYEV RAKHMONALI, ONARKULOV KARIMBERDI EGAMBERDIYEVICH, YULDASHEV SHOHJAXON ABROROVICH, YULDASHEV ABROR ABDUVOSITOVICH, YULDASHEVA SHAHRIZODA ABROROVNA.....101**



UDC: 94(575.1)

**THE EFFECT OF THE NATURAL ENVIRONMENT ON THE  
ECONOMIC SYSTEM AND THE PROCESS OF USE OF LAND AND  
WATER RESOURCES IN THE KHIVA KHANATE**

**Tajieva Umida Rajabbaevna,  
PhD student, Urgench State University,  
Urgench, Uzbekistan.  
[umidatojieva17@gmail.com](mailto:umidatojieva17@gmail.com)**

**Annotasiya:** Ushbu maqolada Xiva xonligida yer va suv resurslaridan foydalanish jarayonlari va tabiiy muhitning aholi xo'jalik yuritish tizimiga ta'siri masalalari tahlil qilinadi. Maqolada Amudaryo del'tasining tabiiy sharoitlari dehqonchilik, chorvachilik va baliqchilikni shakllantirish uchun asos bo'lganligi, qulay iqlim sharoiti, suv resurslari va ishlov berilgan tuproqlar qishloq xo'jaligini rivojlanishiga hissa qo'shganligi yoritilgan.

**Kalit so'zlar:** Xiva, xonlik, tabiat, tarixiy asarlar, toshqin, kanal, dehqonchilik, bog'dorchilik.

**Аннотация:** В этой статье анализируются процессы использования земельных и водных ресурсов и вопросы влияния природной среды на хозяйственную систему населения Хивинского ханства. В статье освещено, что природные условия дельты Амударьи являются основой формирования земледельческого, животноводческого и рыбохозяйственного хозяйства, благоприятные климатические условия, вода и обрабатываемые почвы способствовали развитию сельского хозяйства.

**Ключевые слова:** Хива, ханство, природа, исторические труды, наводнение, канал, сельское хозяйство, садоводство.

**Abstract:** This article analyzes the processes of using land and water resources and the impact of the natural environment on the economic system of the population of the Khiva Khanate. The article highlights that the natural conditions of the Amu Darya delta are the basis for the formation of agricultural, livestock and fish farming, favorable climatic conditions, water and cultivated soils contributed to the development of agriculture.

**Key words:** Khiva, khanate, nature, historical works, flood, canal, agriculture, gardening.

**Introduction.** Geographically, the lands of the Khiva Khanate are located in the Lower Amudarya plains and form a natural continuation of the Aral-Caspian plain. The territory of the khanate consisted of settlements on both sides of the lower reaches of the Amudarya. The southern part of the khanate is connected with the mountains that stretch along both banks of the river, and is bounded on the west by deserts and sands and the Ustyurt Plateau, on the north by the Aral Sea, and on the east by sands and deserts on the right bank of the Amu Darya. These lands of the khanate were more than 300 miles from north to south, and 100 miles from west to east.



From the socio-economic point of view, the territory of the khanate was divided into two parts: the southern region - covering the Khiva area, which included Khanka, Khazarasp, Urgench, Kat, Kush-Kupir and others. The area was densely populated, with the bulk of the canals and 93 percent of the irrigated land. The northern region stretches from the Old-Urgench-Khujayli line to the Aral Sea. The bulk of its land area was in the underdeveloped, sparsely populated steppe zone.

All the irrigated lands in the area received water from the Amudarya, which carried a large amount of sludge, and therefore every year a layer of mud settled in the irrigated fields. In addition, fertilizers applied to arable lands also contributed to the strengthening of the cultural-irrigation layer of the soil. To increase the productivity of the fields, farmers took special measures that had been formed over the centuries, i.e., sand mixed with manure and soil from the lands of old buildings was thrown into the fields. In this case, manure used as a fertilizer, and sand as an element that improved the physical properties of clay soils. Twenty-two percent of the labor time that farmers spend during the entire farming period is spent on fertilizing the land. Thus, irrigation water, on the one hand, and the farmer himself, on the other, were involved in creating the cultural-irrigation layer of the soil.

**Research Methodology.** This article examines the historical logic and historical-geographical data of the Khiva khanate on the basis of modern services of historical science, issues of historiography in the historical context of the environment.

**Materials And Discussion.** The interest of archaeologists, historians and orientalists in the Aral Sea basin dates back to the 19th century. In the early twentieth century, S.P. Tolstov was the first to begin a comprehensive scientific study of the Lower Amudarya region, one of the most important historical and geographical regions in Central Asia. Since the 1930s, the Khorezm archeological and ethnographic expedition, founded and led by S.P. Tolstov, has conducted not only scientific research on the ancient history of the region, but also geology, geomorphology and other issues.

S.P. Tolstov, on the south-western shore of the Aral Sea, wrote: "... The delta plain, covered with endless green reeds, stretches to the east. In the west, a huge fifty-meter-high wall of Ustyurt china — layers of white, gray, and blue stones hanging from the top of a shallow cliff. ... I remember these places from 1929 onwards. At that time, I watched the endless reeds, which were home to wild boars and occasionally tigers, not from above, but from below - from a lifeboat that sailed for hours down the aisles."

In the memoirs of the Iranian military commander Ismail Mirpanji, the following information is given: "This country is called Khorezm. The length of this land, which stretches along the Jaihun, is about forty fars. There are fields and Uzbek fortresses on both sides of the Ceylon coast. The land area is small, narrow in width, small area. There is not much land to be cultivated on either side of the river ... Fifteen farsakhs of the forty farsakhs are cultivated".

A. Vamberi's famous book "Journey to Central Asia" contains the following information: we can confidently note its great productivity, which is explained not only by its cultivation, but also by the fact that the Amudarya is well irrigated with its blessed water.



In such memoirs we find not only information about the natural conditions of the khanate, land and water resources, but also information about the climatic conditions. For example, the Russian Empire's military description of the khanate's climate states that the climate is temperate: "... The summer heat is unbearable if the air is not renewed in summer with constant southeast and south winds. Rainfall is very rare, even in autumn, but in both autumn and winter there are constant winds that bring clouds of sand from the steppes, so sometimes they hide the sun's rays.

One of the chapters of the book "History of irrigation in Khorezm" by Ya. G. Gulyamov is devoted to the study of the dynamics of the irrigation network of Khorezm in the XVI-XIX centuries. This, of course, is of great importance for the study of land relations, for the determination of the location and area of the irrigated and cultivated lands of the khanate. Another chapter provides interesting ethnographic information on irrigation functions.

The crisis of the Aral Sea, which began in the late 1960s and its consequences, the problems of water use in the region (water depletion, environmental pollution, public health) are well known and raise questions about the relationship between the ecology and climate of the Aral Sea basin. Due to the continental climate, desert and semi-desert lands, the western part of Central Asia is characterized by limited water resources (especially fresh water) in the past. It is also known that the Amudarya River has changed frequently in the past. In particular, A.S. Kes said, "Such a change in flow would have flowed downstream of the river delta, and as a result, the Khiva oasis, along with the population that has been engaged in irrigated agriculture for many centuries, would be deprived of water, building and life. That is why, man has tried to maintain this changing balance of nature by artificial means, and probably did not allow the re-emergence of the Uzbay River. These "artificial measures" included, first of all, artificial irrigation systems, which played a specific control role in ensuring that the flowing river flowed smoothly.

Indeed, if we look at the past, we see that the strategy of nature use and the formation of the economic system in the Lower Amudarya region is primarily related to the natural conditions of the oasis. The common plain of the region provided free access to cold Arctic and polar air masses. It was the natural conditions of the Amudarya delta that formed the basis for the formation of an economic complex of the local population, consisting of agriculture, livestock and fisheries. In this case, favorable climatic conditions, water resources, soils cultivated by the labor of farmers have contributed to the development of agriculture.

In the Khorezm oasis since ancient times have developed specific forms of land use, some of which were reflected in the traditions brought by the Dashtikipchak tribes.

The life of several Uzbek and Karakalpak tribes living in the lower delta of the Amudarya in the XIX century sheds some light on the historical development of irrigated agriculture in the Khorezm oasis. Eighteenth-century tourists and later researchers note that traces of irrigation facilities have been preserved in many parts of the Kuvandarya and Yanidarya valleys.

Under conditions of water scarcity, the oasis has developed its own methods of land preparation, fertilization and irrigation. In particular, the preparation of the area for planting began with the leveling of the surface, that is, the tops of the soil were



removed and the depressions were filled and divided into separate small areas separated by soil ridges from each other for easier irrigation. The field was then washed with brine by repeated irrigation several times in a row. The soil, especially during the first irrigation, quickly absorbs water and dissolved salts are formed. Thus the layer in which the plant roots are mainly developed is cleaned. Water is saturated with salt and has not yet penetrated into the soil was also used for drainage.

Since the lands of Khorezm were exactly saline, it was difficult to plant crops until they were irrigated three or four times during the winter. While digging canals and constructing waterworks is one problem, clearing sediments from the muddy water of the river at the bottom of the canals is the second problem, and flood prevention is the third problem. In particular, in the Khiva khanate, the land area required sufficient water to produce more crops, depending on climatic conditions and other characteristics. Therefore, the timely cleaning and digging of canals from the Amudarya River is one of the main tasks of the agricultural population. A lot of work has been put into this work.

The Amudarya River annually produces 200 million tons (1.2 cubic km) of turbidity. Sometimes the river accumulates sediments up to 20 cm thick in the surrounding plains within a year. Therefore, all irrigation points had to be cleaned every year. Digging large canals and building dams was especially difficult. Such work is usually carried out in winter or early spring. For example, in the Khiva khanate about 700,000 workers were used to clean the canals. It took more than 12 days to clear the largest main canal in Khorezm, Polvonyop.

It should be noted that the rich experience accumulated over many years in irrigation has allowed the local population to develop certain skills in the creation and implementation of complex water management techniques. As a result, in the course of long development, from the simplest methods of drainage mechanisms to more complex types, a unique irrigation technique has emerged. In Khorezm, the simplest methods of pumping water from the canals to the fields were "sepma", "depma" and "nova", while the ancient method of pumping water, called "chigir", became the most "improved" method. However, irrigated lands were 4 times more labor-intensive than those irrigated with naturally flowing (foot) water, and secondly, the water flowing through the field through the ditches remained in the ditch and most of the mud in it sank to the bottom. Therefore, Khorezm farmers preferred to irrigate with more running water, believing that the mud in the running water would almost stop the effects of dissolved salts.

Another feature of the natural conditions of the khanate is the problem of floods in the river. These events necessitated, on the one hand, measures to protect the fields in agriculture, and, on the other hand, encouraged their more efficient use in irrigating the lands in the conditions of water scarcity.

The water of the Amudarya overflows several times a year. Because these floods coincided with a time when crops needed water, local farmers created a flood calendar based on centuries of experience. Therefore, in the Khorezm oasis there were special people who knew when the river flood would start and how the river flow would change. According to their calendar, irrigated agriculture in the oasis (during the growing season) was based on the 4 floods of the Amudarya: 1) Blue cane; 2) White



fish; 3) Star; 4) Forty children. In particular, the "Blue Reed Flood" (late March) begins, when the reeds in the lakes are just beginning to grow. Depending on the growth rate of the cane, the timing or delay of the flood was determined. In mid-April, whitefish began to migrate from the Aral Sea to the upper reaches of the Amudarya. It's called the "White Fish Flood." The "Starburst" (mid-May) is marked by the time of the appearance of the Hulkar constellation. The "Kirk chilla" (summer chilla) began in the second half of June and lasted for 40 days. If the floods were delayed or not at all, it alarmed the whole country and signaled the collapse of the farm.

By the nineteenth century, the state had become more active as a major player in marital relations. In particular, the coming to power of the Kungrad dynasty in the early 19th century and the implementation of their centralization policy led to efforts by the government to establish strict control over the distribution of water and land resources.

In the late 50s of the XVIII century, the Karakalpaks took an active part in the implementation of irrigation measures of the Khiva khanate, providing such assistance not only in the delta itself, but also in its environs. Such events were reflected in cartographic materials of the late XIX and early XX centuries.

In the Khiva chronicles of the early 19th century, the Yangiyop canal is described in connection with the events in the south-eastern district of the Mazdakkhan ruins. According to him, the Yangiyop and Karakoz canals were originally called by the same name and were built in the first half of the 19th century by Davlat Karakoz, a famous official of the khanate. In 1814, by the order of Muhammad Rahimkhan, the foothills of the Shohabad canal were cleared, and in 1815 the Dashovuz fortress was built there. In 1810, Muhammad Rahimkhan ordered the transfer of water to the Oqmachit area in the foothills of the Yangiarik canal and the improvement of these areas.

In the first quarter of the 19th century, there were no large settlements on the right bank of the Amudarya. The description of the events of 1806 speaks of the strong rabbi that Eltuzarkhan built in the north of Sheikh Abbas. In 1828, the new head of Polvonyop, Toshako, was built, and in 1831, a canal was built to the Old Urgench district. "In the spring, the region's crops were short of water. He said ...

He rode to the saxaul of the Pahlavonota river, called Toshako, the sakonik of the Pahlavonota river, which he dug last year. The construction of Toshako, the head of a solid canal on the ground consisting of gravel, made the wet canal of South Khorezm much more useful.

By 1855, irrigation work had been carried out on the left bank of the upper delta, including a large area of Khanabad. One of the Khanabad canals, the Karakalpak Canal, was dug by the Karakalpaks in the 1930s, and although the Khiva khan Allakulikhan allowed them to live here, the Karakalpaks withdrew when no action was taken against the oppression of the Karakalpaks by the Turkmen. The Karakalpaks were firmly established in the Aral Sea and above in the first quarter of the 19th century. If during the reign of Muhammad Amin the Karakalpaks were officially allowed to settle in the lands from the Kukuzak coast to the Aral Sea, during the reign of Muhammad Rahim I some of them were relocated to the north-western districts of the Aral Sea. Each time the khan attacked the Karakalpak tribes or tribes, he moved them, but this time he moved them to the southern border of the Aral Sea. As a result,



the Karakalpaks completely conquered the lands from the Chilpak area on the right bank of the Amudarya to Kipchak on the left bank of the Amudarya.

In the khanate, Uzbeks lived in villages stretching from Khojaly to Toshovuz and Gurlan. They were mainly engaged in farming, gardening, silkworm breeding, fishing. Most of the population lived along the canals, in wetlands. The periphery of human habitation, as in towns and villages, is surrounded by a soil wall with a height of a ridge to prevent flooding.

Karakalpak households were located in the foothills of the Amudarya, on the lands from Khojaly to the Aral Sea, and on the islands in the Aral Sea. They were mainly engaged in animal husbandry and partly in grain growing. In particular, goats and sheep played a major role in Karakalpak households. They supplied wool, milk and meat. Goats were mainly fed by the poor. Because the goat is not very demanding on food, it feeds on poor plants of the swamps, requires less care and at the same time gives high milk. That is why the Karakalpak folk proverb says, "The poor man's cow is a goat."

For the people living along the Aral Sea, the availability of rich pastures provided an opportunity to develop animal husbandry, the availability of reeds and thickets was useful for breeding cattle, and desert pastures were useful for nomadic pastoralism.

The proximity of the sea, many lakes and rivers contributed to the development of fisheries. All the Kungrad tribes living near the Aral Sea, especially the Koldaully, Muyten, Ashamayli, Kiyat, Kazakhs of Alima descent, have been fishing since ancient times. In the early twentieth century, large fishing communities emerged in the south of the Aral Sea. In 1910, the Khiva Joint Stock Company was established, uniting Astrakhan and Caucasian fish producers. Of the 57 fisheries covering the entire coast of the Aral Sea, 17 were on the Muynak Peninsula. Fishing on the southern shores of the Aral Sea, in the delta and inland lakes of the Amudarya, amounted to 472.7 thousand pounds in 1912, 699.1 thousand pounds in 1913 and 760 thousand pounds in 1916.

The islanders living in and around Kungrad were engaged in fishing as well as grain growing and cattle breeding. It is noteworthy that in the early 19th century, when the khan of Khiva besieged Kungrad, plowed the crops and offered to surrender, the captives replied: "Three months of melon, three months of soap, three months of pumpkin, three months of chickpeas."

The Turkmens, who lived in the lands stretching from the cities of Tamagur and Ilalli to Old Urgench, were engaged in grain-growing and cattle-breeding. Due to the shortage of water, Turkmen tribes in the ancient Urgench region mainly planted less water-intensive crops such as wheat, barley, millet, sesame, and flax, and engaged in more livestock. They had farms that owned 500 or even 1,000 camels. Between Ilalli and Toshovuz, Bukhara prisoners of war and silkworms lived.

In the Uzbek-populated areas of the Aral Sea region, horticulture is developed, and in their gardens are grown jiida, apricots, apples, peaches, pears, and viticulture is widespread. The Uzbeks knew how to keep their crops well. They dried many varieties of apricots, melons, figs, grapes.

**Conclusion.** The natural conditions of the Amudarya delta were the basis for the formation of an economic complex of the local population, consisting of agriculture,



livestock and fisheries. In this case, favorable climatic conditions, water resources, soils cultivated by the labor of farmers have contributed to the development of agriculture. Exact historical and ethnographic data show that there is a link between the use of natural resources and the natural conditions of human settlements, since the main economic system of subsistence was agriculture.

The lands cultivated in the Khiva khanate consisted of state, vakf and property lands, in terms of their ownership, and the state-owned lands constituted the majority. Because farming in the khanate is based on artificial irrigation, and irrigation facilities require a lot of labor and expenditure - which shows that the work can be organized only by the state.

The second half of the 18th century - the beginning of the 19th century saw the intensification of centralization tendencies in the Khiva khanate, the policy of strengthening the position of the central government of the first representatives of the Kungrad dynasty, economic growth, especially land and water recovery. This is primarily reflected in changes in the composition of land ownership. In particular, the state land fund has been significantly expanded, and the process of redistribution of private land ownership has intensified.

#### References:

- [1]. Abdurasulov U.A. "Zemelnie otnosheniya v Xivinskom khanstve vo vtoroy polovine XVIII - pervoy chetverti XIX". AKD, Tashkent, 2008.
- [2]. Gulomov Ya. History of irrigation in Khorezm (from ancient times to the present). Tashkent, 1959.
- [3]. Ziyoev H. "Unopened pages of history" Tashkent- "Mehnat" -2003.80-p
- [4]. Lobachevskiy V. Khivinskiy district. "Voenno- statisticheskoe opisaniye Turkestanakogo voenno- go okruga" Tashkent, 1912.
- [5]. Davletov S.R., Tajieva U.R. Nature Management In Historical Context Of Khorezm The American Journal of Social Science and Education Innovations, 2(07), 353-360.
- [6]. Shkapskiy O. „Amu-Darinskije essays“ To the agrarian question in the lower Amudare, Tashkent, 1900.
- [7]. Tolstov S.P. "Drevnexorezmiyskoy tsivilizatsii" Moscow- Leningrad. Izdatelstvo AN SSSR, 1948.
- [8]. Ismail Mirpanjiy. "Memories in captivity" The first and second parts. Translated by Ismail Bekjan. - Urgench: Quvonchbek-Mashhura, 1997.
- [9]. Priarale na perekrestke kultur. - Samarkand-Tashkent: MITsAI, 2013.
- [10]. Ethnokulturnie osobennosti prirodopolzovaniya narodov Priaralya (v kontse XIX -XX ). M., 2003.



UDC:159.9

## STRENGTHENING THE INSTITUTION OF THE FAMILY AS A PRIORITY DIRECTION OF SOCIAL PROTECTION OF THE FAMILY

**Raimjanova Ugilxon Nomanovna**  
**Tashkent State Agrarian University**  
**Senior Lecturer, Department of Humanities**  
[oraimjanova@mail.ru](mailto:oraimjanova@mail.ru)

**Annotasiya.** Ushbu maqolada oilani ijtimoiy himoya qilish, oila institutini mustahkamlash ustuvorligi ko'rsatilgan. Shuningdek, u mamlakatimizda ayollar va qizlarning ijtimoiy-siyosiy va ijtimoiy faolligini oshirish yo'llari va usullarini ko'rsatadi. Bundan tashqari, har tomonlama barkamol va barkamol avlodni mustahkamlashda oila rolini oshirish va oila institutini mustahkamlash borasidagi islohotlar alohida ta'kidlangan. Bundan tashqari, oilani ijtimoiy himoya qilish, oila institutini mustahkamlashning ustuvor yo'nalishlari bo'yicha xulosa va tavsiyalar berildi.

**Kalit so'zlar:** Oila instituti, oilani mustahkamlash, ijtimoiy himoya, ayollar, ijtimoiy siyosat, huquqiy ong, ijtimoiy faollik, oila institutini mustahkamlash, yosh oilalarning qonuniy manfaatlari.

**Аннотация.** В статье подчеркивается приоритет социальной защиты семьи, укрепления института семьи. Также показаны пути и средства повышения социально-политической и социальной активности женщин и девочек в нашей стране. Кроме того, выделяются реформы, направленные на повышение роли семьи в укреплении всесторонне развитого и гармонично развитого поколения и укрепление института семьи. Кроме того, сделаны выводы и рекомендации по приоритетным направлениям социальной защиты семьи, укреплению института семьи.

**Ключевые слова:** институт семьи, укрепление семьи, социальная защита, женщины, социальная политика, правовое сознание, общественная активность, укрепление института семьи, правовые интересы молодых семей.

**Annotation.** This article highlights the priority of social protection of the family, strengthening the institution of the family. It also shows the ways and means of increasing the socio-political and social activity of women and girls in our country. In addition, reforms to increase the role of the family in strengthening a comprehensively developed and harmoniously developed generation and to strengthen the institution of the family are highlighted. In addition, conclusions and recommendations were made on the priority areas of social protection of the family, strengthening the institution of the family.

**Keywords:** Family institute, family strengthening, social protection, women, social policy, legal consciousness, social activism, strengthening the family institution, legal interests of young families.

**Introduction.** To increase the socio-political and social activity of women in our country, to create conditions for them to realize their abilities and potential in various fields and sectors, to ensure unconditional observance of their rights and legitimate



interests, to protect motherhood and childhood. Extensive work is underway to provide comprehensive support, as well as to strengthen the institution of the family. To further strengthen and develop the institution of the family, which is the basis of our society, to raise to a qualitatively new level all the work being done to strengthen the protection and support of families, especially young families, the legal and socio-economic interests. A comprehensive set of targeted measures has been developed to increase the role of the family in the upbringing of a spiritually mature and comprehensively developed generation, to strengthen the role and place of the community in building a strong, healthy family [1].

Family development in Uzbekistan is considered at the global level in the framework of the United Nations Sustainable Development Goals, as well as in the Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021 [2].

At the same time, a number of systemic problems and shortcomings that hinder the successful implementation of public policy in this area hinder the full implementation of reforms to strengthen the institution of the family and the achievement of the set goals. For example:

**first**, there is no effective system for coordinating and monitoring the activities of relevant agencies and organizations, and the level of cooperation between the state, civil society institutions and the private sector on family development issues is low;

**secondly**, the specialization of scientific research in the field of strengthening the family is narrow, disconnected from the realities of modern life, the results of scientific research are poorly implemented in practice;

**third**, there are changes in the demographic development of the family, the number of family divorces is growing, there is a lack of research to substantiate the negative trends and causes of problems in this area;

**fourthly**, the potential of cultural and historical heritage in the family and educational institutions is underutilized, and efforts to prevent the influence of ideas and views that are alien to our national mentality are ineffective;

**fifth**, the legal framework for strengthening the family is imperfect, and there is no solid legal framework for the protection and support of the family based on the study of law enforcement practices and best international practices;

**sixth**, there is a shortage of specialists and low qualifications, the education system does not have a mechanism for forecasting the need for specialists, and the curricula for strengthening and developing the family institution are not perfect.

In order to implement a set of measures to improve the institution of the family, to ensure close cooperation and active role of government agencies, civil society institutions and citizens in this process, as well as the Decree of the President of the Republic of Uzbekistan dated February 2, 2018 In accordance with the Decree No. PF-5325 "On measures to radically improve the activities in the field of support and strengthening the institution of the family" [3].

Analysis of the relevant literature. It should be noted that the institution of the family is to some extent reflected in the legal systems of the territory of Uzbekistan. In particular, the relationship to protect the family has been thoroughly analyzed in Islamic law by jurists of the time. In particular, it is reflected in Burhanuddin Al-



Marghinani's "Hidoya", "Mukhtasar" and a number of other studies. Also studied by A.Kh. Saidov, A.R. Rakhmanov, SA Iskhokov and others. Issues of family protection in the CIS countries are discussed by OP Pavlova, L. Pchelinsova, A. Nechayeva, N.V. Letova, V.V. Ryazansev, M.N. Maleina, A.Z. Dzugayeva, O. Dyujeva, I.M. Researched by Kuznesova, VG Ionchenkova and others [4].

National jurists H.R.Rahmonkulov, I.B.Zokirov, O.Okyulov, M.Kh.Baratov, R.J.Matkurbanov studied the legal status on a general basis from the civil-legal point of view [5].

In the researches carried out by scientists in the Republic of Uzbekistan, including FMOtahojayev, M.Vosikova, G.Inomjanova, A.Yu.Azizova, Sh.R.Yuldasheva, NAAshurova, Z.Esonova aspects are highlighted [6].

**Research methodology.** The article explores the strengthening of the Family Institute through scientific abstract-logical reasoning and comparative analysis in the study of the family as a priority area of social protection. In addition, the methods of induction and deduction assessment were widely used in the analysis of the priorities of social protection of the family, strengthening the institution of the family. Also, the methods of scientific observation were used in the development of the priority of social protection of the family, strengthening the institution of the family.

**Analysis and results.** The family is a sacred place. Only the use of this sacred word in reference to the family has a deep meaning and significance. After all, the foundation of the future of the nation is laid in the family, which will form a generation that will ensure the longevity of life, preserve national culture, traditions, moral and spiritual values, lay the foundation for economic prosperity and cultural development. Of course, it is impossible to imagine a real human life, a prosperous and happy life without these actions. In the essence of the reforms being carried out in our country, the role of the family, which has become the backbone of our lives in achieving our goals, is enormous, given the priority of the individual and his interests [7].

In order to further strengthen the family and increase its social significance, legal norms aimed at regulating legal relations were prepared on the basis of the ideas of independence and the ideology of national independence. It was developed in accordance with international norms and national mentality. Relationships between family members are governed by ethical and legal rules. Influential organizations around the world also make a significant contribution to strengthening the family and protecting the rights of parents and children. Thanks to independence, the protection of human interests, family, motherhood and childhood in our country has begun to be carried out in accordance with international law. In particular, the United Nations Universal Declaration of Human Rights (1948), the Convention on the Elimination of All Forms of Discrimination against Women (December 18, 1979), and the Law on the Rights of the Child (1989). November 20, 1951), "On the Payment of Men and Women for Equal Work" (June 29, 1951), "On the Political Rights of Women" (1952) , December 20) Conventions, The Hague Convention on the Civil Aspects of the Abduction of Children to Other Countries (October 25, 1980), "The Universal Declaration on the Life, Protection and Development of Children Declaration "(September 30, 1990), ILO Convention No. 103 on the Protection of Motherhood (June 23, 1952) and a number of other documents ratified by our Parliament during the



years of independence, family, motherhood and childhood. interests in accordance with the norms of international law are positive steps in the field of protection. In particular, the fact that the law provides for additional guarantees for the rights of children in need of social protection in a separate chapter is another proof in the field of lawmaking that Uzbekistan has a strong social protection system. 'Idi [8]. It is especially noteworthy in this chapter that the rights of children in need of social protection to the family environment are guaranteed. Significantly, the law states that if it is not possible to place a child in a family, placement in a specialized institution is a last resort. It also guarantees the right of children in need of social protection to social integration, the right to housing, social assistance, the right of children with disabilities, children with physical and (or) mental disabilities to medical and social assistance and education. also reflected in this document.

One of the first international legal instruments to which the Republic of Uzbekistan acceded on December 9, 1992 was the Convention on the Rights of the Child. The Republic of Uzbekistan regularly submits national reports on the implementation of the Convention to the UN Committee on the Rights of the Child. In turn, on the basis of the recommendations of the UN Committee on the Rights of the Child, a National Action Plan is being developed and implemented. The norms of this international document are fully implemented in our national legislation. The norms of the Convention on the Rights of the Child are enshrined in the Constitution of the Republic of Uzbekistan, the Civil, Family, Labor, Criminal and Criminal Procedure Codes, on the Fundamentals of State Youth Policy in the Republic of Uzbekistan, —Education Laws of the Republic of Uzbekistan "On Citizenship", "On Health of Citizens", "On Social Protection of Persons with Disabilities" Many decrees and resolutions of the President, the "National Training Program", are reflected in the decisions of the Government of the Republic guaranteeing the rights of the child [10]. It should be noted that these documents reflect the legal framework and optimal solutions to the urgent tasks of the main reformer state in Uzbekistan, the consistent and systematic gradual implementation of strategic goals in the field of youth.

Family law states that all citizens are equal, regardless of nationality or race, "... all citizens have the same rights and freedoms, regardless of gender, race, nationality, language, religion, social origin, beliefs, personality and They are equal before the law, regardless of their social status "(Constitution of the Republic of Uzbekistan, Article 18) .1 This is an invariable rule arising from the friendship of peoples, which is reflected in family law and allows people of different nationalities. belonging or racial affiliation means that it has no significance in family relationships [11].

In a democratic state governed by the rule of law, in a free and just civil society, non-property personal relations are the main determinant, while property relations are the product of subordination. The reason why non-property personal relationships predominate in the sum of family relationships is primarily related to procreation and child rearing. Thus, family law, the order and conditions of marriage, the dissolution of marriage, the invalidity of the marriage, the personal and property relations arising between husband and wife in the family, between parents and children, between other members of the family , adoption, guardianship and trusteeship, the relationship arising from the adoption of children into the family, a set of legal norms governing the



registration of acts of civil status. In revealing the essence of family law, it is necessary to take into account not only its concept, the specificity of the subject, but also its most important principles, because its principles reflect the specifics of this area of law. The medical system plays an important role in the formation of a healthy family. The number of hospitals in the country is growing every year, especially in 2015 in Tashkent, in 2017 this figure reached 81, and in 2019 - 85 (Table 1).

**Table 1****Number of hospital facilities**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
The Republic of Uzbekistan	<b>1158*</b>	<b>1181*</b>	<b>1225*</b>	<b>1128*</b>	<b>1058*</b>	<b>1071*</b>	<b>1106*</b>	<b>1135*</b>	<b>1165*</b>	<b>1205*</b>
The Republic of Karakalpakstan	50	48	51	46	41	42	42	41	43	49
provinces:										
Andijon	92	107	123	123	117	125	136	136	139	149
Buxoro	72	77	79	73	73	72	75	79	81	82
Jizzax	63	64	65	69	57	58	58	60	58	63
Kashkadarya	104	105	112	86	89	90	86	82	94	89
Navoi	43	42	37	29	29	29	28	29	31	34
Namangan	108	111	129	105	97	99	115	125	131	116
Samarkand	107	111	125	98	89	91	89	90	85	99
Surxondaryo	78	74	70	64	44	50	53	58	64	57
Sirdaryo	36	36	35	37	36	34	33	33	38	45
Tashkent	91	82	83	84	72	73	78	81	82	85
Fergana	157	164	152	148	136	124	123	118	116	125
Khorezm	32	32	33	34	34	37	38	42	42	50
Tashkent	106	109	114	114	127	131	135	144	144	146

Note: \*) Data not distributed by regions are added

The Institute of the Family is a historical institution. Legislation has its own legal basis, but today a new concept is needed instead of the institution of family law. The Uzbek people have a rich history and values. There have been changes in family law and family protection regulations. It was necessary to take into account the material and living conditions of the family, their moral and spiritual views. Monitoring of wireless monitoring mechanism is being introduced. We have also had a number of positive developments in the health care system. In particular, the number of children's polyclinics (departments) is growing from year to year. In 2015, this figure was 1997, in 2017 it was 1102, and in 2019 it reached 2058 (Table 2). . It is obvious that our country pays a lot of attention to healthcare.

**Table 2****Key health indicators (end of year)**

	2012	2013	2014	2015	2016	2017	2018	2019
Number of hospital facilities	1225	1128	1058	1071	1106	1135	1165	1205
Number of hospital beds:								
total, thousand	138,3	134	130,9	129,7	132	135,7	153,6	153,4
Per 10,000 population	46,1	43,9	42,2	41,1	41,1	41,6	46,6	45,2
The total number of patients treated in hospitals, thousand	4975	5150	5294	5294	5582	5985	6236	6154
Number of population per hospital	217	228	237	243	243	241	215	221
Number of places for pregnant women and those giving birth:								
total, thousand	19,3	18,7	18,1	17,6	17,4	17,7	17,4	17,3
10,000 women (15-49 years old)	22,7	21,8	20,9	20,2	19,9	20,9	19,6	19,3
Number of outpatient clinics	6389	6421	6054	6220	6542	5296	5627	5955
Capacity of outpatient clinics, number of trips per shift:								
total, thousand	424,3	418,5	406,7	407	411,9	405,3	440,8	468,6
Per 10,000 population	141,5	137,3	131,1	128,9	128,2	124,1	133,7	
Number of obstetric and gynecological rooms:	3066	2766	2823	2752	2640	2157	2186	1900
Number of children's polyclinics (departments):	2418	2315	2104	1997	1783	1102	1128	2058
Number of doctors in all specialties:								
total, thousand	81,3	81,7	82	83,4	84,1	85,4	89,8	91,9
Per 10,000 population	27,1	26,8	26,4	26,4	26,2	26,1	27,2	27,1
Population per doctor:	369	373	378	379	382	383	367	369
Number of female doctors in all specialties:								
total, thousand	42,7	42,9	42,7	41	43,2	43,1	44,8	44,3
as a percentage of the total number of doctors	52,5	52,5	52,1	51,6	51,4	50,5	49,9	48,2
Number of nurses:								
total, thousand	324,6	327,4	332,4	336,4	341,3	348,2	356,7	365,7



Per 10,000 population	108,2	107,4	107,2	106,5	106,3	106,6	108,2	107,8
The number of people per nurse	92	93	93	94	94	94	92	92,7

Source: Created by the author on the basis of Stat.uz.

Conclusions and suggestions. In order to further improve the institutionalization of the family as a priority direction of social protection of the family, we attach the following conclusions and recommendations:

1. Further improvement of the legislative and regulatory framework aimed at the development and improvement of the family, taking into account today's requirements, further strengthening the attention of our society to this issue;

2. Strengthen the attention and care for young families, provide them with legal and social protection, provide comprehensive support to young families, both materially and spiritually, including the provision of comfortable and cozy housing. providing accommodation, providing the necessary privileges and advantages;

3. Strengthen the role and status of the community institution in our society and daily life, strengthen their influence in the support and formation of young families, provide the necessary support and assistance to young families;

4. The family, first of all, in strengthening the care of the state and society in solving the problems of needy families, providing them with financial assistance and social support in raising children, creating decent social and living conditions, including strengthening the family pay special attention to women who carry the main burden on their shoulders;

5. Further improvement of the system of protection of family health, motherhood and childhood in accordance with the principle "Healthy mother - healthy child"

6. The role of the family in further developing the spiritual foundations of our society, preserving and strengthening the ancient national values, creating a broad spiritual environment in our society, resisting various harmful influences that are completely alien to our national mentality and growing. increase its role and importance;

7. Strengthen the role of the family in the upbringing of a physically healthy, spiritually mature and harmoniously developed harmoniously developed generation and, for this purpose, strengthen the mechanism of practical cooperation of the family with educational institutions, ensure their close and effective cooperation.

#### References:

- [1]. Otaxo'jaev F.M., Yuldasheva Sh.R. Family law. - T., Adolat, 2007.
- [2]. Action Strategy of the President of the Republic of Uzbekistan on five priority areas of development of the Republic of Uzbekistan for 2017-2021. Decree No. PF-4947 of February 7, 2017
- [3]. Decree of the President of the Republic of Uzbekistan No. PF-5325 of February 2, 2018 "On measures to radically improve the activities in the field of support of women and strengthening the institution of the family."
- [4]. Otaxo'jaev F.M. Family law. - T.: TDYUI. 2005. - 280 p.
- [5]. Dadaboyev Yu.T., Abdullaev Yu. and dr. "Family right." Uchebnoe posobie. Tashkent, 1998 75 31.
- [6]. Tursunov Y., Usmanova M. The right to social security. TDYUI. Tashkent, 2004



- [7]. Inoyatov A. Labor law of the Republic of Uzbekistan. "The world of economics and law." Tashkent, 2002
- [8]. Yuldasheva Sh. Guide for practical training in family law of the Republic of Uzbekistan. - T.: TDYUI. 2004. - 44 6.
- [9]. International human rights treaties: collection / Editor-in-Chief of the Uzbek edition A.Kh. Saidov. - T.: "Adolat", 2004.
- [10]. Legal Encyclopedia of Uzbekistan / Responsible for publication RA Muhitdinov et al.; Editor-in-Chief N.Toychiyev. - T.: "Adolat", 2010.
- [11]. Resolution of the President of the Republic of Uzbekistan. About the state program "Year of harmoniously developed generation". 2013.

**UDC: 327.66.4**

## **DASHHAVUZ AS AN CENTER OF THE KHANATE IN XIX CENTURY**

**Navruzov Saparboy**

**Candidate of Historical Sciences,  
Associate Professor, Department of History,  
Urgench State University.**

[navrozovs@gmail.com](mailto:navrozovs@gmail.com)

**Nurullayeva Nodira**

**Candidate of Historical Sciences,  
Associate Professor, Department of History,  
Urgench State University.**

[nurullaeva5@gmail.com](mailto:nurullaeva5@gmail.com)

**BabayazovUmidbek**

**Master, Department of History,  
Urgench State University.**

[babayazovu@mail.ru](mailto:babayazovu@mail.ru)

**Annotatsiya:** Maqolada XIX asrning yarmida paydo bo'lgan O'rta Osiyoning kech feodal shahri Dashxavuz haqida so'z boradi. N. Muravyov, G. Danilevskiy, F. Baziner, knyaz Masalskiy, A.Kun va boshqalar u haqida qiziqarli ma'lumotlar berishadi. O'sha vaqtda shaharda hunarmandchilik: to'quvchilik, charm buyumlar va boshqa narsalarning rivojlanganligi ko'rsatib beriladi.

**Kalit so'zlar:** Dashxavuz, Sazhen, Foot, Verst, Chitgar, Posachi, Sovunchi, Chorsu, Tim, Kanava, Shahobod, Chapanfurush, Buyakchi.

**Аннотация:** В статье рассматривается позднефеодальный город Средней Азии Дашхавуз, возникший в середине XIX века. Интересные сведения о нем дают Н. Муравьев, Г. Данилевский, Ф. Базинер, князь Масальский, А. Кун и другие. В то время в городе было развито ремесло: ткачество, кожгалантерея и многое другое.

**Ключевые слова:** Дашхавуз, Сажень, Нога, Верста, Читгар, Посачи, Мыло, Чорсу, Тим, Канава, Шахабад, Чапанфуруш, Буякчи.



**Abstract:** The article deals with the Central Asian late feudal city of Dashkhavuz, which appeared in the half of the XIX century. N. Muravyov, G. Danilevsky, F. Baziner, Prince Masalsky, A. Kuhn and others reported interesting information about him. In the city, the craft was developed especially: weaving, leather goods and other things in that period..

**Keywords:** Dashhavuz, Sazhen, Foot, Verst, Chitgar, Posachi, Sovunchi, Chorsu, Tym, Kanava, Shahabad, Chapanfurush, Buyakchi.

**Introduction.** Questions of the history the Central Asian medieval late feudal city attract the attention of researchers, but this problem still remains insufficiently developed. In the sources used by historians, many aspects of the life of Central Asian cities are poorly covered.

So, as the orientalist I. P. Petrushevsky, who until recently studied the medieval feudal city, noted that, " the internal structure of the medieval feudal city still remains one of the dark, little-studied problems of Oriental historiography: The issues of periodization of the history of cities, the social composition of their population, the issues of the specifics of their system, the existence of workshops, the organization of trade, social relations and forms of social struggle remain undeveloped." [1].

Dashkhavuz, as the center of the khanate, played an important role in the political and economic life of the khanate. In the works of pre-revolutionary researchers, there is enough information and facts that reflect the administrative and economic situation of the city, as well as the history of its origin.

**Literature Review.** For the first time, Nikolai Muravyov mentioned Dashkhavuz, calling it Dashkhavuz. During his stay in this city, it seems that there were no fortresses or villages in it yet.

More knowledgeable about the cities of the khanate, Danilevsky also reported a lot of interesting things about Dashkhavuz. According to travelers, Dashkhavuz is located 61 versts northwest of Khiva.

With regard to the city building, Mr. Danilevsky reported the following:

"The city consists of a small number of mud houses, some of them dilapidated and scattered on both sides of the Shahabad ditch. On the right side of Shahabad, a fortification was built, consisting of a quadrangular wall with angular round towers. The length in each side is 300 fathoms: the height of the wall is 4 fathoms, its thickness at the bottom is 3 fathoms, and it narrows to 1.5 feet at the top. This fortification has three gates: from the east, north and south: they are built of brick, but the wall and towers are made of clay, and in many places they have collapsed." [2].

No less important is the information provided by M. Ivanin, who in his descriptions indicated the role of Dashkhavuz in a strategic sense. First of all, the researcher writes: "Our informed prisoners assured that when the khan learned about the construction of the Novo-Aleksanrov fortification by us, he himself decided to build a fortress on the site where Dashkhavuz now stands. The Khivans considered this point to be militarily important. It should be noted that the researchers noting the characteristic features and features of the city of that period wrote: "In the late medieval cities of Central Asia, a prominent place was occupied, as is well known, by various monumental buildings associated with trade and handicraft activities - covered bazaars,



caravanserais, so-called chorsu, tyms, toks, which in architectural design could compete with Muslim mosques, madrasas and other religious buildings”[3].

**Analysis and Results.** Interesting information concerning the architecture, as well as the history of the city of Dashhavuz, is reported by Baziner, who visited the city in 1842. "On September 17, our travelers arrived in Dashkhavuz," Baziner wrote, " where they spent a whole month waiting for the khan to return from the Bukhara border»

This city also lies at the Shavat canal, 30 versts from Ilyala. A log bridge spans the canal, and in front of the bridge is a fortress built in 1835, or simply an earthen rampart 25 feet high, forming a fairly regular quadrangle, each side of it no more than 900 paces in length.[4]

The information provided by A. L. Kuhn, who visited Dashhavuz in 1873, introduces the reader in more detail to the city and the changes that took place as a result of political events.

"When the news of the approach of the Russians from Ustyurt, - says Kuhn (in the spring of last 1872),the walls of Dashhavuz were renewed and strengthened by its current ruler (hakim) Yakupbai. Dashhavuz, the inhabitants entrust, was built by Allakuly Khan. The name Dashkhavuz (stone pond) was given to the newly built fortress because in its place in the old days there was a pond lined with stone, Allakuly Khan laid the fortress here, settled it with the adjacent land plots-Persians, part of the military prisoners taken from Khorasan, part of the Khivatajiks.[5].

Further, Kun. A. L., as an eyewitness to the events that took place in his eyes, reports: "The Dashkhavuz district, at first glance, gives the impression of richly cultivated land, and this should be attributed to the predominance of the Persian population in it, more developed than the Uzbeks living nearby. This superiority of one race over another is seen here not only in the cultivation of the land, but also in the way of life. Despite the slave status, the home life of the redeemed Persians is furnished with great amenities”[6].

With regard to the living population, the reports of Danilevsky are important, who argued that the population of the surrounding area is quite crowded and consists mainly of Sart, Turkmens and Zhyamshids, who do not wander for long distances. In relation to trade, Russian travelers reported various information and facts that reflected reality. It should be noted that the number of trade shops located in the city, according to Baziner, is up to 180.

A. L. Kun reported that in Dashhavuz up to 300 shops and workshops and one caravanserai, auctions are held on Wednesdays and Saturdays.

**Conclusion.** As a city of the Khiva Khanate, Dashkhavuz was the center of the ruling class, the center of which flowed the wealth of society, the mass of surplus product, both withdrawn through non-economic coercion, and acquired in the process of economic and trade relations. The research claims that the oriental bazaar is not only a place of trade, but also a center of handicraft production. In the medieval city, there is no clear border between artisans and merchants, most of them sell their own products directly from the workshop located in the bazaar.

In this regard, interesting facts were reported by Prince V. I. Masalsky, who visited Khiva in 1912: "that there are 300 shops in the city and the main object of trade



is bread. In relation to the existing houses in Dashhavuz, although approximate, but still important are the reports of A. L. Kun, who believed that there are up to 400 houses in Dashhavuz, by the end of the XIX century, according to Girsheld, the number of courtyards in the city of Dashhavuz and 400 inhabitants in it. The cities of Central Asia, as well as in the whole East, did not have a special legal status or administrative autonomy, all the central administrative positions in them were held by state officials.[7].

It is noteworthy that the reports contain specific data on administrative persons. For example, Danilevsky reported that in 1842, the Dashhavuz was ruled by Hakim YakubzhanMahram.

As for religious and educational institutions, pre – revolutionary researchers also have some information, they note that in the city of Dashhavuz in 1873 there were 6 mosques and the same number of schools and one madrasa.

The materials reported in the sources contain information regarding the fact that the Dashhavuz was ruled by Hakim JumaniyazMahram.

This information is confirmed by Masalsky, who reports information about the city by 1910-1911, in which there were 6 mosques with schools and madrasas. Thus, Dashkhavuz, as a city of late feudal Khorezm, by its geographical location on both coasts of Shahabad and on the lands of the central part of the khanate, was considered a lever connecting the south with the north, along with Hazarasp, one of the strongest fortresses.

Thus, according to travel sources and the available data in the sources, the city of Dashkhavuz played an important role in the economic and cultural life of the khanate.

#### References:

- [1]. I.P.Petrushevskiy. Gorodskaya znat' v epoxu gosudarstva Xulaguidov // Sovetskoy vostokovedeniya V. M. 1948.
- [2]. Murav'ev N. N. Puteshestvie v Turkmeniyu i Xivu kapitana Nikolaya Murav'yova General'nogo shtaba, otpravlennogo v 1819-1820gg. v sii strani dlya peregovorov. M. Ch 1 1822,
- [3]. Danilevskiy. G. I. Opisanie Xivinskogo xanstva. ZRGO. K. V. SPb, 1851. [4]. Ivanin M. Xiva i reka Amudar'ya. M. 1879.
- [5]. Bol'shakov. O. G. Bentovich.I.B. Beleniskiy.A.M. Srednevekoviyy gorod Sredney Azii. L. 1973. S. 38.
- [6]. Savel'ev. P. Puteshestvie g. Bazinera cherez kirgizskuyu step' v Xivu. Turkestanskije vedomosti № 31. 1873 g.
- [7]. Girshfel'd. V. Voенno-strategicheskoe opisanie Xivinskogo oazisa. Ch II, Tashkent 1903
- [8]. Baltaev. A. Xorazm tarixiga doir materiallar. Rukopis' № 9320. Institut vostokovedeniya.



UDC: 303.422

## TATYANA ALEKSANDROVNA ZHDANKO IS AN OUTSTANDING SCIENTIST AND ETNOGRAPHER.

**Navruzov Saparboy**  
Candidate of Historical Sciences,  
Associate Professor, Department of History,  
Urgench State University.  
[navrozovs@gmail.com](mailto:navrozovs@gmail.com)

**Nurullayeva Nodira**  
Candidate of Historical Sciences,  
Associate Professor, Department of History,  
Urgench State University.  
[nurullaeva5@gmail.com](mailto:nurullaeva5@gmail.com)

**Olimova Yulduz**  
3rd year student, Faculty of History,  
Urgench State University.  
[Olimova\\_Y@mail.ru](mailto:Olimova_Y@mail.ru)

**Annotatsiya.** Ushbu maqolada taniqli etnograf Jdankoning etnografik tadqiqotlari haqida so'z yuritiladi. U o'zining tadqiqotlari bilan O'rta Osiyo va Qozog'iston xalqlarining etnik jarayoni masalasini o'rganishga katta hissa qo'shgan, ayniqsa, qoraqalpoq xalqining madaniyati va iqtisodini batafsil tasvirlagan.

**Kalit so'zlar:** arxeologik va etnografik ekspeditsiya, ko'chmanchi chorvadorlar, yarim harakatsiz aholi, Orol dengizi mintaqasi, tarixiy-etnografik atlas, etnografiya, qoraqalpoqlar.

**Аннотация.** В данной статье идет речь об этнографических исследованиях выдающегося этнографа Жданко, который своими исследованиями внес большой вклад изучение вопроса этнического процесса народов Средней Азии и Казахстана, особенно подробно им описано хозяйство и культуру каракалпакского народа.

**Ключевые слова:** археолого-этнографическая экспедиция, кочевники-скотоводы, полуседлого население, Приаралье, историко-этнографический атлас, этнография, каракалпаки.

**Annotation.** This article deals with the ethnographic studies of the outstanding ethnographer Zhdanko, who made a great contribution to the study of the issue of the ethnic process of the peoples of Central Asia and Kazakhstan with his reaserch. Especially, he described in detail the economy and culture of the Karakalpak people.

**Key words:** archaeological and ethnographic expedition, nomadic pastoralists, semi-sedentary population, the Aral Sea region, historical and ethnographic atlas, ethnography, Karakalpaks.

**Introduction.** Today, in many spheres of life, the destroyed or interrupted continuity ties are being restored, including in science, in culture, and between generations of scientists. At present, in ethnography, as in other humanities, there is a re-evaluation of many scientific achievements and concepts, the scientific merits of



individual researchers, which should be reflected in new historiographical works. A healthy continuity of traditions and generations, accompanied by the qualitative growth of both science and scientists, is in itself a factor of progress. The arrival of the post-war generation of ethnographers in the big science was facilitated by the fact that they were able to rely on the experience, knowledge, as well as on the friendly and benevolent support and assistance of the older generation of scientists who managed to carry through the 1930s and preserve the basic values of Russian ethnography.

**Literature Review.** They were courageous people and brilliant scientists. They are S. P. Tolstov, S. A. Tokarev, M. O. Kosven, I. I. Potekhin, L. N. Terentyeva and others and formed the foundation of the revived Institute of Ethnography in Moscow. In this brilliant constellation of scientists and organizers of ethnographic science, the post-war generation of ethnographers took a worthy place. A bright personality, as a scientist and as a person, in this new galaxy of scientists, was Tatyana Alexandrovna Zhdanko.

Tatyana Aleksandrovna Zhdanko is an outstanding scientist, Doctor of Historical Sciences, patriarch of Russian ethnography. Tatyana Aleksandrovna Zhdanko was born on August 1, 1909 in the city of Elisavetgrad (now Kirovograd, Ukraine) in the family of a soldier. Her father, with the rank of lieutenant general, participated in the First World War. In 1916, he retired due to illness. He was treated in the Kiev military hospital, where he died. Tatiana Alexandrovna, her older sister and brother were raised by her mother, who worked as a teacher, later as a castellan of clinics at the Kiev Medical Institute, and as a librarian at the Uzbek State University in Samarkand. She died in 1962.

Tatiana Alexandrovna graduated from the seven-year labor school in Kiev in 1924. From 1924 to 1926, she studied at the Kiev Trade and Industrial Vocational School, after which she left for Moscow, and in 1927, T. A. Zhdanko entered the First Moscow State University at the Ethnographic department of the Historical and Ethnological (later Historical and Philosophical) Faculty. She specialized in the Central Asian cycle after completing her education at Moscow State University in December 1930. From February 1931 to December 1935 She worked at the Central State Museum of the Uzbek SSR as a senior researcher, then head of the department. As an employee of the museum, Tatiana Alexandrovna often went on expeditions to collect exhibits. In 1932, she first visited the Khorezm region and Karakalpakstan. For five years of work in the museum, she organized a number of expositions on the history of Uzbekistan, led tours of the monuments of Samarkand.[1].

From April 1944 to May 1947, T. A. Zhdanko was a post-graduate student at the Institute of Ethnography of the USSR Academy of Sciences. Its scientific director was S. P. Tolstov, who in his student years (1929-1930) led the first expeditions to Central Asia. Already in her post-graduate years, T. A. Zhdanko was involved in the research of the Khorezm Archaeological and ethnographic expedition of the Institute of Ethnography. As part of the expedition, Tatyana Alexandrovna led (from 1946 to 1959) the Karakalpak ethnographic detachment, for a number of years she was the deputy head of the expedition, who invariably remained S. P. Tolstov. In 1953, T. A. Zhdanko headed the sector of Central Asia and Kazakhstan.



**Analysis and Results.** The result of the work of numerous and multinational expedition teams and the result of the versatile activities of Tatyana Alexandrovna in this direction was the publication of several works devoted to the problems of the history and ethnography of the Karakalpaks. Among them are such fundamental studies as "Essays on historical ethnography of the Karakalpaks" (1950), "Karakalpaks of the Khorezm oasis" (1952), "Folk ornamental art of the Karakalpaks" (1958), "Karakalpaks" (Peoples of Central Asia and Kazakhstan 1962). Tatiana Alexandrovna also worked in archaeological teams on the excavations of the Toprak-kala palace, Koy-kyrylgan-kala and other remarkable historical monuments of ancient Khorezm. Since the 1940s, the main focus of her research has been the history and ethnography of the steppe nomadic and semi-nomadic peoples of Central Asia, primarily the Karakalpaks. Her PhD (defended in 1947) and doctoral (1964) dissertations and most of her published works are devoted to this problem [2]. Tatiana Alexandrovna, due to the 50th anniversary of her birth, was awarded the honorary title of Honored Scientist of the Karakalpak ASSR for her great achievements in the development of historical science in Karakalpakstan and in the training of scientific personnel.

Since 1976, Tatyana Alexandrovna has been the chairman of the specialized council for the defense of PhD theses at the Institute of Ethnography. For many years, she has been a member of the editorial board of the journal "Soviet Ethnography". She has government awards – the Order of Friendship of Peoples (1975), six medals, as well as Honorary Certificates of the Government of the Karakalpak ASSR and others.

In addition to the scientific direction associated with field research in Karakalpakstan, T. A. Zhdanko developed general theoretical problems. One of the main issues that she dealt with since the late 1950s was the study of ethnic processes in the Central Asian-Kazakh region from antiquity to the present day. In the late 1950s and early 1960s, Tatiana Alexandrovna was a member of the editorial board and was one of the authors of two volumes of the "Peoples of Central Asia and Kazakhstan" series "Peoples of the World". In the early 1970s, the main focus of her scientific activity was the organization of research, the development of programs for the collection of materials in the framework of a large all-encompassing project to create a "Historical and Ethnographic Atlas of Central Asia and Kazakhstan".

T. A. Zhdanko is an excellent teacher and educator. Her beneficial influence has been experienced by many scientists of Kazakhstan, Central Asian republics, Bashkiria, and the North Caucasus. According to Y. A. Rapoport, Tatyana Alexandrovna was just the "connecting link" between archeology and ethnography. Her most significant contribution to science was the development of a typology of economic and cultural complexes of the semi-sedentary population of Central Asia. T. A. Zhdanko based on her field material gave a detailed description of the economy and culture of the semi-sedentary groups of Turkmens and Karakalpaks. The economic and social structures of these groups were characterized by a complex combination of nomadic and sedentary features with pronounced patriarchal-feudal relations. T. A. Zhdanko justified the division into two subgroups: 1) nomads-pastoralists who moved from the steppes relatively recently, settled on the outskirts of oases; 2) the main group



of semi – sedentary population – descendants of those peoples in which this type of economy prevailed since antiquity, possibly since the Bronze Age.

The great merit of T. A. Zhdanko is that she raised and gave direction to the scientific life of a large galaxy of researchers from the Central Asian republics, Kazakhstan and the North Caucasus. The contribution of T. A. Zhdanko has an undoubted scientific significance, it has enriched our ethnographic knowledge about the culture of many peoples of Central Asia and Kazakhstan. Among them are representatives of the settled population – Uzbeks and Tajiks, Turkmens, as well as nomadic Kazakhs. On the basis of data from many disciplines, S. P. Tolstov and T. A. Zhdanko proved: "Undoubtedly, the Karakalpaks, as well as some Uzbeks, Turkmens and some groups of Kazakhs, were mainly formed on the territory of the Aral Sea region." In the XII-XIII centuries, in their opinion, the process of formation of the Karakalpaks took place as part of the Kangli association that emerged in the Aral Sea region, formed on the basis of a mixture of the Oghuz and Kipchak-Kimak tribes that came from the east [3].

**Conclusion.** It should be noted that the study of the ethnic history of the traditional everyday and modern culture of the Karakalpaks was one of the main areas of scientific interests of T. A. Zhdanko. She studied in detail the economic and cultural type of the Karakalpaks, which she characterized as a type of cattle breeders-farmers-fishermen. As S. A. Tokarev wrote, "only ethnography as a science that studies the ethnic characteristics of individual peoples can provide the most complete and exhaustive solution to the problem of the ethnogenesis of each given people. To understand the origin of the people, it is necessary to find out the genesis and development of the cultural image that mainly characterizes each given people." [4]. Following S. P. Tolstov, she proved the ancient origin of this type on the basis of her rich field material. The work of T. A. Zhdanko is also valuable because it introduces new and very important ethnographic materials into the historical sources, covering all the main points of settlement of the largest Karakalpak tribes and clans in the territory of the Karakalpak region.

Today we can confidently say: T. A. Zhdanko belongs to the people who have achieved success in life. This success is based on high morals, tireless hard work, constant kindness and goodwill to people, sincere, heartfelt respect for peoples and their cultures. It is also worth nothing that T. A. Zhdanko tried to create a "Historical and Ethnographic Atlas of Central Asia and Kazakhstan" on the basis of her research, which played an important role in the detailed study and study of ethnic groups living throughout Central Asia.

#### References:

- [1]. Zhdanko T. A. Essays on historical ethnography of Karakalpaks. - M.-L.-1950.
- [2]. Zhdanko T. A. Ethnographic studies and ethnographers of the Khorezm expedition. 1997.
- [3]. Kamalov S. K. About the life and scientific activity of T. A. Zhdanko // Ethnic history and traditional culture of the peoples of Central Asia and Kazakhstan. Nukus, 1989.
- [4]. Tokarev S. A. To the formulation of problems of ethnogenesis/ / SE. -1949, No. 3. - pp. 24-25, 36.



UDK 316.37.013.78

## **CREATIVE THINKING IS AN IMPORTANT FACTOR OF SOCIAL DEVELOPMENT**

**Hojiev Rasulbek Boynazar ogli**  
Lecturer, Department of Social Sciences  
Chirchik State Pedagogical Institute  
[hojiyev\\_rasulbek@umail.uz](mailto:hojiyev_rasulbek@umail.uz)

**Norboeva Dilnoza Orzikulovna,**  
2nd year student, Faculty of Humanities,  
Chirchik State Pedagogical Institute

**Annotasiya.** Mazkur maqolada bugungi kunda butun dunyo miqyosida deyarli barcha soha vakillari tomonidan eng ko'p o'rganilayotgan kreativlik tushunchasi va tuzilishi, uning shakllanishi va rivojlanishiga ta'sir ko'rsatuvchi omillar, kreativlikning jamiyat hayotida tutgan o'rni, ta'lim-tarbiya jarayonida o'quvchilarni kreativ fikrlash ko'nikmalarini shakllantirish zaruriyati hamda tashabbuskorlik hususiyatlariga ega bo'lgan barkamol avlodni tarbiyalashdagi ahamiyati haqida so'z yuritiladi. Shaxsda kreativ fikrlashning shakllanishi va rivojlanishiga ta'sir ko'rsatuvchi omillar falsafiy, psixologik, sosiologik nuqtai nazardan yondashilgan bo'lib, mazkur sohada faoliyat ko'rsatgan yetuk olimlarning va nufuzli xalqaro tashkilotlarning tajribalari va ilmiy izlanishlari natijalarida erishilgan xulosalariga tayaniladi. Shuningdek, ushbu maqolada kreativlik va kreativ fikrlash tushunchalari xorijiy va mahalliy manbalarga tayangan holda atroflicha tahlil qilingan.

**Kalit so'zlar:** Kreativlik, kreativ fikrlash, PISA, tafakkur, konvergent tafakkur, divergent tafakkur, yoshlar, lider.

**Аннотация.** В статье рассматриваются понятие и структура творчества, факторы, влияющие на его формирование и развитие, роль творчества в обществе, необходимость развития у учащихся навыков творческого мышления в учебном процессе, а также особенности инициативности. воспитание следующего поколения. Факторы, влияющие на формирование и развитие творческого мышления человека, рассматриваются с философской, психологической, социологической точки зрения, основываясь на опыте и научных исследованиях ведущих ученых и влиятельных международных организаций, работающих в этой области. В этой статье также представлен всесторонний анализ концепций творчества и творческого мышления на основе зарубежных и местных источников.

**Ключевые слова:** Креатив, креативность, креативное мышление, PISA, мышление, конвергентное мышление, дивергентное мышление, молодежь, лидер.



**Abstract.** The article discusses the concept and structure of creativity, factors influencing its formation and development, the role of creativity in society, the need to develop students' skills of creative thinking in the educational process, as well as the features of initiative, the upbringing of the next generation. The factors influencing the formation and development of human creative thinking are considered from a philosophical, psychological, sociological point of view, based on the experience and scientific research of leading scientists and influential international organizations working in this field. This article also provides a comprehensive analysis of the concepts of creativity and creative thinking based on foreign and local sources.

**Key words:** Creativity, creative thinking, PISA, thinking, convergent thinking, divergent thinking, youth, leader.

**Introduction.** Creative thinking, a creative approach to any work is one of the most important problems studied today in all spheres of life and the production process. A legitimate question arises. What is creative thinking? What is the role of creative thinking in modern society? How are creative features manifested in a person?

When approaching this issue, it is necessary to rely more on foreign experience, since we see that this issue has been widely and in detail studied by foreign scientists. For example, American psychologists Hennessy and Amabile argue that creativity and achievement have contributed to the development of human civilization around the world in a variety of fields, from science and technology to philosophy, art and the humanities [1].

**Literature review.** According to the European Organization for Economic Cooperation and Development, creative thinking is about more than just random ideas. It is a real skill, based on knowledge and experience that allows a person to sometimes achieve better results in difficult situations. Societies and organizations around the world are increasingly in need of innovative knowledge and creativity in solving problems [2].

It is true that the influence of creative thinking lags behind significant innovations in society as a whole, but it is also a universal and equal phenomenon, meaning that any person, to one degree or another, has the ability to think and is creative [3].

American scientist D. Wexler describes "Creative thinking as a type of thinking that requires a person to solve several problems or questions at once and helps to understand the uniqueness of the essence of things and events, as opposed to stereotypical, boring thinking".[4]

The PISA (International Program for Student Assessment) study defines creative thinking as the ability to effectively participate in the development, evaluation and refinement of ideas that lead to original and effective solutions, achievements and creative experiences in the field of knowledge.

**Research Methodology.** The lexical meaning of the concept "creativity" in English means "to create", "creative" means a creator, creator. We see that representatives of different spheres give different definitions depending on in which sphere of public life they are applied. For example, from a pedagogical point of view, creativity refers to the teacher's creative abilities, which characterizes the readiness to create new ideas and is part of the talent as an independent factor.



From a psychological point of view, creativity is a person's ability to be creative, a level of creative giftedness, far from the traditional or habitual way of thinking of a person, characterized by a willingness to create fundamentally new ideas, as well as a unique solution to problems.

In general, today, creative activity is understood as activity aimed at creativity, creativity, innovation. A creative person, on the contrary, must be able to think for himself, his worldview, constantly strive for innovation, work tirelessly on himself, find solutions to problems in a more unusual way than other people, and express original views, have interesting conversations. and reflect other qualities.

**Analysis and results.** The use of creative skills not only to create new ideas, but also to improve the lifestyle or certain aspects taken separately, plays an important role in the development of a person's inner world.

A. Maslow also considered creativity to be an integral creative direction, an activity that is often lost under the influence of the environment.

American psychologist Joe Paul Guilford for the first time in his research work compared creativity and intelligence. He divided thinking into convergent and divergent types when creating a model of intelligent structure.

Convergent thinking - (Latin *Convergere* - "one-sided") is a form of thinking that consists in choosing only one of several solutions to a problem. Convergent thinking is based on intelligence, which is why it is also called intelligent thinking.[4]

Divergent thinking - (lat. *Divergere* - "division") - one of the methods of creative thinking, the search for multiple solutions to a given problem, since divergent thinking contributes to the birth of creative ideas.[5]

The foundation of divergent thinking is creativity. Creativity also depends on the degree to which thinking is formed, and the better a person's thinking is developed, the more developed his creative thinking will be.

However, creativity is the result not only of highly developed thinking, that is, a person with high intellectual potential cannot always think creatively. We can also see this in Joe Guildford's study. In addition to divergent thinking, Guildford combined variability, accuracy, and other intellectual parameters in his creative structure. He also proved that there is an inextricable link between creativity and intelligence. However, Guildford found in his experiments that tall intellectuals do not always exhibit creative behavior when solving tests, and creative low intellectuals do not. Consequently, divergent thinking does not reflect all the features of the creative process.

According to E.P. Torrens, the concept of "creativity" is based on the following:

- promotion of a problem or scientific hypotheses; - check and change the hypothesis;

- identify the problem based on the formation of the results of the solution;

- sensitivity to the contradictions of knowledge and practical actions in the search for a solution to the problem. Creative thinking can be found in any social area. [5]

In general, creativity is the creation of new, original ideas, a non-standard form of thinking, the search for successful solutions to the problems posed. On the other hand, creative thinking is revolutionary thinking, which is constructive in nature.

The educational process plays an important role in creative thinking. Creative thinking is an important skill that young people need to master today. [6]



This ability is important for young people to adapt to this process and become competitive at a time when today's rapidly changing, active use of modern information communications requires more results than conventional literacy.

**Conclusion/Recommendations.** In short, creative thinking is a process that plays an important role in society, directly related to human thinking, and the formation of this skill in a person, especially among young people, is one of the important elements of the future development of society country. In the formation and development of creative thinking of young people, attention should be paid to the following aspects.

Firstly, from an early age, to feel that reason plays an important role in the upbringing of a person and that he has a place in society;

Secondly, to abandon the dogmatic views that has developed in society today;

Thirdly, the use of democratic methods, rather than autocratic ones, in the management process;

Fourthly, the ideas and views of creative thinkers should be respected and supported. After all, leaders always act as a locomotive in society. Most leaders today are creative thinkers.

### References

- [1]. Hennessey, B. and T. Amabile (2010), «Creativity», *Annual Review of Psychology*, Vol. 61, pp. 569-598
- [2]. OECD (2010), *The OECD Innovation Strategy: Getting a Head Start on Tomorrow*, OECD.
- [3]. OECD (2017), *PISA 2021 Creative Thinking Strategic Advisory Group Report*, Organization for Economic Co-Operation and Development, [https://one.oecd.org/document/EDU/PISA/GB\(2017\)19/en/pdf](https://one.oecd.org/document/EDU/PISA/GB(2017)19/en/pdf) (accessed on 26 March 2018).
- [4]. Savelyeva M.G. Pedagogical cases: design and use in the learning process and assessment of students' competencies / Textbook. - Izhevsk: "Udmurt University", 2013. - P. 9.
- [5]. Drapeau Patti. Sparking student creativity (practical ways to promote innovative thinking and problem solving). – Alexandria – Virginia, USA: ASCD, 2014.
- [6]. Lucas, B. and E. Spencer (2017), *Teaching Creative Thinking: Developing Learners Who Generate Ideas and Can Think Critically.*, Crown House Publishing, [https://bookshop.canterbury.ac.uk/Teaching-CreativeThinking-Developing-learners-who-generate-ideas-and-can-thinkcritically\\_9781785832369](https://bookshop.canterbury.ac.uk/Teaching-CreativeThinking-Developing-learners-who-generate-ideas-and-can-thinkcritically_9781785832369) (accessed on 26 March 2018).
- [7]. Ikramov R.A., Hojiev R.B. (2020). The upbringing of a harmoniously developed generation is a priority of the state youth policy. // Bulletin of Science and Education. No. 14 (92). Part 1. pp. 88-90.
- [8]. Hojiev, R.B., & Norboeva, D.O. (2021). Cognitive foundations of youth social life. // Academic Research in Educational Sciences, 2 (2), pp.544-555.
- [9]. Hojiyev R.B., Xolmominov G.B., Sharipov M.L. (2020) Raising a Harmoniously Developed Generation is a Priority of Democratic Reforms in Uzbekistan // European Journal of Research and Reflection in Educational Sciences, №8(5). 1-3.
- [10]. Hojiyev R. B., Adilov Z. Y. (2017) The source of developing intellectual ability. // Young scientist, №22 (4), P. 389-393.



UDK: 316.3: 338.009

## ON THE ISSUE OF FORMATION OF NATIONAL EDUCATION AND YOUTH WORLDWIDE

**Kodirjon Odilov**  
**Docent of the Department "Methodology of Socio-Economic Sciences" of the Andijan Regional Territorial Center for Retraining and Advanced Training of Public Education Workers, Candidate of Philosophy**  
[Kodirjonodilov@mail.ru](mailto:Kodirjonodilov@mail.ru)

**Annotatsiya.** Ushbu maqolada ta'lim tarbiya masalalari va milliy tarbiyaning yoshlar dunyoqarashini shakllantirishdagi o'rni va roli tahlil qilingan.

**Kalit so'zlar:** tarbiya, qadriyatlar, urf-odat va an'analar, milliy tarbiya, ma'naviy meros.

**Аннотация.** В данной статье анализируются вопросы воспитания и место и роль национального воспитания в формировании мировоззрения молодежи.

**Ключевые слова:** воспитание, ценности, традиции и традиции, национальное воспитание, духовное наследие.

**Annotation.** This article analyzes the issues of education and the place and role of national education in the formation of the worldview of young people.

**Key words:** education, values, traditions, national education, spiritual heritage.

**Introduction.** During the years of independence, a national direction of education has been formed in the education system of Uzbekistan, which combines the upbringing of the younger generation as mentally, morally, ideologically and physically mature individuals. Spiritual relations inherited from ancestors on the basis of values, customs and traditions that ensure the unique existence of man and society in the world, gradually passed down from generation to generation - national education was restored and improved in new conditions.

It is known that upbringing is a social-practical pedagogical process aimed at the formation of certain physical, mental, moral, spiritual qualities in a person, the measures taken to ensure that a person has the qualities necessary for life in society, a set of moral norms. Education is the most ancient and eternal value that ensures human humanity. Without education, neither the individual nor the human society can exist. Because it is only through the upbringing of the values that ensure the existence of man and society that human relations are passed from one generation to another. Consequently, certain goals underlie the education system in each country.

Today, the content of the education system in our country requires updating on the basis of national education. This makes it necessary to link social upbringing with family upbringing. These tasks have become a priority in this area, the implementation of which requires the search for new national methods and ways of integrating national values, customs and traditions inherited from ancestors with family and social upbringing, to conduct scientific and practical research in this direction.



**Literature review.** The Uzbek people have created a great spiritual heritage of education and have been educating many generations of humanity in the spirit of universal values and virtues such as humanity, kindness, diligence, courage and decency.

Epics such as "Alpomish", "Gorogly", which are examples of the common artistic heritage of the peoples of Central Asia with a history of several thousand years, have been passed down from generation to generation as examples of national spiritual education. Occupies a worthy place. The "Avesto" emphasizes the purity of the offspring in marriage, and there are negative views on the marriage of close relatives and brothers. In this sense, the Avesto is undoubtedly a valuable source for the history of pedagogy of the peoples of the East. [1]

Al-Khwarizmi, Al-Fargani, Ismail al-Bukhari, At-Termizi, Abu Nasr Farobi, Abu Rayhan Beruni, Yusuf Khas Hajib, Abu Ali ibn Sino, Az-Zamakhshari, Kaykovus, who lived in Central Asia during the IX-XI centuries. In the works created by scholars, the person, the upbringing of children in the family, its importance in human life and activity are reflected in vivid examples. These scientists spread the fame of the peoples of Central Asia all over the world with their works.[2]

Abdulla Avloni (1879-1934), an enlightened poet, playwright, journalist, scientist, statesman and public figure, one of the most famous representatives of the Uzbek national culture of the late 19th and early 20th centuries, spoke about the homeland, morality, the development of the mother tongue, the role of labor in society and human life pedagogical ideas are expressed.[3] He stressed that the feeling of homeland is the most humane, the most honorable feeling. It is necessary to live with the pain of the homeland, to rejoice in its happiness, to be proud of it. The homeland is as sacred as the mother. It is the sacred duty of the child to appreciate and respect him, to share his joys and sorrows, to share his sorrows together. In this sense, we understand the truth of the profound words of the famous enlightener Abdulla Avloni: "Education is for us a matter of life or death, salvation or destruction, happiness or disaster." [4]

Fitrat's book "Family" also provides excellent instructions on child rearing. He said, "The happiness and glory of every nation depends, of course, on the inner discipline and harmony of that nation. Peace and harmony are based on the discipline of the families of this nation. "Where family relations are based on strong discipline, so is the country and the nation." [5]

In general, thinkers living and working in Central Asia express in their works the idea that science is a key tool in the development of social, cultural and educational life of the country, a key factor in the development of human morality, and should be an integral part of moral and intellectual education. They focused on the fact that the sign of perfection is manifested in the spiritual and cultural qualities and behavior of man.[6]

**Research methodology.** If we pay attention to the fundamental meaning of the concept of upbringing, it is a complex process that takes a long time to form, which ensures that a person has an idea and practical manifestation of himself, his behavior and morals. Every society will have its own educational methods and tools. From ancient times, upbringing has been considered as one of the forms of assimilation of the experience of the older generation of the younger generation, both scientifically



and practically. Due to this, the concept of upbringing in society is closely related to education, it is ineffective to interpret education without upbringing, upbringing without education. The content, directions, forms and methods of their implementation in the education system depend on the lifestyle, national traditions and customs of the people.

The term national education is used in a broad and narrow sense. In a broad sense, it represents the sum of all spiritual influences, actions, aspirations, norms aimed at shaping the human personality, ensuring its active participation in production and social, cultural, enlightenment life. National education in such an understanding, not only the educational work carried out in the family, school, all educational institutions, children's and youth organizations, but also the whole social system, its leading ideas, creative activities and products of literature, art, cinema, radio, TV, media in this direction. National education in the broadest sense also includes education and training in this area. In a narrow sense, national education is a socio-pedagogical activity aimed at the spiritual development of a particular person, the development of his worldview, moral image, aesthetic taste. This is done by family and educational institutions, public organizations and individual citizens. In his Address to the Oliy Majlis, President Mirziyoyev said, "Education and upbringing of our people begin in the cradle. Only enlightenment leads a person to perfection and society to development." [7]

**Analysis and results.** It is known that during the former regime, our people were deprived of their national and spiritual wealth, national consciousness, values aimed at national education, national ideological heritage. Many eternal traditions, customs and ways of applying them in the Uzbek people are in danger of disappearing, and our people are forgetting their native language, culture, history and rich spirituality. National folk pedagogy was denied.

Only thanks to independence, we have been able to achieve the Uzbek national educational harmony on the basis of modern knowledge and apply it in practice. During the Soviet era, the education system was based on European pedagogy, and education was interpreted unilaterally. Our next task in the field of education is to use the heritage of the East and fill it with modern knowledge.

Consequently, no nation can have its own national image without respecting its national values. After all, national values, language, religion, customs, traditions, holidays, forms of communication and interaction of the nation form the basis of national education. Today, in inculcating in the minds of young people the ideas that reflect our national values, the national characteristics of our people, namely, the sanctity of the family, neighborhood, motherland, respect for parents, motherland, elders, love for the mother tongue, respect for women, patience, diligence, honesty, kindness we need to turn such qualities as consequence into the life beliefs of these young people.

Young people should be taught with pride that science has developed in the East before. This has been repeatedly stated by European scientists. Indeed, it is no coincidence that the German scholar Herler acknowledged that "the East is the teacher of Europe." Islam also originated in Arabia, but it rose to the level of science in Central Asia.



The attitude of young people to the national and spiritual heritage of our people on the basis of the influence of national education is of paramount importance in ensuring the independent development of the country. Today, every young citizen of Uzbekistan should be inquisitive, thirsty for knowledge, enthusiastic and kind. But, unfortunately, there are cases when some of our young people are influenced by destructive ideas and ideologies. It is a pity that among such young people the love for people decreases and even the love for the Motherland, the sense of patriotism is replaced by foreign ideas. An example of this is the young people who are losing their identity in Suria and other countries. Of course, they are few in number, but they are physically strong but spiritually weak people who can serve the great future of Uzbekistan.

First of all, in order to eradicate such vices, we need to inculcate in our young people the rich national and spiritual heritage left by our ancestors from the time of kindergarten. We need to teach our children the principles of national education, national pride, national heroism from an early age. Following the motto of our people, "There is no future for those who forget the past," we must form young people who will contribute to the development of democratic development through the widespread use of the teachings of our ancestors in educating young people.

Indeed, the Uzbek people are a nation that has created its own dorilfun in the field of education. The cultural heritage of the Uzbek people, the national educational heritage is a huge sea. Now is the time to drink water from this sea and enjoy it. As noted by President Shavkat Mirziyoyev, "The unique and unique scientific and spiritual heritage of our great ancestors must become a vital program for us. This immortal heritage will always be with us and will always give us strength and inspiration. First of all, we need to irrigate the national education system in this spirit."

The study of the traditions and values of national education, imbued with the national spirit, is closely linked with the life, culture and spiritual characteristics of our people, consists of. Well-known pedagogical scientist, Professor Muhammadjon Quronov draws attention to the fact that "National Education" as a multifaceted concept includes: "goal-oriented educational activities based on national values; a unique form of universal education specific and appropriate to each nation; a means of preserving, restoring and developing the nation and its culture; a private, spiritual source of the process of comprehensive development of children of different nationalities; the main principle of educating students in ethics, diligence, patriotism, beauty, economics, ecology and other areas; fostering a culture of interethnic dialogue and, as a result, a humane way and means of achieving civil harmony in Uzbekistan."

Of course, such an approach almost embraced the meaning of the concept of national upbringing. Because the core of national education is nationalism. National upbringing serves to instill in the younger generation respect for the history and traditions of their nation and the culture of other peoples, as well as the pursuit of knowledge, pride in the national spiritual heritage, patriotism.

**Conclusions.** In conclusion, it should be noted that the Uzbek people have created a unique medicine in the field of education. Today, the analysis of the term education refers primarily to the concept of national education, but there is not always uniformity in what is being done in this area, what is the content of national



education. While we believe that it is expedient to bring up our children on the basis of science and education, we need to cultivate in young people a sense of loyalty to the ideas of independence, respect for national values, a sense of national pride. After all, young people are the owners of the future, and the formation of a healthy worldview in them is a priority of our society.

If today we, the youth, lose our vigilance and sensitivity, determination and responsibility in the matter of national education, and leave this very important work to its own devices and selfishness, we will eventually lose our national educational traditions, spirituality and historical memory. We may stray from the path of development. Most importantly, let us bring up our children as healthy, perfect people on the basis of the national upbringing left to us as a national heritage formed by our ancestors, so that they are loyal to their ancestors, our history, our Motherland, our mother tongue, our national values and traditions.

#### **References:**

- [1]. The sages are about upbringing. - T.: «Teacher», 1982. –67-p.
- [2]. B.B. Mamarajabov Our national values as a factor of effectiveness in the educational process.// MODERN EDUCATION / SOVREMENNOE OBRAZOVANIE 2014, 12
- [3]. Abdulla Avloni. Turkish gulistan or morality. - T.: «Teacher», 1992. –34-p.
- [4]. Abdullah Avloni Selected Works Volume 2. Tashkent Manaviyat, 1998, p.38
- [5]. Fitrat. Family. Tashkent Spirituality. 1998, p.13.
- [6]. Quronov M. Scientific and pedagogical bases of national education in general secondary schools of Uzbekistan. Dissertation for the degree of Doctor of Pedagogical Sciences. - T., 1998. –99-p.
- [7]. Sh.Mirziyoev Speech at the solemn ceremony dedicated to the Day of Teachers and Coaches. The newspaper "People's Word" October 1, 2020
- [8]. Quronov M. National education. - T.: «Spirituality». 2007. Pages 6-7.

**UDK: 370.153+613**

### **DEPENDENCE OF A PERSON'S ATTITUDE TO HEALTH ON AGE CHARACTERISTICS**

**Isakova Muazzam Tulkinovna**  
**Ferghana State University**  
**associate Professor of psychology**  
**candidate of psychological sciences**  
[\*\*isaqovam@gmail.com\*\*](mailto:isaqovam@gmail.com)

**Annotatsiya.** Мақолада бугунги кунда саломатликни сақлаб қолиш масалалари бутун дунёда энг актуал муаммолардан бири эканлиги, инсонларнинг ўз саломатликларига нисбатан муносабатлари 20 ёшдан 60 ёшгача ёш босқичлари бўйича тадқиқ этилган. Саломатликка муносабатни когнитив, эмоционал, хулқий, мотивацион-қадриятли соҳалари ўртасидаги боғлиқлик аниқланган ва таҳлил қилинган.

**Таянч сўзлар:** саломатлик, ижтимоий муносабат, ёш босқичлари, когнитив, мотивацион-қадриятли, хулқий, эмоционал, мотивация, корреляция коэффициенти.

**Аннотация..** В статье исследуется тот факт, что вопросы здоровья являются одной из самых актуальных проблем в современном мире, а отношение людей к своему здоровью изучается в возрасте от 20 до 60 лет. Выявлена и проанализирована взаимосвязь между когнитивной, эмоциональной, поведенческой и мотивационно-ценностной сферами отношения к здоровью.

**Ключевые слова:** здоровье, социальные отношения, возраст, познавательная, мотивационно-ценностная, моральная, эмоциональная, мотивация, коэффициент корреляции.

**Abstract.** The article explores the fact that health issues are one of the most pressing issues in the world today, and people's attitudes towards their health are studied at the age levels of 20 to 60 years. The relationship between cognitive, emotional, behavioral, motivational-value areas of attitudes to health has been identified and analyzed.

**Key words:** health, social relations, age, cognitive, motivational-value, moral, emotional, motivation, correlation coefficient.

**Introduction.** Attitudes toward health have changed dramatically today. The problem of pandemic (COVID-19), which has already shown its danger on the planet, requires the medical culture of each person, mental stability, perception of a healthy life, the level of cooperation and consensus in social relations. Today, experts from all over the world emphasize that increasing the desire to live in each person, to start restoring health in peace, to maintain and adhere to healthy values, can be the basis for overcoming any disease.

The issue of the physical, medical, social and psychological importance of health is one of the problems in the focus of researchers. In our study, the issue of coverage of this problem from a psychological point of view was also raised.

**Methodology.** R.A Berezovskaya's questionnaire "Attitudes to health" was used in this research. In this survey, respondents' attitudes toward health were assessed through four psychological components: cognitive, emotional, behavioral, and motivational-value. The results obtained on the evaluation scales of the survey were evaluated in several aspects. In the first case, the respondents' attitudes toward health were studied by their age stages (Table 1).

**Table 1**

**Indicators of health attitudes study scales by respondents by age**

Scales	Age	X	$\sigma$	t
Cognitive	Up to 20 years	61,86	14,78	-0,547
	20-30 years old	64,00	13,77	0,365
	31-40 years old	59,93	10,90	0,372
	41-50 years old	60,06	12,15	-0,100
	51-60 years old	64,33	8,60	-3,169**
Emotional	Up to 20 years	87,60	17,98	-0,879
	20-30 years old	107,73	12,54	-3,248**

	31-40 years old	92,73	10,70	-1,346
	41-50 years old	96,06	19,73	-0,202
	51-60 years old	94,00	18,13	-0,206
Behavioral	20 years old	74,46	14,09	0,662
	20-30 years old	75,60	17,28	1,184
	31-40 years old	75,13	9,38	-0,511
	41-50 years old	71,06	12,58	1,061
	51-60 years old	68,00	14,41	0,041
Motivational -vaulable	20 years old	120,80	14,86	-0,121
	20-30 years old	124,80	19,65	-0,547
	31-40 years old	117,26	11,56	0,365
	41-50 years old	120,53	14,30	0,372
	51-60 years old	121,40	16,26	-0,100

Note : \*\*  $p \leq 0,01$

The mean values of the respondents' ratios between the ages of 20 and 60 were used on the Student t-criterion on all evaluation scales. Empirically, there were very few statistically significant cases at all stages of the subjects. Attitudes toward health were observed in respondents aged 51–60 years. They showed that attitudes to health on cognitive scales were statistically different from the remaining age stages in understanding a person's level of consciousness or competence in health, key risk factors and risk awareness, and understanding the role of health in active and longevity ( $64, 33 \pm 8.60$ ;  $t = -3.169$ ;  $r \leq 0.01$ ). Indicators The 51–60-year-olds' attitudes toward health may be different because of their level of health knowledge, life experience, experience in a variety of health-related life situations, and age-related symptoms. This has led to the formation of a cognitive perception in them that everyone should be responsible and accountable for their own health.

There was a statistical difference in respondents' attitudes toward health on an emotional scale. This was observed in 20-30-year old. Their attitude to health is specific to the age of maturity and reflects the optimal level of concern for health, the ability to enjoy and enjoy the state of health. At this age, emotional assessment of individuals' attitudes toward health is a priority ( $107.73 \pm 12.54$ ;  $t = -3.248$ ;  $r \leq 0.01$ ). Their bodies are full of energy, enthusiasm is a priority, and their stature has the look they want. If the disease is not observed in almost exceptional cases of symptomatic, it has the optimal level in the remaining cases. They feel a desire to take advantage of the health opportunities available. Surprisingly, other indicators of the respondents' relationship with age-related statistical significance was not observed.

In studying the nature of these surprising cases, we performed a correlation analysis of empirical indicators across all age stages. This is because unobserved differences in the mean health attitudes of the respondents led to the conclusion that they could be identified in the scale-scale correlation analysis according to their age. To do this, a correlation analysis of age-specific health attitudes was performed (Tables 2-6).

Significance correlation coefficients between the cognitive and behavioral assessment scale ( $r = 0.758$ ,  $r \leq 0.01$ ) and the emotional-behavioral relationship scale ( $r = 0.698$ ,  $r \leq 0.01$ ) in the correlation of health attitudes of children under 20 years of age

observed. Correlation coefficients The level of health awareness or competence of 20-year-olds in relation to health, basic risk factors and risk awareness, understanding of the role of health in active and long life, optimal level of health concern, ability to enjoy health status the account shows that it is possible to ensure in them the degree of conformity of human behavior and actions to the requirements of a healthy lifestyle. This means that even those under the age of 20 are not indifferent to their health.

Table 2

**Correlation between health attitudes study scales (respondents under 20)**

	Cognitive	Emotional	Behavioral	Motivational-valuable
Cognitive	1	0,448	0,758**	0,452
Emotional		1	0,698**	0,480
Behavioral			1	0,461
Motivational-valuable				1

Note : \*\*  $p \leq 0,01$

In respondents aged 20-30 years, the results of the correlation analysis of health attitudes were unique. This makes it more important to pay attention to health at an advanced age. This means that respondents at this age have experienced different stages of life activities, situations related to different social relationships, have grown to the level of assessing the importance of health in terms of their maturity and testing in different aspects of life.

Table 3

**Correlation between health attendance scales (respondents aged 20-30)**

	Cognitive	Emotional	Behavi	Мотивацион-қадриятли
Cognitive	1	0,231**	0,533**	0,396**
Emotional		1	0,242**	0,526**
Behavioral			1	0,280**
Motivational-valuable				1

Note: \*\*  $p \leq 0,01$

Constant awareness of health ( $r = 0.231, r \leq 0.01$ ), coordination of health behaviors ( $r = 0.533, r \leq 0.01$ ) the degree of formation of motivation to maintain and strengthen health ( $r = 0.396, r \leq 0.01$ ) is ensured. In turn, they not only form socially significant perceptions of health through the development of emotional attitudes to health, but also lead to their coordination in their practical activities and behaviors ( $r = 0.242, r \leq 0.01$ ). As a result, it also leads to an increase in the level of formation of motivation to maintain and strengthen health ( $r = 0.526, r \leq 0.01$ ).

It also provides an opportunity for the formation of a high importance of health and health motivation in respondents aged 20-30 years ( $r = 0.280, r \leq 0.01$ ) by adapting their health behavior to the requirements of a healthy lifestyle. The empirical indicators of the study can be considered as a period when 20-30-year-old respondents should be given the necessary guidance on positive changes in attitudes towards health.

If we evaluate the 30-40-year-old respondents as the second stage of the maturation period according to the age stages of personality development, the attitudes of those at this stage to health can also be interpreted as almost synchronous (Table 4).

Table 4

**Correlation between health attitudes study scales (respondents aged 30-40)**



	Cognitive	Emotional	Behavioral	Motivational-valuable
Cognitive	1	0,367**	0,471**	0,472**
Emotional		1	0,176*	0,563**
Behavioral			1	0,177*
Motivational-valuable				1

Note : \*  $p \leq 0,05$ ; \*\*  $p \leq 0,01$

They also have a constant awareness of their health ( $r = 0.367$ ,  $r \leq 0.01$ ), coordination of health behaviors ( $r = 0.471$ ,  $r \leq 0.01$ ) through the formation of an attitude to health as the main criterion for a healthy lifestyle. , while the degree of formation of health motivation to maintain and strengthen ( $r = 0.472$ ,  $r \leq 0.01$ ) is ensured. In turn, they not only form socially significant perceptions of health through the development of emotional attitudes to health, but also lead to their coordination in their practical activities and behaviors ( $r = 0.176$ ,  $r \leq 0.05$  ). As a result, it also leads to an increase in the level of formation of motivation to maintain and strengthen health ( $r = 0.563$ ,  $r \leq 0.01$ ). This age group leads to the importance of health and the formation of health motivation ( $r = 0.177$ ,  $r \leq 0.05$ ).

In terms of age, 40-50 year olds are the second stage of maturity (Table 5). Individuals of this age group will form a new system of social experiences, personality traits and personal experiences, as well as attitudes towards marriage.

Responsibilities of respondents experiencing the second stage of puberty in health were identified. They include a person's health awareness or skills, health risk factors, and attitudes toward health

concluded that it is important to know how to deal with risk, to translate into behavior the understanding of the role of health in active and longevity ( $r = 0.452$ ,  $r \leq 0.05$ ).

**Table 5**

**Correlation between health attitudes study scales (respondents aged 40-50 years)**

	Cognitive	Emotional	Behavioral	Motivational-valuable
Cognitive	1	0,239	0,452*	0,498**
Emotional		1	0,324	0,294
Behavioral			1	0,468**
Motivational-valuable				1

Note : \*  $p \leq 0,05$ ; \*\*  $p \leq 0,01$

Knowledge of a healthy lifestyle and health led him to conclude that the most important of life values ( $r = 0.498$ ,  $r \leq 0.01$ ).

Also, their attitude to health is becoming more fully practical than just an idea. At this age, respondents expressed the view that health is a value to health when an individual adapts his or her behavior to health students ( $r = 0.468$ ,  $r \leq 0.01$ ).

Attitudes of 50–60-year-olds to health differ from those of previously analyzed age groups (Table 3.3.6).

**Table 6****Correlation between health attendance scales (respondents aged 50-60 years)**

	Cognitive	Emotional	Behavioral	Motivational-vaulable
Cognitive	1	0,271	0,343	0,382
Emotional		1	-0,028	0,466*
Behavioral			1	0,325
Motivational-vaulable				1

Note: \*  $p \leq 0,05$ ;

Their attitude to health led to the conclusion that only the constant awareness of health and its promotion to the level of value determines the importance of health ( $r = 0.466$ ,  $r \leq 0.05$ ).

**Conclusion.** The following conclusions were drawn from this study.

The fact that people's attitudes to health are expressed according to different age characteristics does not always create a distinctive view. However, the attitudes of the elderly to health on cognitive scales showed that the level of human consciousness or competence in health, key risk factors and risk awareness, statistically different from the remaining age stages in understanding the role of health in active and long life ( $64.33 \pm 8.60$ ;  $t = -3.169$ ;  $r \leq 0.01$ ). Indicators The difference in attitudes toward health among 51-60 year olds may be due to their level of health knowledge, life experience, experience in a variety of health life situations, and age-related symptoms. This has led to the formation of a cognitive perception in them that everyone should be responsible and accountable for their own health.

Each age group has an internal pattern of attitudes toward health. This is reflected in their cognitive, emotional, behavioral, and motivational-value attitudes toward health. Behavioral and emotional relationships with health are a priority in the early stages of maturity. Cognitive, emotional, behavioral, and value relationships in relation to health in the middle stages of adolescence represent an unequivocally leading relationship.

People in their 50s and 60s value their attitude to health as a full value. Their attitude to such an attitude is determined by life experience, health problems, and opportunities to compare the importance of health at different stages of life.

**References:**

- [1]. Vutulkas D. New models of health and disease. - M.: «Nauka», 1997. -S.33 - 41.
- [2]. Department of Trade and Industry, South Africa (1997). Liquor Policy Aper and Liquor Bill (Government Gazette N° 18135). Pretoria, Government Printer.
- [3]. Isakova.M.T. Socio-Psychological Factors Are The Effect Ofperson's Mental Health // European Journal of Molecular & Clinical Medicine, 2020, Volume 7, Issue 3, Pages 4699-4718.
- [4]. Isakova M.T. Socio-psychological factors of human mental health. Monograph. Fergana. 2021.-193 p
- [5]. Resolution of the President of the Republic of Uzbekistan "On approval of the Concept of development of mental health services of the population of the Republic of Uzbekistan in 2019-2025". 2019 y.13.02. gov.uz



- [6]. Rubin GJ, Wessely S. The psychological effects of quarantining a city. *BMJ* 2020; 368: m313.
- [7]. Reshetnikov M.M. Psychic health of the population - modern trends and old problems. // *National Journal of Psychology*. - 2015. - № 1 (17). - s. 9-15.
- [8]. Rozin V.M. Health as a philosophical and socio-psychological problem. - «*World of Psychology*», №1 (21), Moscow -Voronej, 2000. - p. 12-30.
- [9]. Weiss DS, Marmar CR. The impact of event scale – revised. In: Wilson JP, Keane TM, eds. *Assessing psychological trauma and PTSD*. New York: Guildford Press, 1997: 399–411.

**UDK: 37.091: 378:17**

## **ORGANIZATION OF EDUCATIONAL WORK IN THE SYSTEM OF HIGHER EDUCATION AS A PEDAGOGICAL PROBLEM**

**Siddikov Hasanboy**  
**Pedagogy Faculty,**  
**Deputy Dean for Youth Affairs,**  
**Urgench State University,**  
[\*\*xasan\\_siddiqov@mail.ru\*\*](mailto:xasan_siddiqov@mail.ru)

**Annotatsiya:** Ushbu maqolada yoshlar tarbiyasi masalasi davlat siyosati darajasiga ko‘tarilgani, “Oliy ta’lim” atamasi zahirida iqtisod, fan, texnika va madaniyat sohasida faoliyat olib boruvchi, ish mobaynida ilm-fan, madaniyat, texnika yangiliklarini qo‘llagan va o‘z ustida ishlagan holda nazariy va amaliy muammolarni bartaraf etuvchi yuqori malakali mutaxassislarini tayyorlash masalasi, oliy ta’lim tizimida tarbiyaviy ishlarni tashkil etish pedagogik muammo sifatida buyuk adiblar tomonidan talqin qilinishi va oliy ta’lim tizimidagi tarbiya jarayonining xususiyatlari haqida ma’lumotlar berilgan.

**Kalit so‘zlar:** oliy ta’lim tizimi, ta’lim, tarbiya, pedagogik muammo, pedagogik qarashlar, majmuaviy yondashuv, sog‘lom turmush tarzi, ahloqiy tarbiya, tarbiya jarayoni xususiyatlari, ustuvor yo‘nalishlar, guruh murabbiyi, adolat, ijtimoiy hodisa.

**Аннотация:** В данной статье вопрос воспитания молодежи поставлен на уровень государственной политики. Великими писателями вопрос подготовки высококвалифицированных специалистов для преодоления теоретических и практических проблем, организация воспитательной работы в системе высшего образования как педагогическая проблема, особенности образовательного процесса в системе высшего образования.

**Ключевые слова:** система высшего образования, образование, воспитание, педагогическая проблема, педагогические взгляды, комплексный подход, здоровый образ жизни, нравственное воспитание, особенности образовательного процесса, приоритеты, групповой тренер, справедливость, социальное событие.

**Abstract:** In this article, the issue of youth education has been raised to the level of state policy. The issue of training highly qualified specialists to overcome theoretical



and practical problems, the organization of educational work in the higher education system as a pedagogical problem by great writers, and the features of the educational process in the higher education system.

**Key words:** higher education system, education, upbringing, pedagogical problem, pedagogical views, integrated approach, healthy lifestyle, moral education, features of educational process, priorities, group coach, justice, social event.

**Introduction.** The organization of educational work in higher education requires every educator to have modern knowledge, skills and abilities. Because on the basis of today's term "Higher Education" is a highly qualified person working in the field of economics, science, technology and culture, applying the latest scientific, cultural and technical innovations and overcoming theoretical and practical problems. training of specialists is understood.

The main purpose of higher education is to develop the scientific, cultural, economic and social spheres of the republic, which are qualified, competitive, highly educated, able to meet the requirements of the higher education specialist in their chosen field is to train high-potential professionals who contribute, think independently, and have high morale.

**Literature review.** At the same time, every coach working in higher education must have a comprehensive approach to the organization of educational work. To do this, they must first study and analyze the views of great writers on education and know the technological approach to the educational process and the effective use of methods and tools to create a healthy lifestyle for future generations in order to implement the laws and decrees adopted in our country. After all, the President did not express the following views in vain.

Today, life itself proves time and again how true the words of our great ancestor Imam Moturidi, "Know the wisdom of life in health," are true. Promoting a healthy lifestyle among the population, especially among our youth, should be one of the priorities.

In general, the healthy and harmonious development of the younger generation, which will ensure the future of any society, plays a crucial role in the development of any society. We rely on our talented, determined and enterprising young people.[1;4 p]

Spirituality begins with education. It is a well-known fact that there is no spirituality without education. Abdullah Avloni, one of the founders of national pedagogy, said, is proof of our point.

**Research Methodology** Ancient philosophers and sages highly valued morality, calling it the foundation of society. Over the centuries, many books, proverbs, etiquettes, exhortations, exemplary wisdom and narrations have been created on the subject of morality. The treasures of folklore contain invaluable gems of moral thought, all of which cannot be quantified or described. All aspects of human morality are reflected in the Holy Qur'an and the hadiths of our Prophet Muhammad.

One of the tasks of moral education is to have a conscious discipline. Conscious discipline is manifested in one's daily activities, behavior, relationships, and outlook. The culture and behavior of a conscious, disciplined person are in one way or another connected with the solution of everyday problems and his ideas about the meaning of



life, good and evil, spiritual wealth. A person with a conscious discipline understands his moral duty, evaluates his actions, and condemns wrongdoing.

A disciplined person feels personal responsibility for an action while evaluating his or her behavior correctly. This means that we need to instill conscious discipline in students in higher education. In this regard, we can see from the content of the decisions and decrees adopted by the head of our state that the formation of moral qualities in our youth, their support, social protection is one of the most pressing issues today.

Further improvement of the youth support system, promotion of their employment, promotion of entrepreneurial ideas and initiatives, creation of additional conditions for them to earn a decent income, taking the work in this area to a new level, as well as 2017 - 2021 in order to ensure the implementation of the State Program for the implementation of the Action Strategy on the five priority areas of development of the Republic of Uzbekistan in the "Year of Youth Support and Health":

- Introduce the following procedure for the involvement of young people in entrepreneurship, their permanent employment, the creation of favorable conditions for additional income, according to which:

- During the internship in manufacturing or service enterprises, but not more than six months, a monthly subsidy is allocated by vocational education institutions at the expense of the State budget in the amount of twice the basic calculation amount. [2; 2 p.]

**Analysis and results.** Discipline is the process of imparting to others the positive skills of each person's life, lessons learned and intellectual potential.

Proper organization of the educational process has always been one of the most important social requirements, but at a time of qualitative change, the urgency of this issue is growing. Every coach working in higher education must consciously understand that the process of upbringing is organized for the purposeful improvement of the individual and creates opportunities for regular and systematic influence on the personality of the pupil. The educational process involves two interrelated activities - teacher and student. In the process of upbringing, a person's consciousness is formed, emotions and various abilities are developed, ideological, moral, volitional, aesthetic qualities are formed, a system of scientific views on nature and society is formed, and physical strength is strengthened. In the process of upbringing, an individual develops moral skills and habits that meet the moral requirements of society. To achieve this, the student's mind (learning process), emotions (in the classroom and in extracurricular activities), will (in the process of organizing activities, behavior management) are systematically and systematically influenced. In the process of education, none of these (consciousness, emotions, will) will be harder to achieve if the will) is ignored.

The essence and tasks of a goal-oriented educational process are planned and regulated by the educator.

A) What qualities of a student are planned to form or lose?

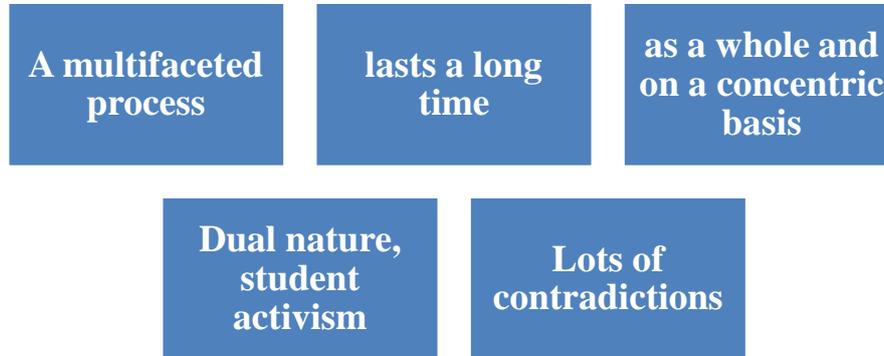
B) Sources will be sought to nurture or eliminate these traits.

C) Which and where are planned to use the theoretical and practical resources that serve the stated purpose.



The essence of the education carried out in such a plan is the educational system, the intellectual and physical activity of society and people.

### **CHARACTERISTICS OF THE EDUCATIONAL PROCESS IN THE HIGHER EDUCATION SYSTEM**



The first feature of education is that it is a multifaceted process that involves schools, families, children's and adolescent organizations, neighborhoods, the general public, cinema, television, literature, and the arts.

Another feature of upbringing is that it lasts a long time. Unlike education, it begins at birth, during the school years, at university, and beyond, and lasts a lifetime.

Another distinctive feature of education is that it is integrated and concentrated. Different aspects of upbringing are inextricably linked. At every stage of the system of continuing education, the same thing is taught, for example, friendship, harmony, patriotism, and so on.

Another feature of education is that it is a two-way process in which the student is actively involved.

Another factor is the high level of conflict in education. These contradictions are manifested in the struggle between the qualities that first appear in students according to their understanding and the qualities that are formed by the educator between the demands placed on students and the ability to fulfill them.

Discipline is the ability to conform to social norms and to refrain from engaging in hateful behavior.

Beruni emphasizes that while science, art, and practice play a key role in human development, the laws of lineage, social environment, and life also play an important role. According to him, the most important factors in human development are enlightenment and high morality. Signs of morality include goodness, righteousness, justice, humility, generosity, nobility, friendship and cooperation, hard work, purity, and the pursuit of beauty.

Justice is the solution of vital issues in accordance with moral and legal norms. In this context, the formation of perceptions of social justice in young people is important in the context of the topic of social justice.

It is well known that "justice" as a broad concept covers all aspects of social relations. "Justice, as a category of morality and law, is a necessary measure that



monitors the moral and legal relations, evaluates the activities of people," wrote F. Nizamov.

The rate of rise is determined by the adherence of any society to the norms of social justice.

**Conclusion/Recommendations.** Based on the above considerations, the following conclusions can be drawn:

The role of higher education in the development of society is enormous. The thinker Abu Nasir al-Farabi believes that the main task of education is to bring up a mature person who can meet the needs of society and serve it.

So we need to instill in students in higher education a conscious discipline, a sense of morality, and a sense of fairness.

It is necessary to educate a person who plays an important role in the development of society, to encourage him to learn, to work, and to gradually turn this behavior into a skill. Man's observation cultivates ability and pushes the mind. The mind preserves consciousness. The mind becomes a material and spiritual source. In this way, man gradually improves and attains perfection. but it requires a long-term responsibility, honorable work and perseverance, a will from the educator and the trainees. In doing so, the educator must take into account the age, interests and needs of students.

Based on the findings, we have developed the following recommendations:

1) Every educator should study the pedagogical and psychological views of great writers in the process of educating students in the higher education system and be able to use their quotations effectively in the process;

2) Organizing competitions among coaches of higher education on "The most effective methods of educating young people";

3) Organization of seminars-trainings on "Integrated approach to education";

#### **References:**

- [1]. Address of the President of the Republic of Uzbekistan to the Oliy Majlis of January 24, 2020. 4-p. <https://kun.uz/uz/news/list?f=tag&name>
- [2]. No. PF-6208 of the President of the Republic of Uzbekistan dated April 20, 2021 <https://lex.uz/ru/docs/-5382151#undefined.2-b> .
- [3]. Antoine Montchretien de Vatteville; A Treatise on Political Economy. M.: Delo, 2000 (series Political Economy: Stages of Cognition). – 48 p.
- [4]. Tolipov B.X. The combination of material and spiritual factors in the economic culture of the individual: Falsafa.fan.nom. ... diss. – T.: 2009. –152 p.
- [5]. Western philosophy. –T.: "Sharq", 2005. – 141 p.
- [6]. Innovative development: Economy, intellectual resources, knowledge management / under total. ed. B.Z. Milnera - M.: INFRA-M, 2010. 624 p.
- [7].Kadyrov A.M., Sevlikyants S.G., Otto O.E., Akhmedieva A.T. Information and innovative development of the economy of Uzbekistan. - T.: Economic, 2011. – 136 p.
- [8].Kuranov M. Scientific and pedagogical foundations of national education in secondary schools of Uzbekistan: Autor.d.d. ... Doctor of Pedagogical Sciences. – Tashkent, 1998. – 40 p.



[9]. Ochilov M. Moral formation of the future teacher. - Tashkent: Teacher, 1999.–327p.

[10]. Incheon declaration/ Education 2030: Towards inclusive and equitable quality education and lifelong learning for all (Word Education Forum, 19- 22 may 2015, Incheon, Republic of Korea). - 48 p.

**UDK: 370.153+613**

## **SOLVING PROFESSIONALLY PROBLEMS IS A GUARANTEE OF QUALITY PREPARATION FOR PRACTICAL ACTIVITY**

**Baychaev Fazliddin Khusenovich,  
Navoiy state Mining institute,  
Assistant, the department of  
“General physics”,  
[baychaevfazliddin@gmail.com](mailto:baychaevfazliddin@gmail.com)**

**Annotasiya:** Mazkur maqoladi kon-metallurgiya sanoati tizimi bo‘lajak mutaxassislari uchun fizikadan amaliyot darslarida kasbiy yo‘naltirilgan masalalar yechish ularni amaliy faoliyatga sifatli tayyorlash garovi ekanligi ko‘rsatilgan.

**Kalit so‘zlar:** kon-metallurgiya sanoati, ta‘lim, ishlab chiqarish, amaliy mashg‘ulot, kasbiy yo‘naltirilgan masalalar.

**Аннотация:** В статье показано, для будущих специалистов горно-металлургической отрасли решение профессионально ориентированных задач на практических занятиях по физике является залогом качественной подготовки к практической деятельности.

**Ключевые слова:** горно-металлургическая промышленность, образование, производство, практическое занятие, профессионально ориентированные задачи.

**Abstract:** The article shows that for future specialists in the mining and metallurgical industry, the solution of professionally oriented tasks in practical classes in physics is the key to high-quality preparation for practical activities.

**Keywords:** mining and metallurgical industry, education, production, practical training, professionally oriented tasks.

**Introduction.** Today, at a time when the process of qualitative renewal is taking place in all segments of our society, the higher education system is also rising to a new stage in its history of development. Special attention is now being paid to creating a system of higher education that meets international standards, in which the integration of education and industry is recognized as one of the priorities. Therefore, the organization of training of highly qualified personnel in higher education institutions on the basis of the orders of enterprises, raising the quality of education to a level that meets their requirements is an urgent issue of guaranteed education.

Numerous reforms in the field of higher education in the country, as in all areas of education, lead to the creation of modern requirements in the field of education of the mining and metallurgical industry of higher education. In the future, further development of this industry will focus not only on servicing existing production technologies, but also on the formation of a professional personality capable of



implementing innovative processes and self-development. It is well known that the natural sciences, especially physics, play an important role in the careful study of modern manufacturing industries in mining and metallurgy. In his Address to the Oliy Majlis, President Mirziyoyev said: "If we look at history, we see that physics has been a fundamental basis in the creation of almost all inventions and technologies in the world. Indeed, without a deep understanding of the laws of physics, results cannot be achieved in today's demanding fields, such as engineering, energy, IT, water and energy-saving technologies"[1]. It should be noted that all technology requires a radical improvement in the quality of teaching physics in higher education institutions. To this end, a new approach to teaching physics in the mining and metallurgical industry, in the formation of students' knowledge and skills in science, not only focusing on the study of definitions, formulas and laws, but also on the importance of any physical phenomenon or law in the mining industry. It is advisable to explain with concrete examples and issues in practical training. Therefore, the technique is recognized as a method of reproductive learning that provides practical training in higher education - a link between theory and practice, influencing the development of students' skills and competencies to apply the knowledge gained during lectures and independent work.

It is well known that with the development of science and technology, any employer pays attention not only to the theoretical knowledge and skills of the future specialist, but also to the training of mature personnel who can solve today's problems and apply the theory in practice. The development of professionally oriented issues in physics for specialists is not only an integration of science and industry, but also one of the important steps in increasing the professional competence of the future specialist. These types of questions not only give students a first impression of the specialties they need to master, but also create a pedagogical environment to demonstrate the importance of science in production.

**Literature review.** A lot of research work is carried out in the training of professional competence of specialists, including research by our scientists UI Inoyatov, NA Muslimov, Sh.Sh. Sharipov, Z.K.Ismailova, D.O.Khimmataliev and others. conducted in the CIS countries E.F.Zeer, N.N. Budishcheva, U.I.Atlyaguzova, Yu.V. We can see that Shagina, SV Lavrinenko and others have worked on the use of pedagogical technologies in the formation and development of professional competence of future professionals, the improvement of technologies to increase the effectiveness of vocational training. However, we can see that the professional competence of students in higher education institutions that train future specialists for the mining and metallurgical industry system has not yet been considered in the example of physics. Also, the incompleteness of the textbook on physics for future specialists of the mining and metallurgical industry, the lack of inclusion of issues covering production technologies, shows the relevance of the research.

**Analysis and results.** Based on our experience, the level of application in the field of "Optics" included in the program of physics for students majoring in "Mining", "Metallurgy" and "Mining, processing and processing of rare and radioactive metals" Here are the materials:

№	Program materials	Materials for use in the mining and metallurgical industry
1	Worldviews on the nature of light. Light waves and the quantities that characterize it.	Propagation of electromagnetic waves in rocks.
2	Light diffraction. Huygens-Fresnel principle. Fresnel zones. Round disc and hole diffraction. Individual slit diffraction, Diffraction grating and its characteristic quantities. X-ray diffraction	Methods for studying the composition of minerals using X-ray diffraction analysis
3	Polarization of light. Malyus's law. Polarizing devices. Artificial anisotropy. Keer effect. Rotation of the plane of polarization. Light dispersion.	Methods of applying polarization in the study of physicochemical composition of rocks and minerals.
4	Electronic theory of variance. Light dispersion. Absorption and scattering of light.	Application of the laws of absorption and scattering in the study of rock composition.

In the practical sessions on some of the topics listed in the table, we provide examples of what should be considered in solving professionally oriented questions and issues.

On the subject of worldviews of the nature of light, it is necessary to give the necessary insights into the nature of its electromagnetic wave properties in rocks and the specificity of their propagation in rocks. It is also necessary to pay attention to the laws of scattering, refraction and refraction of light along a straight line, as well as the degree of their application in practice. In particular, the introduction of questions and issues related to the determination of the refractive index of rocks will provide an incentive for the future specialist to acquire initial professional knowledge.

Given the refractive index ( $n$ ) of solids, the refractive index ( $R$ ) of rays is calculated by the Fresnel formula:

$$R = \left( \frac{n-1}{n+1} \right)^2$$

Where,  $n$  - light refractive index of solids relative to air.

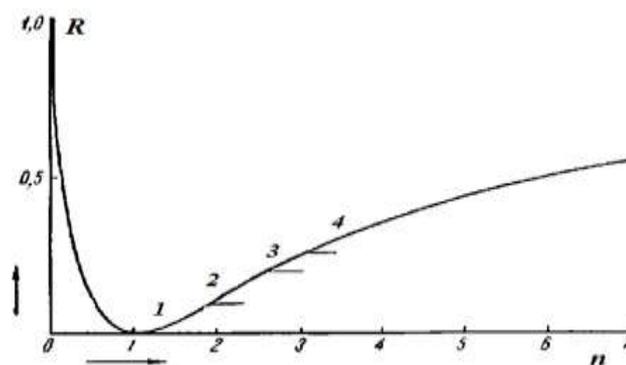


Figure 1.

This expression is explained by determining the need to find the return coefficient in them by putting the values of the refractive index for rocks and minerals. Or it is said to study the refractive index of different rocks on the basis of giving a graph of the dependence of the refractive index of the substance on the return coefficient. (Figure 1). For example,



1. Substances with a refractive index of 1.3-1.9 have a glassy luster, for ice ( $n = 1.309$ ), cryolite ( $n = 1.34-1.36$ ), fluorite ( $n = 1.43$ ), quartz ( $n = 1.544$ ), corundum ( $n = 1.77$ ), garnet ( $n = 1.85$ );

2. The refractive index of diamond-like substances lies in the range of 1.9-2.6; zircon ( $n = 1.92-1.96$ ), cassiterite ( $n = 1.99-2.09$ ), diamond ( $n = 2.40-2.46$ ), rutile ( $n = 2.62$ );

3. Rocks with a refractive index in the range of 2.6-3 will be metal-like transparent and semi-transparent minerals; alabandine ( $n = 2.70$ ), cuprite ( $n = 2.85$ ), cinnabar ( $n = 2.91$ ), hematite ( $n = 3.01$ )

4. Rocks with a refractive index of 3 shine like metal. These include hematite, prolyusite, molybdenite, antimonite, galena, pyrite, bismuth.

In the graph, the curve showing the ability to return from the minimum to the left suddenly rises upwards (Figure 1). This area includes some pure metals with a refractive index smaller than one: silver ( $n = 0.18$ ), gold ( $n = 0.36$ ), and copper ( $n = 0.64$ ).

Based on the above conclusions, it is explained that the most common minerals on Earth are substances with a refractive index in the range of 1.5-1.7.

When a stream of light falls on an object, some of this light returns from the surface of the body, and some is absorbed into the body. If the incident streams of incident and absorbed light are added, it is known that their sum is quantitatively equal to the total luminous flux incident on the body. Under the influence of absorbed light, the body heats up because the light energy is converted into the internal energy of the body, explaining that the relative magnitude of the returning and absorbed light depends on the structure of the rock.

The rotation of a beam of parallel rays incident on a body in a certain direction is called a flat rotation, as exemplified by machined, polished metals and minerals. However, the fact that the surfaces of rocks are not smooth, that is, they are rough, creates a dullness in their luster, because the light falling on the porous rocks is all scattered in all directions (pores are "curtains" that block light).

The surface of transparent minerals in rocks and ores is examined by grinding or pulverizing. In this case, the most important size is the refractive index. The properties of opaque minerals, which are found as a mixture in rocks, are determined mainly by the reflected light rays.

**Conclusions.** After the reflection coefficient and refractive index of light provide the necessary information about the properties of ores and minerals, questions and issues on the topic are formed:

1. How is the refractive index of rocks determined?
2. By determining the size of ores and minerals, it is possible to obtain complete information about them?
3. Does the roughness of the rock surface make it difficult to determine the refractive index?
4. What do objects with a refractive index in the range of 1.3-1.9 look like?
5. What information do you have about rocks with a refractive index of 1.9-2.6?
6. For what purposes can be used rocks with a refractive index of 2.6-3.0?



7. In what range does the refractive index of rocks such as molybdenite, antimonite, galena, pyrlite, bismuth lie?

8. How to determine the resistance of rocks to external influences?

9. How to determine the properties of minerals found in rocks as a mixture?

10. How is the propagation of electromagnetic waves in solids and rocks?

11. Parts made of quartz are durable and are common on the ground. Then why not use it?

12. In what range does the refractive index of substances such as zircon, cassiteorite, diamond, rutile lie?

13. A thin beam of light falls from the air at an angle of  $40^\circ$  to the surface of the diamond. What is the refractive index of light in a diamond?

14. A thin beam of light fell from the air at an angle of  $66^\circ$  to the surface of the body and broke at  $27^\circ$ . Determine the refractive index of this body and what kind of body it is.

15. Calculate the boundary full internal return angle for diamond and quartz.

16. Determine the refractive index of an object if its boundary full internal rotation angle is  $42^\circ$ .

17. What is the refractive index of pomegranate mineral compared to ethyl alcohol?

For students, questions and issues of such a creative nature not only make them remember the formulas, but also make them think about the reasons for the process, relying on their own knowledge. The use of creative questions and issues allows to determine the knowledge in this area, to be able to correctly apply the learned formula. For the teacher, recommending these types of questions and issues is the most effective way to test a student's ability, as there are also students who are limited to memorizing formulas.

Practice classes should offer a wide range of topics of varying difficulty, as well as a choice of options. Depending on who chooses which level of problem, it is possible to assess the level of knowledge. If some student can't pick and choose problems later, he or she should be given the necessary advice, given his or her aspirations, so that he or she feels a sense of perfect performance on his or her own. At the same time, learning to use the teacher's advice correctly will be the basis for developing students' thinking skills.

Pedagogical experience has shown that solving professionally oriented problems in practical classes in physics creates the following opportunities for students:

- Theoretical knowledge is systematized, strengthened and deepened;
- On the basis of the interrelationships between the laws of physics and concepts, the basis is created for the application of theoretical knowledge in practice, expanding educational skills;
- acquires skills and abilities in performing graphic work and other types of tasks;
- focuses on the correct use of technical and scientific literature;
- develops the ability to think independently.

In short, in order to cultivate a modern specialist, not only knowledge and understanding, but also the formation of creative thinking will be necessary. Solving professionally oriented problems is the basis for understanding the essence of the



phenomenon underlying the laws of physics, its analysis, creative work of students, deep and perfect mastery of physics-based specialties, and finally the improvement of professional competence in future specialists of the mining and metallurgical industry.

### References:

- [1]. Inoyatov U. I. Theoretical and organizational-methodological foundations of quality control management in education in a vocational college. Diss. ... doct. ped. sciences. - T.: 2003. - 327 p.;
- [2]. Muslimov N.A. Theoretical and methodological bases of professional formation of a teacher of vocational education. Diss. ... ped. fan. doct. - T.: 2007. - 315 p.;
- [3]. Turdiqulov E.O., Djuraev R.X. and others. Theory and practice of integrated education. - T.: 2009. - 176 p.;
- [4]. Ismailova Z.K. Formation of professional pedagogical skills of students: Diss. ... ped. fan. nom. - T.: 2000.- 186 p.;
- [5]. Sharipov Sh.S. Pedagogical conditions for the formation of student ingenuity: Diss. ...- T.: 2001. -140 p.
- [6]. Ximmataliev D.O. Integration of pedagogical and technical knowledge in the diagnosis of professional training. Dis-T.: 2018. - 230 p.;
- [7]. Zeer, E.F. Psychology of vocational education - M.: Publishing house of the Moscow Psychological and Social Institute; Voronezh: Publishing house NPO "MODEK", 2003. - 480 p.
- [8]. Budishcheva N.N. Competence-activity approach as the basis for modernization of the content of education // Actual problems of modernization of the capital's education. - Yakutsk, 2002, - S. 23-30.
- [9]. Yu.V. Shagina "Formation of professional competencies of future engineering specialists in the context of the integration of education, science and production" Author's abstract: dis. Candidate of Pedagogical Sciences. - Samara.: 2010. -- 23 p.
- [10]. Atlyaguzova U.I. Formation of basic competences of students of a technical profile: abstract of thesis: dis. ... Doctor of Pedagogical Sciences. - Togliatti., 2011. - - 23 p.
- [11]. Lavrinenko S.V. "Optimization of professionally oriented training of students in a modern technical university" Author's abstract: dis. Candidate of Pedagogical Sciences. - Veliky Novgorod.: 2019.-- 25 s



UDC:338.48:658.64

**INDUSTRIAL DEVELOPMENT IS A KEY FACTOR IN REDUCING POVERTY**

**Abdurahmanova Muattarkhon Shokir kizi**  
**Namangan institute of engineering and technology**  
**Master's degree student in marketing**  
[muattarmuattar00@gmail.com](mailto:muattarmuattar00@gmail.com)

**Annotatsiya.** Ushbu maqolada sanoatni rivojlantirish–kambag`allikni qisqartirishning bosh omili haqida so`z yuritilgan. Kambag`allikni ehtimolini keltirib chiqaruvchi omillar: keksalik, ayol kishi bo`lish, turmush o`rtog`ining bo`lmasligi, ota yoki ona bo`lmagan oilada katta bo`lish, ishsizlik, davlat uyida ijarada turish, past savodxonlik va sog`liq darajasi, oilada nogiron yoki surunkali kasallikka chalingan odamning bo`lishi. Kambag`allikdan chiqib ketish uchun eng muhim omil – bu insonning intilishi, o`z kuchiga tayangan holda, aniq maqsad sari harakati bo`lishi kerak.

**Kalit so`zlar:** iqtisodiyot, kambag`allik, dehqonchilik, daromad, iste`molchi, yalpi ichki mahsulot, mikroreditlash mexanizmi, mehnat migrantlari, biznes.

**Annotation.** This article discusses the development of industry - a key factor in reducing poverty. Factors contributing to the likelihood of poverty: old age, being a woman, not having a spouse, growing up in a non-parental family, unemployment, renting a public house, low literacy and poor health the degree of liquefaction, the presence in the family of a person with a disability or chronic illness. The most important factor in getting out of poverty is a person's aspirations, based on their own strength, to move towards a specific goal.

**Key words:** economy, poverty, agriculture, income, consumer, GDP, microcredit mechanism, labor migrants, business.

**Аннотация.** В этой статье рассматривается развитие промышленности - ключевого фактора сокращения бедности. Факторы, влияющие на вероятность бедности: старость, принадлежность к женщине, отсутствие супруга, взросление в семье без родителей, безработица, аренда общественного дома, низкая грамотность и слабое здоровье, степень разжижения, наличие в семья человека с инвалидностью или хроническим заболеванием. Важнейшим фактором выхода из бедности является стремление человека, основанное на собственных силах, двигаться к определенной цели.

**Ключевые слова:** экономика, бедность, сельское хозяйство, доход, потребитель, ВВП, механизм микрокредитования, трудовые мигранты, бизнес.

**Introduction.** The most important factor in getting out of poverty is a person's aspirations, based on their own strength, to move towards a specific goal. To this end, more than a thousand vocational training centers have been established in the mahallas next year. 'm separated. Subsidies of up to 7 million soums were provided to citizens who wished to complete their training and start their own businesses. [4]



Also, depending on the capabilities and direction of development of each district, 10 hundred to 1 hectare of land was allocated to farming families. The development of industry in the districts will lead to a decrease in unemployment, an increase in incomes and an improvement in their living standards. We believe that it is important to focus on income generation as a factor in determining poverty. It is even more important to develop the causes and factors that form the basis of income generation, says doctor of economics Nodir Jumayev.

**Literature review.** President Shavkat Mirziyoyev's resolutions are aimed at ensuring long-term stability. The essence of this idea is to develop the country on the basis of best practices and eliminate income inequality. It would be wrong to say that this is the main factor in reducing poverty. Therefore, in his Address to the Oliy Majlis on January 24, 2020, the President said, "It is no secret that the majority of the population in the regions, especially in rural areas, do not have sufficient sources of income. As in any country, we have a poor population. According to various estimates, they are about 12-15%. It's not about small numbers, it's about 4-5 million people." [7]

It is very important for Uzbekistan to develop an approach to this category and to implement reforms in this area. Because until now, he was completely ignored, the numbers were not disclosed. In this regard, the Decree of the President of the Republic of Uzbekistan dated March 26, 2020 "On measures to radically update the state policy on economic development and poverty reduction" sets many tasks in this regard and poverty reduction. new directions have been formed. In particular, the reorganization of the Ministry of Economy and Industry into the Ministry of Economic Development and Poverty Reduction has launched a new phase of reforms in this area.

For example, a 2015 study by Pakistani scholars Tariq Majid and Noman Malik found that literacy rates were among the factors contributing to poverty. Factors such as the head of the household's experience, age, gender, and employment influence the family's poverty. It is also argued that having a woman as the head of the family has a greater impact on poverty. This is due to the fact that women do not have high opportunities for education and income. Studies show that, firstly, poverty is inversely proportional to the level of education, secondly, those with remittances in rural areas are less likely to fall into poverty, and thirdly, urbanization leads to a reduction in poverty and an increase in rural areas. notes the coming. Experience, in turn, argues that youth and employment in agriculture do not lead to poverty. [4]

M. Friedman, one of the founders of the effective implementation of monetary policy in the United States, notes that income inequality does not accurately reflect the statistical distribution. According to him, the distribution of income in terms of consumption depends on the causes. One of the reasons for the income inequality is that people are not evenly distributed. This trend is also noted by the scientist H. Stakle, J. Minser identified and assessed the factors of investment in human capital and income inequality. He notes that the inequality of people's incomes depends on investments in human capital, and that the investment process is based on free choice. According to Minser, a big salary requires a lot of study. Therefore, the difference between professions is explained by the differences in their study, and the absolute difference in the duration of the study leads to a percentage difference in annual income. The difference between the incomes of several owners of the same profession is due to the

prolongation of the investment period in the experience of human capital. In general, factors such as education, age, and occupation are argued to be the main reasons for people's income stratification.

**Research methodology.** We believe that it is important to focus on income generation as a factor in determining poverty. It is even more important to develop the causes and factors that form the basis of income generation. This is a key factor in eradicating poverty. Including the development of vocational guidance in the education system and in the interests of the people.

The approach of international organizations is also unique. The approach and criteria of international organizations in this regard are also interesting. In particular, the World Bank's criteria for determining daily income as poverty is defined as the ratio of national income per capita to:

- \* \$ 1.9 international poverty line;

- \* \$ 3.2 for a country with an average income below (GDP per capita for 2020 - \$ 1026-3995);

- \* \$ 5.5 for a country with an average income (GDP 3995 - 12375 USD per capita for 2020).

The benchmark was announced in 2013, when it was \$ 1.25 at the time, but rose to \$ 1.9 in 2015. In turn, these indicators are applied by calculating per capita income at base prices in 2005 and 2011, respectively. Starting in 2017, the next two indicators will be added. The international standard of poverty is minimal consumption and cannot be replaced by the next two. This figure reflects extreme poverty. Since Uzbekistan has a lower-than-average income, \$ 3.2 is recommended.

In 2015, the 70th session of the UN General Assembly adopted 17 Sustainable Development Goals until 2030. The first of these goals is called "Poverty Eradication" and calls on the world to fight against this factor. Based on these goals, the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated October 20, 2018 "On measures to implement national goals and objectives in the field of sustainable development until 2030" was adopted. Item 1 of the appendix to the decision reads "Goal 1. Reducing the level of poverty everywhere. " Area 7, which is the focus of this paragraph, focuses on social protection and gender equality, as well as the use of microcredit practices. [1]

**Analysis and results.** In general, countries with high GDP growth are also making great strides in reducing poverty. In developing countries, there is a tendency to have an oversupply of unskilled labor and a lack of financial and material resources, which means that the development of labor-intensive industries is desirable. [1]

What are the main causes of poverty in Uzbekistan? Here are some of them:

1. Aspects that led to the destabilization of the social sphere:

- \* Insufficient public spending on health care, especially in the provision of primary health care;

- \* low coverage of preschool education;

- \* the use of educational institutions as "rubber" in school education reduces the effectiveness of basic education;

- \* Decreasing the level of human capital of young people, whose share of higher education is less than 10%;



\* Research funding should be around 0.25% of GDP.

2. The attachment of wages to positions rather than to professions has made the professions that require higher education less attractive. For example, there is a significant difference in the job of a doctor and a sergeant.

3. The duration of power outages caused the following instability:

\* affected the fact that part of the homework was not mastered;

\* has had a significant impact on business. For example, a World Bank report states that the smaller a business entity, the greater the power outage.

4. The growth of the informal sector of the economy has had a negative impact on the accounting and statistics of income.

What should be done?

It is clear that poverty reduction is not without its problems. So what to do?

In light of these findings, we believe it is appropriate to focus on the following. First of all, it is necessary to compile accurate statistics and conduct research in terms of demographic grouping to determine the level of poverty. This should take into account the number of family members, literacy, health, age, gender, and chosen profession.

There are also many short-term measures that need to be taken. In particular, the introduction of the theory of specialization in economics (D. Ricardo) in line with human abilities. To do this, create value-added (GDP) based on how well they have the opportunity and desire to work. For example, the introduction of a mechanism to create all the conditions for a knife maker (a craftsman learned from his ancestors and loved it) to work. If we demand or are forced to do other types of work, there will be no tendency for economic growth and poverty. [8] Reducing the consumption of the population, that is, the emergency termination of the monopoly of the state and "individual" entrepreneurs. To do this, we need to create a competitive environment in the economy. There are two aspects to this process.

First, to reduce the formation of a monopoly of national (public or private) producers. Second, we need to accelerate the accession of various economic unions, including the World Trade Organization. Ensuring uninterrupted power supply, accelerating the use of alternative energy. To do this, focus on the development of alternative energy sources (solar, wind, etc.). It is also advisable to develop the introduction of state subsidies for the transition to this type of energy consumption. Reducing costs, that is, introducing austerity measures in low-income communities. For example, ceremonies based on different national values require a reduction in costs, as well as a reduction in the informal economy. Third, long-term programs are important in this process. In this regard, the implementation of such programs should increase the volume and efficiency of funding for preventive health services. This will focus on vaccinating young children and reduce passive life expectancy through the development of active lifestyles.

**Conclusions.** "From small business to big business." The idea is to provide employment, that is, to lift people out of poverty. Only this means that the cost per job is lower in a large business than in a small business. At the same time, large business is one of the most effective means of increasing the country's export potential. We also believe that it is necessary to develop high-capacity products, that is, to form venture



funds to produce research results, especially to introduce private sector research funding. [4] Finally, it is necessary to develop the principle of exporting the product of labor, not labor migrants. Consequently, attracting investment in human capital will inevitably yield sustainable results in the long run.

The scale of work and efforts in the interests of the people in our country is growing. There has been a lot of talk lately about poverty, which has been hidden for many years. It's important that this doesn't happen. Practical action has been initiated. The number of poor people is being determined and a list of low-income families is being compiled. That is, the process has begun. We hope that our suggestions and ideas will help in this process.

### References:

- [1]. Chub B.A. Diversifitsirovannie korporatsii v sovremennoy ekonomike Rossii / pod red. d.e.n. V.V. Bandurina. - M.: Bukvitsa, 2000. - 184 p.
- [2]. Glazev S.Yu. Theory of long-term technical and economic development [Text] / S. Yu. Glazev. - M.: Vldar, 1993.
- [3]. Ansoff I., McDonell E. Implanting Strategic Management. Prentice Hall, 1990. — 568 r. [www.stat.uz](http://www.stat.uz)
- [4]. Kotler F. Marketing XXI century. Marketing from to I. New marketing technologies. Desyat smertnyx grekhov marketing: per. s angl. / pod red. T.R. Theor.— SPb.: Neva, 2005. - 432 p. 22.
- [5]. Raximov, D. (2019). Svobodno-ekonomicheskie zony-rasshirenie eksportnogo potentsiala Uzbekistana. *Archivist*, (12 (45))
- [6]. Gulyamov, S.S. and b. (2019). Blockchain technologies in the digital economy. - T.: Economics-Finance. 396 b.
- [7]. Ayupov, R.X., Baltabaeva, G.R. (2018). Digital Currency Market: Innovation and Development Prospects. -T: Science and technology. 172 b.
- [8]. United Nations Conference on Trade and Development (UNCTAD). Digital economy report 2019.

**UDK: 316.3: 338.009**

## **SOCIO-PHILOSOPHICAL ASPECTS OF IMPROVING THE LEGAL CULTURE OF THE ENTREPRENEUR'S PERSONALITY**

**Ganiyev Bahodirjon Sodikjonovich**  
**docent, doctor of philosophy (PhD)**  
**Fergana state university,**  
**Uzbekistan, Fergana city**  
**[mr.ganiev76\\_fsu@inbox.ru](mailto:mr.ganiev76_fsu@inbox.ru)**

**Annotatsiya.** Mazkur maqolada mamlakatimizning iqtisodiy taraqqiyotida tadbirkor shaxsning huquqiy madaniyatini mazmun-mohiyati, o'ziga xos xususiyatlari va takomillashuvi ilmiy-nazariy tomondan o'rganilgan. Tadbirkor shaxs huquqiy madaniyatining ijtimoiy, madaniy, iqtisodiy va huquqiy asoslarini ishlab chiqish, mustahkamlash asoslari, shuningdek respublikamiz rivojlanishidagi ahamiyatini ijtimoiy-falsafiy jihatdan tahlil qilishga harakat qildik.



**Kalit so'zlar:** tadbirkorlik, tadbirkor shaxs, biznes falsafa, fenomen, falsafiy tahlil, fuqarolik jamiyati, huquqiy madaniyat, legalizatsiya.

**Аннотация.** В данной статье с научно-теоретической стороны исследуются сущность, особенности и совершенствование правовой культуры предпринимателя в условиях экономического развития нашей страны. Мы попытались проанализировать основы развития, укрепления социальных, культурных, экономических и правовых основ правовой культуры личности предпринимателя, а также ее значение в развитии республики с социально-философской точки зрения.

**Ключевые слова:** предпринимательство, семейное предпринимательство, бизнес, феномен, философский анализ, гражданское общество, трансформация, легализация.

**Annotation.** In this article, the essence, specific features and improvement of the legal culture of an entrepreneur in the economic development of our country are studied from the scientific and theoretical side. We tried to analyze the basis of development, strengthening the social, cultural, economic and legal foundations of the legal culture of the entrepreneur person, as well as its importance in the development of the Republic from the socio-philosophical point of view.

**Key words:** entrepreneurship, entrepreneurial personality, business falsafa, phenomenon, philosophical analysis, civil society, legal culture, legalization.

**Introduction.** A special place in the economic development of our country is occupied by the following spheres: employment of its population, increasing the welfare of people. For this reason, today in our country, individuals engaged in entrepreneurship are more and more engaged in activities in various fields. Because entrepreneurship is one of the areas that have developed in our country since time immemorial. That is, even in our country, the profession of entrepreneurship has its own long and glorious history. In this sense, the concept of entrepreneurship in the peoples of Central Asia is interpreted not only as a means of livelihood or means of transportation, but also as a specific ability and talent. Examples such as the passage of the Great Silk Road through the Central Asian region, the explanation of the role of entrepreneurship in ensuring socio-economic well-being in the so-called Amir Temur schemes, and the creation of the foundations of deep economic thought, such as Ibn Khaldun, indicate that the foundations of entrepreneurship go back to very distant times. After all, from the time when state relations were formed in the history of mankind, entrepreneurship developed within the framework of trade. In historical documents, it is noted that in which state entrepreneurship developed, centralized power, prosperity in a certain sense, as well as science also experienced its development stage.

In the ideas of liberalism, which were later formed in Western Europe, each person was of paramount importance, in terms of dignity and freedom, and in terms of responsibility for his or her activities, the necessary condition for the freedom of the individual was private property, the free market, free competition and free entrepreneurship, the need to have equal opportunities, the need to. Such views, which were formed at that time, took a worthy place in the society in the acquisition of a specific status of entrepreneurship. Universal human thoughts, which express the exteriors of entrepreneurship and social development, deserve special attention. "This



is the observance of human rights, entrepreneurship freedom; the word freedom, press freedom and is a phrase from the and so on." [2. 147 ].

**Research Methodology.** It is noted in historical sources that from Avesto, philosophical-moral ideas that glorify human labor, denigrate laziness, give lessons from Labor, in which the well-being of society and human life are recognized separately [3. 248]. In Islam also pays special attention to entrepreneurship and its religious and legal issues [6. 138-160].

In the philosophical teachings formed in ancient Greece, the issue of entrepreneurship was overthrown separately. In particular, Plato, in his work "laws", focusing on the issue of state and entrepreneurial Relations, said that economic freedom can only strengthen relations between them [4. 95-96], In the case of Aristotle, "an entrepreneur must be able to apply for Fair Work, regularly engage in charitable work" [5. 234] the league will be highlighted separately.

Abu Nasr Forabi, in his work "the city of the virtuous people", stands in a special circle about the people who are entrepreneurs who do charitable work. Forobi believes that the team that gives a person happiness is a truly virtuous, mature, original Jamaa. It is necessary to take care of the future of a person, his happiness, the feeling of being a partner in his grief, to be formed precisely in entrepreneurs. Forobi pays special attention to the place of new laws in the development of entrepreneurship in society. For this reason, the scientist "the leader must again make laws on trade that do not harm anyone, even about the measurement of weight, grain-dun and sugar-like things. At the same time, the legislator, it is necessary in the laws to reflect the situation of all impoverished and impoverished people, so as not to fall under the category of people who violate the laws and renew their own people without correcting them to the end" [7. 38], - he writes. However, Abu Rayhon Beruni considers the voluntary agreement of people as the main factor in his views on entrepreneurship [8. 14-27].

Abu Ali ibn Sina points out that entrepreneurship should also be managed with the help of fair laws adopted on the basis of mutual agreement of people in the work of " Tib law " [9. 147]. State and political figure Amir Temur grandfather approaches the issue of entrepreneurship in his "Timur regimes" from the point of view of Justice. In this sense "quot;...I looked at all the same seriously and fairly, no one was different from the other" [10. 53-55], - writes.

**Research Methodology.** In our research, methods of scientific knowledge such as objectivity, systematism, analysis and synthesis, generalization, historicity and rationality, systematic approach were relied upon. The peculiarities of entrepreneurial activity and the formation of its legal culture have been of particular importance for all periods of time. According to historical sources, the roots of the existence of entrepreneurship go back to the distant past. As we know, until the XVI century, the most basic routes of the Great Silk Road from our country have passed and the trade, buying and selling flourished. In this sense, in some local literature there is a view that entrepreneurship first arose precisely in the form of trade.

The results of the study show that entrepreneurial activity was formed mainly in the XVIII century, which was often explained in connection with the notion of "proprietor". In fact, to the concept of entrepreneurship, it is precisely in this period that lived a well-known British economist R.Kantilton gave his first marotaba comment.



Later on the development of entrepreneurship and its social and legal foundations Sh.L.Monteske have taken a separate initiative. In particular, the French philosopher Charles Lui Monteske in his view, when he says freedom understand that the person does not do what he wants, but only the right to carry out actions that are reflected in the lawstirib, that the formation of human activities can only be carried out through laws [11. He puts forward the idea of 163]. It should be noted that these views also play an important role in the analysis of issues related to today's entrepreneurial personality and its legal culture.

**Analysis and results.** To date, positive scientific achievements are also obtained in the field of jurisprudence. In particular, within the framework of the theory and methodology of legal culture, it is the theoretical and methodological approaches that promote the legal culture of the entrepreneur person. Tadjikonov, A. In the scientific research work carried out by saidovs, more rich content is obtained. According to their conclusion, "when we say legal culture, we understand the level of the legal system decided in society, the level of awareness of the people of this system of rights, the hormone of citizens to the law, the level of execution of legal norms, intolerance to those who do not comply with the law, the level of obedience to the law. Ideas and ideas, theories and ideology formed in the society on these issues constitute the concept of legal culture" [12. 11]. However, on the basis of scientific research of these scientists, a wide opportunity is created not only to raise the legal culture of society, but also to develop proposals-recommendations on the formation of the legal culture of an entrepreneurial person.

Analyzing the cross-section of reforms carried out in our country, it seems that family business development is one of the main directions in the activities of state and non-governmental organizations. It should be noted that the creation of favorable conditions in society for family entrepreneurship is a priority, the main reason for this is in the fact that the number of jobs created by the country corresponds to a certain level of family business. In this regard, the president of the Republic of Uzbekistan said: "We must fully support entrepreneurs who are creating new jobs and, if necessary, raise them on our shoulders" [1.].

**Conclusion/Recommendations.** It is desirable to draw the following scientific and theoretical conclusions from the results of our research on the peculiarities of the formation of the legal culture of an entrepreneurial person:

The nature of entrepreneurship requires social, economic stability in society. The concepts of market economy, private property and entrepreneurship are inextricably linked concepts. In the years of independence, the necessary legal framework, legal normative framework for entrepreneurship was created in our country. When the object factors of formation of legal culture in the worldview of the entrepreneur person are understood, first of all, issues such as cultural and economic reform and opportunities, expansion of material and spiritual production, improvement of social relations, adoption of relevant laws are understood, the subject or aspect of certain spiritual, educational and educational work carried out for this purpose, knowledge,

Entrepreneurship and creativity are qualities inherent in social development, each historical period had its own entrepreneurs and creative personalities. On this method of management, the idea of creativity, historically composed in the effective



development of our national statehood, is the leader. Entrepreneurship and creativity are concepts that harmonize with each other, logically complement and are subject to each other.

### References

- [1]. Mirziyoev M. Location Address of the president of the Republic of Uzbekistan to the Oliy Majlis. (<http://uza.uz/oz/politics/zbekiston-respublikasi-prezidenti-shavkat-mirziyeevning-oliy-25-01-2020>)
- [2]. Karimov I.A. In the 21st century of Uzbekistan: confirmation of security, conditions of stability and guarantees of development. - Tashkent. "Uzbekistan", 1997. - B. 147.
- [3]. Avesto. A. Translation of the Cabinet. - Tashkent: East, 2001. - B. 248.
- [4]. Plato. Laws. Arfon patronymic translation from Russian. - Tashkent: New century generation, 2002. - B. 458.
- [5]. Aristotle. Politics. Op. in 4 volumes. Vol. 4-Moscow: Mysl, 1984. - P. 379.
- [6]. Rahmonov A.R. Human rights and personality status in Islamic jurisprudence. No, it's not. f.n. ...disse. - Tashkent: 2002.
- [7]. Forobi Abu Nasr. The city of virtuous people. - Tashkent: A. Publishing house "People's heritage" named after kadiriy, 1993. - B. 186.
- [8]. Beruni Abu Basil. Mineralogy - Tashkent: Science, 1966. - B. 468.
- [9]. Ibn Sina. Tib Law: 3 volumes selectable / developer: he. Karimov, H. Zire "lost in Test match - Tashkent: "A. Publishing house "People's heritage named after kadiriy", J. I., 1992. - B. 446.
- [10]. Amir Temur. Timur regulations. - Tashkent: F.Fulom publishing house, 1996. - B. 388.
- [11]. Montesquieu Sh. On the spirit of laws - Moscow: 1955. - P. 468.
- [12]. Tajikhonov U., Saidov. A. Theory of khoggi culture. - Tashkent: Adolat, 1998. - B. 11.

**UDK: 331.5**

## INCREASING THE ACTIVITY OF BANKS IN THE CAPITAL MARKET

**Latipxanova Elnora Alimxanovna**  
**Master of Tashkent financial institute**  
[latipxanova@gmail.com](mailto:latipxanova@gmail.com)

**Annotatsiya.** Ushbu maqolada banklarni kapital bozordagi faolligini oshirish haqida soʻz yuritilgan. Xalqimiz yetarli daromad topishi uchun eng qulay biznes va investitsiya muhitini shakllantirib, yangi-yangi korxonalar va ish joylarini koʻpaytirish zarur. Tijorat banklari esa aynan mana shunday muhim jarayonlarning eng faol va uzluksiz ishtirokchisiga aylanishi bugun har qachongidan ham dolzarbdir.

**Kalit soʻzlar:** bank, bozor, raqobat, moliyaviy instrument, investitsiya, texnologiya, valyuta bozori, xususiy tadbirkorlik, kredit.

**Annotation.** This article discusses how to increase the activity of banks in the capital market. In order for our people to earn enough income, we need to create the



most favorable business and investment environment and increase the number of new enterprises and jobs. It is more important today than ever for commercial banks to become the most active and continuous participants in such important processes.

**Key words:** banking, market, competition, financial instrument, investment, technology, foreign exchange market, private entrepreneurship, credit.

**Аннотация.** В данной статье рассматривается, как повысить активность банков на рынке капитала. Чтобы наши люди получали достаточный доход, нам необходимо создать максимально благоприятную среду для бизнеса и инвестиций, а также увеличить количество новых предприятий и рабочих мест. Сегодня как никогда важно, чтобы коммерческие банки стали наиболее активными и постоянными участниками столь важных процессов.

**Ключевые слова:** банковское дело, рынок, конкуренция, финансовый инструмент, инвестиции, технологии, валютный рынок, частное предпринимательство, кредит.

**Introduction.** Globalization has also accelerated the process of integration between countries. These images are reflected in all aspects of socio-political, socio-economic, cultural and humanitarian, sports, sheep, state and society. Such trends have, of course, radically changed the face of financial markets, commercial banks, and financial mechanisms, especially investment flows. As a result, it has become an axiom that whichever country pursues an active investment policy today is achieving sustainable economic growth.[8] As the President said, “investment is the driver of the economy, in Uzbek, the heart of the economy, it is no exaggeration. Along with investment, new technologies, advanced experience, highly qualified specialists will come to various industries and regions, and entrepreneurship will develop rapidly.”

So, how are commercial banks involved in this important area? It is true that for the first time in the history of our country, sovereign government bonds of Uzbekistan were issued in international financial markets. In this regard, cooperation is being established with leading international investment banks such as “J.P.Morgan”, “Citibank”, “Deutsche Bank”.

But what other measures are being taken or should be taken to fully demonstrate the banking and financial potential of our country in order to attract foreign investment?

**Literature review.** The rapid reforms in the banking and financial system in recent years are reflected in the widespread introduction of modern market mechanisms in the sector. In turn, for many years the bulk of the bank's capital belonged to the state. This has hampered healthy competition in the banking sector and negatively affected the quality of services.[2]

As a result, significant institutional changes have taken place in recent years to expand the activities of banks, especially in the investment process. On behalf of the President, a long-term strategy for the development of the banking and financial system is being developed with the support of the government and the Central Bank and international financial institutions.[5]

After all, on this basis, private and foreign capital enters the banking system. As a result, the share of state-owned banks will gradually decrease and will serve to improve the competitive environment in the industry, comprehensively increase the



activities of commercial banks, the quality and culture of lending, especially their investment activity.

In this regard, special attention is paid to the development of financial markets, including the stock market, the introduction of new financial instruments and the issuance of bonds, the further expansion of banking services, the development of the banking system based on advanced information technologies. Broad and favorable conditions are being created for investors. The first step in this direction is, of course, the liberalization of the foreign exchange market.[7]

**Research Methodology.** It is these factors that contribute to improving the efficiency of investment activities of commercial banks, improving the institutional framework.

This is in line with the priorities set out in the Action Strategy. It envisages deepening and stabilizing the banking system, increasing the capitalization and deposit base of banks, strengthening their financial stability and reliability, and further expanding promising investment projects and lending to small businesses and private entrepreneurs.[1]

The above views are also confirmed by international and local experts. They admit that in the context of modernization of the economy, it is impossible to renew the fixed capital of economic entities and raise them to a technologically advanced level without investment. Therefore, it is becoming necessary for economic entities to intensify investment activities aimed at diversifying financial flows and improving economic structures. For example, J. Keynes said, "Investment means the purchase of some old or new property by an individual or corporation. Sometimes the term can be limited to buying a security on a stock exchange. In general, new investments, unlike reinvestments, involve the purchase of any type of capital at the expense of income." It is no exaggeration to say that commercial banks play an important role in this coverage. Because bank investments have a specific economic content.

**Analysis and results.** Imagine a commercial bank in the role of an investor. Under this status, it directs its resources to the creation or acquisition of real assets, the purchase of financial assets for a certain period of time in order to earn direct and indirect income. In turn, the investment activity of banks is reflected in their role as financial intermediaries. It also has a macroeconomic aspect. It is through this prism that commercial banks, in a market economy, encourage businesses to meet their investment needs in the form of money and credit, and ensure the transformation of their funds into investments.

Therefore, according to scientists, from a macroeconomic point of view, the investment activity of banks means the activity aimed at meeting the investment needs of the social and economic spheres at the level of the economy, country and region.[4]

Some experts recognize commercial banks as investment banks based on their income from investment activities and the share of investments in total assets. For example, F. Allen and A. Santamero, in their Theory of Financial Intermediation, argue that an investment bank is not a separate institutional form of a commercial bank or investment bank operating in a particular business area, but a qualified intermediary providing various financial advice. "It is investment banks that facilitate the parties to financial transactions through professionalism, know-how and technology," they said.



In this sense, it is argued that an investment bank is not a simple instrument for financing the traditional business activities of companies, but a system of products and services offered to meet their complex financial needs. That is why investment banking services are divided into five strategically important business areas. These include capital markets, corporate finance, merchant banking, project finance, and risk management.[9]

For example, what are the investment activities of commercial banks in the capital markets? These include primary market operations, in particular stock market services (issuance and placement, research, sponsorship, post-listing support); services in the debt market (issuance and placement, securitization, research, etc.), and in the secondary market services in the stock market (sales, dealing, brokerage, market-making, asset management); debt obligations cover operations such as market services (sales, dealing, brokerage, market-making, asset management).

Business activities in the field of corporate finance include redistribution of property (mergers and acquisitions, etc.), restructuring of the company in crisis, financial advisory services.

Merchant banking is also important in the investment activities of commercial banks. This is because, on this basis, in the initial stages of the company's activity, there is an opportunity to invest in shares (venture capital), to invest in shares (private capital) in order to grow and restructure the property base. In project finance, that is, in structural finance, private investment initiatives, mixed, public-private partnerships, play an important role. Industrial and financial risk management services, risk measurement and compensation consulting services are also key parameters in the investment activities of commercial banks, in other words, confirming that they are investment banks.[3]

In our country, too, there is a strong need to adapt the investment policy of commercial banks to modern requirements. This allows them to set up a system of investment targets and freely choose the ways to achieve these goals. From an institutional point of view, this means that comprehensive measures are being taken to organize and manage investment activities. From this point of view, certain activities of our commercial banks should be aimed at ensuring the appropriate composition and volume of investment assets, increasing the return on assets at an acceptable level of risk. In turn, the expansion of the bank's resource base and the maintenance of bank resources should be among the long-term goals. Only then will pragmatic conditions be created for the liquidity, security and profitability and growth of investments. In terms of investment incentives, the following proposals can be made to encourage commercial banks: increase competitive advantage, increase lending by expanding the resource base, reduce the level of risk through diversification of loan portfolio risks, reduce the risk of non-repayment.[6]

So there is still a lot to do. For example, in the banks of the country the volume of directing short-term resources to short-term assets is still large. Therefore, it is necessary to expand the opportunities for commercial banks to invest in long-term assets. At present, the volume of operations of banks in the stock market remains small. It is advisable to radically reconsider this scale. It is time for commercial banks to

overcome some of the obstacles to effective liquidity management and the rational formation of the investment portfolio.

**Conclusion.** The necessary institutional and legal framework for this is being created and improved. The new laws "On Banks and Banking", "On the Central Bank of the Republic of Uzbekistan", "On improving the monetary policy through the gradual transition to inflation targeting", "Mechanisms for attracting foreign aid" and "On measures to improve work with donors", "On the state program for the implementation of the Action Strategy for the five priority areas of development of the Republic of Uzbekistan in 2017-2021 in the Year of Science, Education and Digital Economy", "Family Resolutions on Additional Measures to Improve the Lending Procedure for Projects Implemented under State Entrepreneurship Development Programs" and other important documents will also help to increase the efficiency of investment activities of commercial banks. [10]

After all, the result of any reform should serve to create a prosperous and decent living conditions for our people. As the head of our state said, "We need to create the most favorable business and investment environment for our people to earn enough money and create new enterprises and jobs. If we don't do these very important things ourselves, no one from abroad will do it for us." It is more important today than ever for commercial banks to become the most active and continuous participants in such important processes.

#### References:

- [1]. Gulyamov, S.S. and b. (2019). Blockchain technologies in the digital economy. - T.: Economics-Finance. 396 p.
- [2]. Ayupov, R.X., Baltabaeva, G.R. (2018). Digital Currency Market: Innovation and Development Prospects. -T: Science and technology. 172 p.
- [3]. United Nations Conference on Trade and Development (UNCTAD). Digital economy report 2019
- [4]. Boltaboyev MR, Kasimova MS, Goyibnazarov BK, Ergashkhojayeva Sh.J., Samadov AN, Otajonov Sh.I. Small business and entrepreneurship. Study guide. - T.: Noshir, 2011. - 280 p
- [5]. Pardayev M.Q., Mamasoatov T.X., Murotqobilov A.A., Rahimov H.A. Small business and private entrepreneurship: development problems and solutions. Monograph. - T.: "Navruz" publishing house, 2013. - 172 p.
- [6]. Ensiklopedicheskiy slovar predprinimatel'ya. Compiled by: Sinelkinov S.M. and dr. - Spb: "Alga fond", "AYaKS", 1992. - 137-138 p.
- [7]. Under the general editorship of S. Gulyamov. Small business and private entrepreneurship: organization, development, management. -T.: "Science and Technology" Publishing House, 2005. - 7 p.
- [8]. Problems of increasing the competitiveness of the Uzbek economy: theory and practice // Edited by SS Gulyamov. - Tashkent: Konsauditinform-Nashr, 2006.
- [9]. Under the general editorship of S. Gulyamov. Small business and private entrepreneurship: establishment, development, management. -T.: "Science and Technology" Publishing House, 2005. - 7 p.
- [10]. Abdurahmanov Q.H., Labor economics. - T.: Mehnat, 2009. -511 p.



UDC: 373.2:831.512.143(089)

## APPLICATION OF ECONOMIC METHODS OF MANAGEMENT TO IMPROVE THE QUALITY OF PRESCHOOL EDUCATION IN UZBEKISTAN

**Salikhov Nodir Djamolovich**

**PhD student**

**Bukhara State University**

**[nodir\\_menedjer@mail.ru](mailto:nodir_menedjer@mail.ru)**

**Annotatsiya:** Maqolada maktabgacha ta'lim tizimini boshqarishning shakllanishi, maktabgacha ta'lim tizimini boshqarishda iqtisodiy usullarning ahamiyati, boshlang'ich ta'lim tizimini davrlar bo'yicha o'zgarishi, maktabgacha ta'limni boshqarish davridagi o'zgarishlar tasvirlangan. mustaqillik.

**Kalit so'zlar:** maktabgacha ta'lim, maktabgacha ta'lim tashkiloti, ta'limni boshqarish, maktabgacha ta'lim tizimi, boshqaruvning iqtisodiy usullari.

**Аннотация:** В статье описывается формирование управления системой дошкольного образования, значение экономических методов в управлении системой дошкольного образования, изменения в управлении системой начального образования по периодам, изменения в управлении дошкольным образованием в период. независимость.

**Ключевые слова:** дошкольное образование, организация дошкольного образования, управление образованием, система дошкольного образования, экономические методы управления.

**Abstract:** The article describes the formation of the management of the preschool education system, the importance of economic methods in the management of the preschool education system, changes in the management of the primary education system by periods, changes in the management of preschool education during independence.

**Key words:** preschool education, preschool education organization, education management, preschool education system, economic methods of management.

**Introduction.** In most countries, the government pays great attention to the early education and upbringing of children, the effective management of the preschool education system in the country, the enrichment of the content of preschool education. Bringing up young children as mature people, imparting knowledge and skills on world knowledge is the basis for the future development of the country. From ancient times, the Republic of Uzbekistan has paid great attention to preschool education and upbringing. After the country gained independence in 1991, the principles and methods of managing the pre-school education system have improved. Economic methods were introduced instead of administrative-command methods of managing the pre-school education system. In his Address to Supreme Council (Oliy Majlis) on December 29, 2020, President of the Republic of Uzbekistan Shavkat Mirziyoyev identified pre-school education as a priority and stated the following about the current state of the system: The number of kindergartens has tripled to more than 14,000. This year, the parameters of admission to higher education have increased 2.5 times compared to 2016, the coverage of our youth with higher education has increased from 9% to 25%



”[3, p. 2]. Given the importance of quality education and upbringing from birth, the importance of preschool education in this process, as well as the relevance of research on the effective management of the preschool education system.

**Literature review.** The article uses the methods of logical thinking, induction and deduction, statistical grouping, econometric modeling, logical analysis, theoretical and methodological basis is the general strategy for the development of preschool education in the country, the decrees of President Sh.M. Mirziyoyev on preschool education and scientific and methodological literature on the research topic.

The database used data from the Ministry of Preschool Education of the Republic of Uzbekistan and the Statistics Committee of the Republic of Uzbekistan.

**Analysis.** Since the early days of independence in our country, the elements of administrative-command methods in the management of preschool education have decreased, and the elements of economic methods inherent in a market economy have increased. The government has focused on radical reform of the pre-school education system, first of all, strengthening the material and technical base of pre-school education institutions, changing the amount of parental fees for children, reforming the procedure for admission of children to pre-school education institutions.

The model regulations of the ministry of public education of the republic of Uzbekistan № MY-306 of February 17, 1997 "On preschool and primary education" provided sufficient information on the activities of preschool educational institutions in the country for that period. Decree of the cabinet of ministers of the republic of Uzbekistan № 313 of June 24, 1999 "On measures to establish and develop a network of non-state preschool institutions" describes in detail the activities of non-governmental preschools and the benefits provided by the government to such institutions. In the early years of independence, preschools and related organizations became part of the Ministry of Public Education of the Republic of Uzbekistan, which is responsible for preschool and secondary education, making it difficult for the government to complete the reform of preschool education.

There has been a decline in the focus on pre-school education, a lack of reform in the pre-school sector, a sharp decline in the coverage of preschool children and a lack of attention to the quality of education, upbringing and health of children in educational institutions.

As a result of the great attention paid to the pre-school education system from the first days of Sh.M.Mirziyoyev's presidency, he ensured positive changes in the management of the pre-school education system. Decree of the President of the Republic of Uzbekistan dated December 29, 2016 № PQ-2707 "On measures to further improve the system of preschool education in 2017-2019" and the responsible organizations are described in detail.

In accordance with the Decree of the President of the Republic of Uzbekistan dated September 30, 2017 No PQ-3305 "On the organization of the Ministry of Preschool Education of the Republic of Uzbekistan", the Ministry of Preschool Education of the Republic of Uzbekistan was established.

In order to radically reform and improve the system of preschool education, to form an effective system of public administration of preschool education and to strengthen its material and technical base, as a result of recent measures taken, the

ministry and its local branches have been established. Quality changes were observed. Improving remuneration and incentives for employees of the system, construction of new public preschool educational institutions, strengthening their material and technical base, further development of the non-governmental sector of preschool education services, expanding the network of preschool educational institutions and strengthening the material and technical base, The work on ensuring wider coverage and creating favorable conditions for public-private partnership in the field of preschool education has begun to bear fruit.

As a result of the Decree of the Cabinet of Ministers of the Republic of Uzbekistan dated August 24, 2018 № 681 "On the establishment of a modern preschool educational institution on the basis of public-private partnership" there was a sharp increase in the number of non-governmental preschool educational institutions.

Analysis of changes in the number of preschool educational institutions in the country and regions in 2010-2020 shows that during this period the number of PEOs in the country increased by 729 units or 111.7% (Table 1).

(Table 1).

**Number of preschool institutions, units**

Regions	Years						2020 is a change from 2010	
	010	012	014	016	018	020	,-	%
Republic of Karakalpakstan	97	30	19	20	17	66	9	117,4
Andijan	54	60	60	61	56	57	03	118,6
Bukhara	25	49	48	44	43	82	7	113,4
Jizzax	89	68	69	71	76	17	8	114,8
Kashkadarya	87	63	37	32	29	82	5	124,5
Navai	89	34	30	29	31	45	6	129,6
Namangan	12	74	78	68	74	43	1	105,1
Samarkand	59	71	54	65	66	43	4	112,7
Surkhandarya	85	95	95	93	86	12	7	107,0
Sirdarya	90	49	57	51	52	86	4	97,9
Tashkent	01	57	56	40	52	69	8	113,6
Fergana	65	97	86	78	65	74		101,0
Khorezm	71	63	57	51	53	60	11	97,0
Tashkent city	15	11	14	23	86	32	17	122,7
<b>Total:</b>	239	221	160	126	186	968	29	111,7

Source: Based on data from the State Statistics Committee of the Republic of Uzbekistan.



In 2010-2020, the highest increase in the number of state PEOs is observed in Tashkent (117 units or 117.4%) and the lowest decrease in the number of PEOs is observed in Khorezm region (-11 units or 97.0%). The next places are taken by Andijan (103 units or 118.6%), Kashkadarya (95 units or 124.5%), Samarkand (84 units or 112.7%), the Republic of Karakalpakstan (69 units or 117.4%), Tashkent (68 units or 113.6 percent), Bukhara (57 units or 113.4 percent), Navoi (56 units or 129.6 percent), Namangan (31 units or 105.1 percent), Jizzakh (28 units or 114.8 percent). ), Surkhandarya (27 units or 107.0 percent), Fergana (9 units or 101.0 percent), Sirdarya (-4 units or 97.9 percent) regions.

The number of children attending preschool education varies across the country. The highest number of children attending PEO was registered in Fergana region (130,269 people) and the lowest in Sirdarya region (30,359 people). It is known that the number of children attending PEOs is influenced by factors such as the size of the population in the area, population density, the number of PEOs, the conditions created in them, the proximity of the population to the area of residence.

The analysis of the number of children attending PEOs in the country and its regions in 2010-2020 shows that during this period the number of children attending PEOs in the country increased by a total of 588,587 or 211.7% (Table 2).

(Table 2).

### Changes in the number of foster children in the Republic of Uzbekistan in 2010-2020, per capita

Regions	Years						Change in 2020 compared to 2010	
	2010	2012	2014	2016	2018	2020	+,-	%
Republic of Karakalpakstan	31401	48963	31962	39677	50507	82737	51336	263,5
Andijan	41069	42304	44171	53099	58446	111478	70409	271,4
Bukhara	25629	25440	28069	31902	40105	67260	41631	262,4
Jizzax	25546	25454	25741	23668	20367	45110	19564	176,6
Kashkadarya	28995	26983	26637	30339	58388	66035	37040	227,7
Navai	18913	15042	19564	21104	24732	34777	15864	183,9
Namangan	43669	44558	45440	48650	57444	104569	60900	239,5
Samarkand	45542	47138	50203	61167	65550	126285	80743	277,3
Surkhandarya	24199	20916	24754	26912	29021	53712	29513	222,0
Sirdarya	14340	13399	15295	15775	19131	30359	16019	211,7
Tashkent	49360	46131	56087	62714	67494	81045	31685	164,2
Fergana	65130	62143	74432	75767	85092	130269	65139	200,0
Khorezm	22115	20254	20388	22009	33502	55250	33135	249,8
Tashkent city	90942	94952	113062	121269	123073	126551	35609	139,2
<b>Total:</b>	526850	533677	575805	634052	732852	1115437	588587	211,7

Source: Based on data from the State Statistics Committee of the Republic of Uzbekistan.

Tashkent (126,551 people), Samarkand (126,285 people), Andijan (111,478 people), Namangan (104,569 people), the Republic of Karakalpakstan (82,737 people) and Tashkent region (81,045 people) are in the second place in terms of the number of children attending PEO, Bukhara (67,260 people), Kashkadarya (66,035 people), Khorezm (55,250 people), Surkhandarya (53,712 people), Jizzakh (45,110 people), Navoi (34,777 people) regions.

During this period, the highest increase in the number of children attending PEOs was recorded in Samarkand region (80,743 or 277.3%) and the lowest in Navoi region (15,864 or 183.9%). Andijan (70,409 people), Fergana (65,139 people), Namangan (60,900 people), the Republic of Karakalpakstan (51,336 people), Bukhara (41,631 people), Kashkadarya (37,040 people) are in the next place in terms of the growth of the number of children attending PEOs, Tashkent city (35,609 people), Khorezm (33,135 people), Tashkent region (31,685 people), Surkhandarya (29,513 people), Jizzakh (19,564 people), Sirdarya (16,019 people) regions.

Parental payments for preschool education are based on humanitarian principles and are regulated by the Decree of the Cabinet of Ministers of the Republic of Uzbekistan dated February 28, 2020 No 114 "On approval of parental payments for public preschool education for 2020" is filled. Pursuant to this Decree, the parental fee for the provision of children attending preschool institutions is developed in accordance with the average income of the population in the area where the parents live (Table 3).

(Table 3).

**The amount of parental payment for the maintenance of children in preschool education, in the amount of one thousand soums**

s/n	Time to be on children's per day, hours	The amount of payment per child in the family participating in the organization				If more than one child from the family participates in the organization, the amount of payment for each child in the family			
		Tashkent city	Regional center	District center	Other regions	Tashkent city	Regional center	District center	Other regions
	4-5	33	31	25	23	23	22	17	16
	9	179	173	117	83	128	123	89	67
	10,5	214	207	159	145	152	147	120	116
	12	242	229	181	170	171	162	136	128
	24	255	243	192	179	182	173	144	135

Source: According to the decree, prepared on the basis of data from the State Statistics Committee of the Republic of Uzbekistan.

According to the table, due to the high average income of the population in the capital Tashkent, parental payments in this area are 1.5-2.0 times higher than in rural areas with relatively low incomes.

The average amount of parental payment specified in this Decree was calculated for the one-hour period of the child's stay in the preschool institution (Table 4).

**(Table 4).**

**Amount of parental payment for the maintenance of children in preschool institutions for an average of one hour, in soums**

s/n	Time to be on children's per day, hours	The amount of payment per child in the family participating in the organization				Average payment per hour across regions
		Tashkent city	Regional center	District center	Other regions	
1	4-5	7333	6889	5556	5111	6222
2	9	19889	19222	13000	9222	15333
3	10,5	20381	19714	15143	13810	17262
4	12	20167	19083	15083	14167	17125
5	24	10625	10125	8000	7458	9052
The average pay per hour according to the time the child is in the organization		15679	15007	11356	9954	12999

Source: According to the decree, prepared on the basis of data from the State Statistics Committee of the Republic of Uzbekistan.

According to the table, the average payment for all regions is 15,333 soums when a child is in preschool for an average of 9 hours. According to the average amount of time spent in preschool education, the average parental fee per hour for child support is 15,679 soums in Tashkent, 15,07 soums in regional centers, 11,356 soums in district centers and 9,954 soums in other regions. The cost of an hour of pre-school education for a child in the country is 12,999 soums.

The Decree reduces the amount of parental payment in the event that two or more children in the family attend a preschool organization, the humanitarian principle of parental payment for the maintenance of children brought up in preschool educational institutions. Such a humanitarian principle increases the coverage of preschool children with pre-school education and provides financial support to foster parents.

The average hourly parental payment for the provision of two or more children in a family attending preschool will be in different amounts for each region, depending on the income of the population, according to Table 4 (Table 5).

**(Table 5).**

**Amount of parental payment for maintenance of two or more foster children in a family on average per hour in preschool educational institutions, in soums**

s/n	Time to be on children's per day, hours	The amount of payment per child in the family participating in the organization				Average payment per hour across regions
		Tashkent city	Regional center	District center	Other regions	
1	4-5	5111	4889	3778	3556	4334
2	9	14222	13667	9889	7444	11306
3	10,5	14476	14000	11429	11048	12738
4	12	14250	13500	11333	10667	12438
5	24	7583	7208	6000	5625	6604
The average pay per hour according to the time the child is in the organization		11887	10732	8847	7804	9818

Source: According to the decree, prepared on the basis of data from the State Statistics Committee of the Republic of Uzbekistan.



According to the average length of stay of two or more children in a preschool institution, the average parental payment per hour for child support is 11,887 soums in Tashkent, 10,732 soums in regional centers, 8,847 soums in district centers and other regions, 7 thousand 804 soums. The cost of an hour of pre-school education for a child in the country is 9,818 soums.

**Discussion.** Bukhara region of the Republic of Uzbekistan has 13 regions, 2 cities and 11 districts, and 9,658 teachers work in 482 preschool educational institutions in the region (Table 6).

(Table 6).

**Information on pedagogical staff of the State Preschool Education Organization under the Bukhara Regional Department of Preschool Education**

№	Name of the region	Total pedagogical staff	age of pedagogical staff						information of pedagogical staff			
			18 – 24 years	25 – 30 years	31 – 39 years	40 – 49 years	50 – 54 years	55 years and older	High	Incomplete higher	Medium special	Medium
1	Bukhara c.	1789	334	357	351	328	294	125	798	114	877	0
2	Kagan c.	608	146	137	176	120	29	0	153	50	405	0
3	Bukhara d.	530	42	219	172	59	29	9	195	51	284	0
4	Vabkent d.	629	96	131	203	127	67	5	159	50	420	0
5	Jondor d.	634	245	158	119	60	39	13	227	53	354	0
6	Kagan d.	215	29	65	55	46	15	5	44	31	140	0
7	Olot d.	233	37	69	48	50	24	5	156	15	59	3
8	Peshku d.	703	135	171	169	155	51	22	186	73	444	0
9	Romitan d.	769	239	167	186	120	47	10	232	95	441	1
10	Shofirkon d.	1161	225	222	311	232	101	70	347	92	722	0
11	Karakul d.	607	207	183	110	78	29	0	215	31	361	0
12	Karovulbazar d.	186	12	43	90	34	7	0	65	27	94	0
13	Gijduvan d.	1594	256	467	636	125	93	17	384	103	1107	0
Average		743	154	184	202	118	63	22	243	60	439	0
Total		9658	2003	2389	2626	1534	825	281	3161	785	5708	4
As a percentage of the total,%		100	20,7	24,7	27,2	15,9	8,5	2,9	32,73	8,13	59,10	0,04

Source: According to the decree, prepared on the basis of data from the State Statistics Committee of the Republic of Uzbekistan.

The table shows that a total of 9,658 teachers work in preschools in Bukhara region, with an average of 743 teachers in each region. Bukhara city and Gijduvan



district have the largest number of teachers and Karavulbozor district has the lowest number of teachers.

The highest proportion of teachers of preschool education institutions (27.2%) is 31-39 years old, and the average age of teachers of preschool education institutions is 32.8 years. The highest share of teachers of preschool education institutions (59.1%) is secondary special education; the share of higher education is 32.7%.

Our government pays great attention to raising the level of education of teachers of preschool education, i.e. the training of many teachers with higher education. Decree of the Cabinet of Ministers of the Republic of Uzbekistan dated May 18, 2019 No 418 "On measures to further improve the training of personnel for the preschool education system" created a great opportunity for preschool education organizations to train specialists with higher education. According to the decision, preschool educators were set at three years instead of four years for full-time education, with the learning process intensified. Also, teachers of preschool education institutions with secondary special education, in accordance with the recommendations of the leaders of the organization, have the opportunity to receive higher education in absentia for three years, without leaving the production. One of the most important measures taken by the government to improve the quality of pre-school education is to use economic methods of preschool education management, differentiate the salaries of teachers with higher education and higher education and skills, pay high salaries and provide financial incentives.

At present, remuneration of teachers of preschool education organizations is approved by the Decree of the Cabinet of Ministers of the Republic of Uzbekistan dated March 9, 2020 No 135 "On measures to further improve the remuneration of employees of public preschool education" amounts of basic tariff rates of payment" (Table 7).

(Table 7).

### Amounts of basic rates of remuneration of employees of the state preschool education system

s/n	Position name	Amount of base tariff rate (UZS)				
		higher category	first category	second category	higher educated	secondary special (vocational) education
3.	Higher education: educators of the preparatory group (from 5 to 6-7 years), language teachers, teacher-defectologist, teacher-speech therapist, psychologists	2095874	1975627	1850054	1727603	x
4.	Preschool teacher (except for item 3)	1620021	1510347	1403920	x	1203660
5.	Educator-methodologist, educator (except for educators of higher education group (from 5 to 6-7 years))	1 510 347	1 403 920	1 301 738	1 203 660	1 111 444
6.	Musician, choreographer, instructors of all specialties	1329081	1222677	1120510	1023015	930302
7.	Assistant educator with higher or secondary special, professional pedagogical education	1 014 333				
8.	Assistant educator with higher,	845 278				



s/n	Position name	Amount of base tariff rate (UZS)				
		higher category	first category	second category	higher educated	secondary special (vocational) education
	secondary special, professional non-pedagogical education and general secondary education					

Source: Annex 1 to the Decree of the Cabinet of Ministers of the Republic of Uzbekistan dated March 9, 2020 No 135 "On measures to further improve the procedure for remuneration of employees of the state preschool education system."

According to the schedule, the higher education of pedagogical staff, based on their knowledge and experience, is encouraged by our government to receive higher categories.

Remuneration of pre-school staff is differentiated based on the knowledge, skills and experience of the staff, which encourages the pedagogical staff of the institution to have higher education and work skills.

Also, the Regulation "On the procedure for remuneration and financial incentives for employees of the state preschool education system" approved by the Decree of the Cabinet of Ministers of the Republic of Uzbekistan dated January 5, 2018 No 10 "On improving the procedure for remuneration of employees of the state preschool education system" Chapter 8 states that "financial incentives for conscientious, enterprising and highly qualified employees of public pre-school educational institutions shall be provided at the expense of a special fund for financial incentives for employees of budgetary institutions and organizations established in public pre-school educational institutions". This is a sign of respect and consideration for employees who work conscientiously, honestly and with high discipline in the institution.

As a result of the introduction of economic methods aimed at raising the level of education of teachers, in a short period of time the level of education of teachers increased from 20.0% to 32.7%.

The widespread use of economic methods in the management of the pre-school education system in Uzbekistan will improve the quality of pre-school education and upbringing, and the level of enrollment of young children in pre-school education institutions will increase sharply. In his Address to the Supreme Council on December 29, 2020, the President of the Republic of Uzbekistan Shavkat Mirziyoyev outlined the urgent tasks for the pre-school education system:

Therefore, our strategic goal for the development of preschool education in the coming years is to create the necessary conditions for the full coverage of every child of kindergarten age in this area of education.

We need to increase the coverage of preschool education to 65% by the end of next year and 75% by the end of 2023. An additional 2,000 non-governmental kindergartens will be established with a budget subsidy of 600 billion soums, bringing the share of the private sector to 25 percent. Also, in 2021, 560,000 6-year-old children or 82% of them will be covered by the free school preparation system" [3, p. 2].



In 2020, the coverage of young children in preschool education will be 55.0%, and as a result of the measures taken in the system, it is planned to reach 65.0% by the end of 2021. For comparison, in 2016, the coverage of preschool children in preschool education was 33.0%, and the measures taken by the government to the preschool education system, as a result of the introduction of economic management methods increased by 22.0% to 55.0%.

**Conclusion.** Given that pre-school education is important for the future development of the country, the government will develop measures for the effective management of the pre-school education system.

Since 2016, Uzbekistan has been accelerating the reform of the pre-school education system. The Ministry of Public Education of the Republic of Uzbekistan took over the pre-school education system and formed the Ministry of Preschool Education of the Republic of Uzbekistan. This new ministry is the state body responsible for preschool education in Uzbekistan.

The Law of the Republic of Uzbekistan “On Preschool Education and Upbringing” was adopted, which fully reflects the aspects of preschool education, the principles of education, the rights and responsibilities of preschool education organizations and foster children and their parents.

In recent years, economic methods have been widely used in the management of preschool education instead of administrative methods. First of all, attention was paid to the establishment of many state and non-state preschool organizations in the regions of Uzbekistan, including the introduction of non-governmental and public-private partnership preschools in cooperation with state preschools.

In order to increase the number and expand the activities of non-governmental and public-private partnerships in preschool education, a number of economic tools have been developed. For example, vacant government buildings were given to companies at zero cost to set up preschools. Long-term tax breaks and low-interest loans from banks were provided to companies engaged in pre-school education.

In the spirit of humanity, the Uzbek government has set different amounts of parental fees for children attending preschools, based on the income of the population, which has made it possible for parents in all regions to send their children to preschool.

The use of economic management methods in the preschool education system has ensured that the coverage of preschool children in preschool education will increase from 33.0% in 2016 to 55.0% in 2020.

In order to improve the quality of pre-school education, the Uzbek government has introduced a system of remuneration and financial incentives for pre-school education, which encourages teachers to have higher education and to improve their knowledge and skills. At the same time, the salaries of pre-school teachers will increase in line with the increase in the level of education of teachers, as well as the change in the categories of teachers in accordance with their qualifications will ensure higher salaries. In addition, the government's ability to train pre-school education specialists has ensured that the level of education of pre-school teachers in the short term will increase from 20.0% in 2016 to 32.7% in 2020.



In order to increase the level of education of teachers working in preschool education and to improve the quality and content of preschool education, I make the following proposals:

- It is necessary to increase the amount of small one-time bonuses given by the head of the organization by 2-3 times, taking into account the work discipline, knowledge of pedagogical staff working in the preschool organization, the activities carried out in the organization;

- Increase the small difference between the salaries of teachers with higher and secondary special education by 2-3 times in determining the amount of salaries paid in accordance with the level of education of teachers of preschool education, the share of higher education is 32.7 percent in case the government facilitates access to higher education.

- It is expedient to establish bonuses for the next year for educated, experienced and active pedagogical staff that has been following labor discipline for a year.

In order to further develop pre-school education in the Republic of Uzbekistan, it is necessary to study modern economic methods from the experience of developed countries with a developed pre-school education system and introduce them into the pre-school education system of Uzbekistan.

#### References:

- [1]. Law of the Republic of Uzbekistan dated December 16, 2019 No. 595 "On preschool education and upbringing", People's speech, December 17, 2019, No. 260.
- [2]. Decree of the President of the Republic of Uzbekistan dated May 8, 2019 No PP-4312 "On approval of the Concept of development of preschool education in the Republic of Uzbekistan until 2030". People's Speech, May 9, 2019, No. 95.
- [3]. Address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis, Khalk Sozi newspaper, December 30, 2020, pages 1-2.
- [4]. Belyx S.S. "Upravlenie razvitiem doskolnogo obrazovaniya v Respublike Komi v usloviyax rynochnoy ekonomiki" diss. Syktyvkar, Russia. SyktGU, 1998.
- [5]. Muminov Kh.I., Jurayev A. (2019) Forecasting economic growth by multi-factored model. Journal of Economics and Innovative Technologies, No. 5, September-October pp. 83-89 <http://iqtisodiyot.tsue.uz>
- [6]. Muminov Kh.I., Jurayev A. (2020) The Impact of the pandemic coronavirus on exports to the economic growth of Uzbekistan. Trans Asian Journal of Marketing & Management Research (TAJMMR), Vol. 9, No. 11, November 2020, pp. 19-26, <https://www.indianjournals.com>
- [7]. Muminov X.I. (2020) 1. Forecasting Economic Growth Based on Time Series and Multivariate Model, (Forecasting of economic growth on time series and a multi-factor models), Nauchnye vesti, No 4 (23), p. 117-128, <http://www.nvesti.ru/%d0%b0%d1%80%d1%85%d0%b8%d0%b2/>
- [8]. Nabieva S. and b. "Great thinkers and historical monuments in preschool education" Textbook. KokandDPI. 2008.
- [9]. Nurkeldieva M. Textbook "Preschool and correctional pedagogy." T. TDPU, 2013
- [10]. Shodmonova Sh. Textbook "Pedagogy of preschool education." T. "Science and Technology" n. 2008 y.



**UDC: 004.934.**

**MODELS AND ALGORITHMS TO SUPPORT QUEST CREATION**

**Muminov Bahodir Boltaevich  
D.Sc., professor TUIT named  
after Muhammad al-Khwarizmi,**

**Bekmurodov Ulugbek Bakhrom ugli  
TATU SF named after  
Muhammad al-Khwarizmi.  
PhD student.**

**[\\*ulugbek\\_bekmurodov@mail.ru](mailto:ulugbek_bekmurodov@mail.ru)**

**Abstract:** This paper analyzes the mathematical support of the module, which helps to create queries based on intelligent communication systems, and formulates the main results that will help to formulate further research. Based on the request, the answer is transacted. These are key concepts in knowledge management. A single node of a communication scenario corresponds to a single node of intelligent communication systems.

**Keywords:** Ontology, methods of knowledge expression, knowledge base, database, facts, events, queries, property, event, object, graphs.

**Аннотация:** В данной статье анализируется математическое обеспечение модуля, который помогает создавать запросы на основе интеллектуальных систем связи, и формулируются основные результаты, которые помогут сформулировать дальнейшие исследования. На основании запроса осуществляется перевод ответа. Это ключевые концепции в управлении знаниями. Одна транзакция коммуникационного сценария соответствует единственному узлу интеллектуальных коммуникационных систем.

**Ключевые слова:** Онтология, методы выражения знаний, база знаний, база данных, факты, события, запросы, свойство, событие, объект, графики.

**Annotatsiya:** Ushbu maqolada intellektual multokot tizmalari asosda so'rovlarni bajarishga ko'maklashuvchi modulning matematik ta'minoti ta'lini davom ettirishni, tadqiqotni davom ettirishni keyingisini izlanishlarini tashkil qilishda yordam berish uchun asosli natijalarni tashkil etish. Savol asosida javob tranzaktsiyalanadi. Bu esa bilimlarni boshkarishida asosiy tushunchalar boshlangandi. Intellektual muloqot tizmalari bitta tuguniga multoqot ssenariysining bit tranzaktsiyasi mos keladi.

**Kalit suzlar:** Ontologiya, bilimlarni ifodalash usullari, bilimlar bazasi, ma'lumotlar bazalari, faktlar, hodisalar, so'rovlar, xususiyat, voqealar, grafiklar.

**Introduction.** One of the main tasks of the concept of "artificial intelligence", which is becoming part of information technology and society, is to perform comprehensible thinking operations using computer systems and their technical devices. It consists in creating a real real process of interaction between human actions and the computer (computers) [1, 2].



Communication systems can be used to create a user query in library systems. This requires the methods of artificial intelligence-based software modules, architectures appropriate to that style, information flow models, communication methods, and algorithms to assist users in creating or shaping the queries outlined in the previous section.

Based on the above architectures, the following can be suggested as mathematical support for building an intellectual environment and making decisions in it:

1. Mathematical support of the decision-making hierarchy based on formal logical knowledge;
2. Mathematical software based on logical semantic connections and production knowledge;
3. Frame knowledge-based mathematical software;
4. Mathematical support based on the construction of ontological knowledge.

It is necessary to build an intellectual environment for the formation of queries and to identify methods of intellectual processing based on ontological knowledge in it.

The expression of ontologies is important to ensure that there is natural communication when creating queries. It is expedient to construct ontologies for each object of the Library systems and to determine the mutual proximity of these objects, to combine the objects.

It has been found that the repetition of the architectural process makes it possible to implement an individual approach in communication systems. That is, the basic communication methods of communication systems are based on:

1. Question - answer;
2. Targeted communication;
3. Purposeless communication;

This requires the construction of ontologies for each PS, the creation of intellectual communication scenarios for the organization of communication in communication systems, as well as methods for determining the proximity of their objects.

**Research methodology.** Building an ontology of corporate information library objects serves to express knowledge and create an intellectual environment. In the intellectual environment, decision-making is based on the intellectual processing of data. From this point of view, in order to create communication systems that facilitate the formation of queries, copies of intellectual environment classes, i.e., working with objects, should cover all aspects of thinking in relation to the object [1].

The construction of an ontology for a predmed field is understood on the basis of the following trinity:

$$O = \langle X, R, F \rangle$$

Here  $X = \{x_1, x_2, \dots, x_n\}$ ,  $n = |X|$ ;

$R = \{r_1, r_2, \dots, r_k, \dots, r_m\}$ ,  $R : x_1 \times x_2 \times \dots \times x_n$ ,  $m = |R|$  - the number of interactions of given class objects in the subject area. These serve to create a pattern for the interaction of classes. In general, class relations are divided into general relations (rules are created, in part, on the basis of definite relations) and definite, definite relations;

$F: X \times R$  – a limited set of functions that interprets given classes and / or relationships. In special cases it is used as a set of interpretive functions to create a broad glossary, dictionary, i.e.  $x$  classes;

The method of constructing an ontology for a subject area consists of two steps:

1. Conduct preliminary analysis for the subject area and determine the characteristics for class characteristics;

2. Build an ontograph model for the subject area. In this case, the ontograph is a graphic, the ends of which are the classes (objects) of the subject area, and the arcs are the relationship between them. A graph is a one-way oriented graph with several arcs entering and exiting one of the three.

**The first stage.** When constructing an ontology, two types of properties are used for the subject area, and they differ from each other:

– Property value. This is the relationship between the classes created and the data type or character types;

– Property-object. This is the relationship between the two classes created.

**The second stage.** We construct a PS ontology using a data model based on an obscure hypergraph to construct a model in the form of a graph. Here are the basic concepts and explanations to formalize this.

Ontology is a very complex data structure that requires imaging using special mathematical hardware [3]. We propose to apply a binary approach to processing ontological knowledge based on the use of an obscure hypergraphic data model for PS. The ontology to be constructed is an obscure ontology (explicit ontology is an obscure ontology is a special case).

**Analysis and results.** While each of the objects is defined with a certain degree of belonging to a common class, in a general obscure class, this group of objects merges.

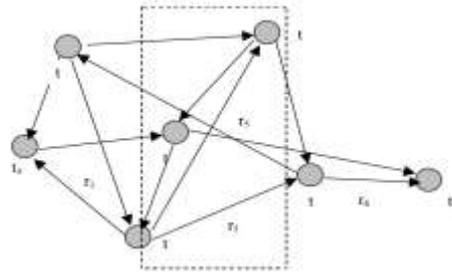
From this, the general nonlinear class can be thought of as the arc of the obscure hypergraph, with the ends included in the generalized arc forming the general nonlinear class. However, in the construction of the ontology, the order of the elements, the rules of the relationship between the objects, and the direction of the relationship are important. Therefore, the first type of obscure-oriented hypergraph is included in the obscure hypergraphic data model.

The first type is a vaguely oriented hypergraph  $\tilde{H} = (X, D)$  and  $X = \{x_i\}, i \in I, I = \{1, 2, \dots, n\}$  and  $D = \{\check{d}_j\}, j \in J, J = \{1, 2, \dots, m\}$  a set of obscurely oriented bows. In this case, for each arc, there is the following (1) obscure set [3].

$$\check{d}_j = \left( \left( \frac{\mu_{d_j}(x_{i_1})}{x_{i_1}} \right), \left( \frac{\mu_{d_j}(x_{i_2})}{x_{i_2}} \right), \dots, \left( \frac{\mu_{d_j}(x_{i_m})}{x_{i_m}} \right) \right) \quad (1)$$

$\tilde{H}$  each of the hypergraphs  $d_j$  The obscure arc follows the obscurely oriented graph  $\tilde{G}(d_j) = (X, \tilde{U}_j)$  represented in the form. This graph, too  $\tilde{H}$  has as many three as there are three in the hypergraph. Also  $\tilde{H} = (X, D)$  the hypergraph is also treated in the same way as a graph with a blunt-pointed tip. Such an arbitrary obscure ontology can be represented in the form of an obscure triangular oriented graph based on expression (1) (Fig. 1), i.e.

$$O \rightarrow \tilde{X}(H) = (X, \tilde{U}) = \bigcup_{\tilde{d}_j \in D} \tilde{G}(d_j)$$



**Figure 1.  $\tilde{O}(H)$  is a nonlinear end-oriented graph model for subject-oriented ontology.**

From this there is a class A atomic set that is cross-linked with the R relation. In this case, the correctly structured set of terms of the ontological classification language L is defined as follows:

1. If  $x \in A, x \in L$ ;
2. If  $x \in L, r_i \in R$  and  $y_i \in L, i = 1, \dots, n \quad x[r_1: y_1, \dots, r_n: y_n] \in L$

The basic approach of ontology is a simple taxonomically incorporated approach. On this basis we can generalize the concept of transitiveness to all relations between properly structured ends (classes).

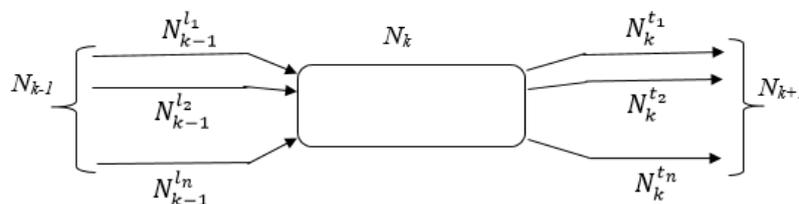
$\tilde{O}(H)$  what an ontological graph  $x, y \in X$  the ontological relationship of the ends allows the introduction of the concept of an uncertain route directed by M (x, y). Henceforth, the directed nonlinear route is the nonlinear route, which is oriented from x three to y three along the graph arcs [4].

Intelligent communication scenario construction systems are based on ontology-based question-and-answer methods, as described in the top paragraphs. Question-answer methods are mainly database-oriented and are distinguished by two features. The first is based on the definition of roles in this communication process, for example, when the user is in the role of the requester, while the software module plays the role of the respondent. In the second, the answers to the questions are formed on a key-value basis [6].

Such approaches are used in many software packages, such as DEDUCOM. This program is a special case of Lisp-programming modules using algorithms for building fact-based communication scenarios. The rules for drawing conclusions based on lisp expressions are as follows:

$$R: ((X \rightarrow V) \wedge (V \rightarrow Y)) \Rightarrow f: (X \rightarrow Y)$$

As a result of research, the scenarios of intellectual communication is a cyclical process, the elements of which are considered on the basis of nodes, its two transition schemes are direct transition, conditional transition.



**Figure 3. Node-to-node diagram of intellectual communication scenarios.**

In this case,  $N$  - nodes, ie  $N_{k-1}$  incoming question,  $N_k$  outgoing answer, questions corresponding to the node in the database -  $li$  ( $i = 1, .. n$ ) and a formalized view of the answers corresponding to the node  $ti$  ( $i = 1, .. n$ ).

Intelligent communication scenarios are based on the following rule for direct transition in the node-to-node scheme:

$$NODE: \left( R: \left( Q \left( node: \left( N_{k-1} \rightarrow N_{k-1}^{lj} \right) \right) \right) ? A(N_k^{ti}): A(N_k^{tn}) \right) \rightarrow N_{k+1},$$

$$j = 1, \dots, n, i = 1, \dots, n - 1.$$

Here  $A(N_k^{tn})$  is the most universal answer to the question posed. Therefore, if no suitable answer is found to the question, this most universal answer is used.  $n$  is the number of options corresponding to the question.

Intelligent communication scenarios are based on the following rule for passing through a condition in a node-passing scheme:

$$NODE: \left( R: \left( \left( \exists Q \left( node: \left( N_{k-1} \rightarrow N_{k-1}^{lj} \right) \right) \right) \wedge \left( \forall Q \left( node: \left( N_c \rightarrow N_c^{lj} \right) \right) \right) \right) \right)$$

$$? A(N_k^{ti}): A(N_k^{tn}) \rightarrow N_{k+1},$$

$$j = 1, \dots, n, \quad c = 1, \dots, m \ll k - 1, \quad i = 1, \dots, n - 1.$$

Here  $A(N_k^{tn})$  the most universal answer to the given question and the number of options corresponding to the  $n$ -question.

It can be seen from the above transition diagrams that in intellectual communication scenarios, addressing the questions before the current question determines its question memory availability and the purpose of the communication and creates the desired query for the user.

In order to achieve the desired query, the following conditions must be met for the scenarios used in communication systems:

1. The purpose of the communication scenario process can be achieved in limited transactions, and with the onset of problem solving, all the questions and answers necessary for the formation of these transactions are identified;

2. Changing the set of expected answers always creates a new set that is different from the current one.

From these conditions, the method of constructing intellectual communication scenarios based on the Mili machine [5] can be written on the basis of the following five.

$$D = (Q, A, T, f, g) \quad (2)$$

where  $D$  denotes the communication scenario.

$$Q = \{q_i\}; i = 1, \dots, k$$

In the communication scenario method, it represents a set of stable states of the automaton and corresponds to a set of names of the communication record. Unlike a communication protocol transaction, a communication scenario transaction includes a single question and all possible answers. A steady state is a state of waiting for an active communication node to respond to a reactive communication node or a state of

waiting for a reactive communication node to ask a question to an active communication node [6].

$$f: (T \times A) \rightarrow T$$

This refers to the transition function and is the transition from the previous scenario to the new state scenario (new transaction of the scenario). In this case, the action is performed depending on the ID of the current transaction and the response received from the reactive communication node.

$$g: (T \times A) \rightarrow Q$$

Specifies the output function, which determines the ID of the next question, the ID of the current transaction, and the current response of the reactive communication node.

The transition and exit functions correspond to the classical definition of a national machine gun. The transaction function is natural when modeling a memory access method. Therefore, it uses the  $\varphi$  function instead of the  $f$  and  $g$  functions.

$$\varphi: (T \times A) \rightarrow (T \times Q)$$

Hence, the transaction function identifies the pair. Defines the name of the next question and the name of the transaction, the current answer, and the name of the current transaction [6].

When performing a transaction (transition from the previous stable state to the next state), the model of the machine can be determined as follows.

$$D = (Q, A, T, \varphi)$$

This expression performs the following sequence of events:

- Accept current response;
- Understand the current answer Determine the name of the next question by the degree of relevance  $m$ .

If there is no defined response  $A$  structure in any way, this means that in order to recognize the current response, the  $D$  communication scenario must relate activity to all elements of the  $A$  response set during each transaction. The place of this set is important for scripts.

The expression of the description of the automatic model, which has the property of remembering the answers of the intellectual communication scenario, has two purposes. They are:

- first, an assessment of how useful the proposed automated model access to a set of questions is in building a communicative scenario method;
- second, the communication provides a transition to the next network model of the scenario method and consists of identification. For example,  $T = \{t_i\}, i \in I, I \in (1, \dots, 4)$  reflect the logic of moving to the next question of an active communication scenario involving four transactions and in response to the understood and misunderstood responses of the communication scenario.

$t_2$  the transaction generates a corresponding Q2 question based on the active communication scenario Q1 question reshaping.  $t_2$  in the transaction  $t_1$  expects to receive answers to the questions in the transaction. Also, answer A2 serves to create a request to return to transaction  $t_1$  and Q1 to repeat the question.

The mathematical model of a machine gun with the ability to remember the answers of an intellectual communication scenario is expressed as follows.

$$\begin{aligned}
 Q &= \{Q_1, Q_2, Q_3, Q_4\} \\
 A &= \{A_1, A_2, A_3, A_4, A_5\} \\
 T &= \{t_1, t_2, t_3, t_4\} \\
 \left. \begin{aligned}
 \varphi: (t_1, A_1) &\rightarrow (t_1, Q_1) \\
 \varphi: (t_1, A_3) &\rightarrow (t_3, Q_3) \\
 \varphi: (t_1, A_4) &\rightarrow (t_4, Q_4) \\
 \varphi: (t_1, A_5) &\rightarrow (t_2, Q_2) \\
 \varphi: (t_2, A_1) &\rightarrow (t_2, Q_2) \\
 \varphi: (t_2, A_2) &\rightarrow (t_1, Q_1) \\
 \varphi: (t_2, A_3) &\rightarrow (t_3, Q_3) \\
 \varphi: (t_2, A_4) &\rightarrow (t_4, Q_4)
 \end{aligned} \right\} \quad (3)
 \end{aligned}$$

$\varphi$  the transaction function (3), represented by the function, describes the logic of access to the set of questions on the one hand, and in this sense can be considered as a mathematical model of the method of access to the set of questions, on the other hand.

$\varphi$  the transaction function should be expressed in tabular form, as it is convenient for experts to complete the necessary transition transactions to create communication scenarios. This is because it is easier to fill in a table than to write formulas in the user interface. Table 1 lists transactions that provide the same data as in formulas (3).

To do this, we express the model of intellectual communication scenario construction (1) on the basis of an ambiguous set of expressions. (1) The expression has three definite sets, Q - a set of questions, A - a set of answers, and T - a set of transactions. These packages should be converted to obscure packages. It also makes no sense to add the concept of uncertainty because T transactions are clear.

Q - a set of clear questions - is a set of all equal questions that will be focused on the purpose of the communication. It is worthwhile to introduce the level of accuracy of these questions [7].

In this context, it is possible to interpret the obscure set relative to the set of questions. Q - A set of obscure queries can be expressed as follows:

$$\begin{aligned}
 Q &= \{Q_j, \mu_Q(Q_j)\}, \quad j \in J, J = (1, \dots, k), \\
 \mu_Q: Q &\rightarrow [0,1]
 \end{aligned}$$

There is  $\mu_Q - Q_j$  the function of determining the degree of accuracy of the question. The function of the question reflects the “closeness” of the current question directly to the question.

The right question is understood as a question that involves solving a problem in response to a direct question. Thus, it is assumed that the purpose of communication can be achieved in a single transaction with a single direct question. Less use of direct questions in a communication scenario will make the communication process take longer and vice versa. It is also possible to achieve the same goal in the same number of transactions, depending on the level of focus of the questions used. Therefore, the accuracy function of the  $\mu_Q$  question also characterizes the “speed” of the communication process approaching the goal.

In a determinant environment, set  $A$  is the set of all responses sufficient to achieve a communication goal. An important characteristic of responses to a feedback communication scenario is their validity. The question checker communication scenario can vary in how accurate a particular answer is, in the degree to which it is focused on the questions.

In this context, it is possible to interpret the obscure set relative to the set of answers.

$A$  - A set of obscure queries can be expressed as follows:

$$A = \{A_j, \mu_A(A_j)\}, \quad j \in J, J = (1, \dots, l),$$
$$\mu_A: A \rightarrow [0,1]$$

Here  $\mu_A - A_j$  is the expected truth function of the answer. Because in the process of natural communication, it is often difficult to know exactly what this value will be, only a correctly accepted answer and question communication scenario can predict.

Thus, the obscure automatic model of the communication scenario method can be represented by seven elements [6]:

$$D^* = (Q, A, T, \mu_Q, \mu_A, f, g) \quad (4)$$

Here  $Q = \{Q_j, \mu_Q(Q_j)\}, j = 1, \dots, k$  - a set of questions that are not directly related to the question communication scenario.

$A = \{A_j, \mu_A(A_j)\}, j = 1, \dots, l$  - a set of false responses to a response communication scenario;

$T = \{t_i\}, i = 1, \dots, n$  - a set of transactions of a communication scenario.

$\mu_Q: Q \rightarrow [0,1]$  - the function of determining the level of accuracy of a question in a question communication scenario;

$\mu_A: A \rightarrow [0,1]$  - the expected truth function of the response of the response communication scenario;

$f: T \times A \rightarrow T$  - the function of transitioning  $D$  to a new transaction depending on the answer received from the current transaction and question communication scenario;

$g: T \times A \rightarrow Q$  - question communication scenario the name of the question is the function of output based on the answer received from the current transaction and the answer communication scenario;

The relationship between the expected validity of the answer at each step and the degree of focus of the next question is then determined by some contradictions. (5) A linear relation of an expression with a coefficient close to each other. The lower the expected validity of the answer, the less direct the next question should be, or vice versa.

**Conclusion.** The mathematical support of the module, which facilitates the creation of queries based on intelligent communication systems, was analyzed and the main results were formed, which will help to formulate further research. It was found that the repetition of the architectural process could implement an individual approach in communication systems, and that the main communication methods were question-answer, targeted communication, and non-targeted communication. The method of constructing the ontology for the subject area was analyzed, the  $\tilde{O}$  (H) nonlinear end-oriented graph model for the ontology designed for PS, and the mathematical



representation of the automated model with the feature of remembering the answers of the intellectual communication scenario were developed.

### References

- [1]. Muminov B.B. Data retrieval system. –T .: Science and technology. 2016. -210 b.
- [2]. Muminov B.B. Data retrieval methods. –T .: Science and technology. 2016.-276 p.
- [3]. M.K.Rumizen. Upravlenie znaniyami // OOO Izdatelstvo Astrel, 2004, -c.128.
- [4]. Wiig K.M. Knowledge Management Foundations: Thinking About Thinking How People and Organizations Create, Represent, and Use Knowledge. - Arlington, TX: Schema Press, 2003. -p.312-314.
- [5]. Davenport, T. and Prussak, L. Working knowledge: how organizations manage what they know. Boston: Harvard Business School Press. 2001- p.231.
- [6]. Nonaka I., Takeuchi X. Company creator of knowledge. Generation and development of innovations in Japanese firms / per. s angl. (The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation). - M .: Olimp-Biznes, 2003. - p.384.
- [7]. Despres C., Chauvel D. The Present and the Promise of Knowledge Management. Butterworth-Heinemann, 2000. - p.352.
- [8]. Stuart T.A. Intellectual capital. New source of wealth of organizations / Per. s angl. - M .: Pokolenie, 2007, p.12
- [9]. Bukovich U., William P. Upravlenie znaniyami: rukovodstvo k deystviyu // per. s angl. M .: INFRA-M, 2002. - c. 504.
- [10]. Stewart T.A. Intellectual Capital: The New Wealth of Organizations. Currency. 2008. - p.320.
- [11]. Milner B.3., Rumyantseva 3.P., Smirnova V.G., Blinnikova A.V. Upravlenie znaniyami v korporatsiyax M .: Delo, 2006, p.118
- [12]. Akoff P., The Art of Resheniya Problem. // M .: Sovetskoe radio, 2001. p. 104.



UDC: 81'44:130.122 [=512.133/=111]

**LEXICOGRAPHIC ANALYSIS OF 'SPIRITUALITY' SEMANTIC FIELD IN THE ENGLISH LANGUAGE**

**Akhmedova Mekhrinigor Bakhodirovna**  
**PhD, Associate professor of**  
**English Literature department**  
**Bukhara State University**  
[mexrisha82@mail.ru](mailto:mexrisha82@mail.ru)

**Annotatsiya:** Maqolada ingliz tilidagi "ma'naviyat" kontekstli maydonining leksikografik talqini haqida umumiy ma'lumot berilgan. Shu bilan birga, ingliz tilidagi leksik kategoriyalar ham ma'no jihatidan keng tahlil qilingan. Bundan tashqari, nutqdagi semantik vositalar ham misollar yordamida tahlil qilindi.

**Kalit so'zlar:** leksikografik tahlil, kontekstual maydon, leksik kategoriyalar, semantik vositalar, semantik ma'nolar, nutq, imon, ma'naviyat.

**Аннотация:** В статье дается обзор лексикографической интерпретации контекстного поля «духовность» в английском языке. Однако лексические категории в английском языке также подвергались тщательному анализу с точки зрения значения. Кроме того, на примерах анализировались семантические инструменты в речи.

**Ключевые слова:** лексикографический анализ, контекстное поле, лексические категории, семантические инструменты, семантические средства, речь, вера, духовность.

**Abstract:** The article provides an overview of the lexicographical interpretation of the 'spirituality' contextual field in English. However, lexical categories in English have also been extensively analyzed in terms of meaning. In addition, the semantic tools in speech were also analyzed using examples.

**Key words:** lexicographic analysis, contextual field, lexical categories, semantic tools, semantic means, speech, faith, spirituality.

**Introduction.** The fact that some lexical categories (systems, groups) in the English language become more and more comprehensive in terms of meaning, shrink or undergo some other changes also occurs under the influence of external factors.

It is known that the rise of a language to the level of a world language is ensured by the international economic and political prestige of the country that speaks that language. However, in today's era of globalization, in addition to economic and political factors, the growing international cultural ties also play an important role in this process. It should be noted that each language that has risen to the status of a world language has its own problems.

Despite the fact that the rapid spread of the global language threatens the devaluation and even extinction of other languages, it is possible that this language, which is popular all over the world, will lose some momentum due to new speakers of different cultures [1]. It is for this reason that abstract concepts in such a language can

expand, narrow, and acquire new meanings in terms of meaning, and such changes can lead to a radical reform or disappearance of the semantic means in speech.

**Literature review.** According to linguist L.L. Newman, “concepts such as ‘faith’, ‘spirituality’ and ‘belief’ are often used as mutually synonymous terms, but their interpretations are unique and different” [2]. In the evaluation of these and similar abstract concepts in English as mutual meanings, of course, the total number of users as a second or foreign language is greater than the number of its original speakers, and the meanings of certain concepts in this language are generalized according to similarity; it is much more likely that a single meaning will be isolated and lead to its isolation [3]. In particular, the English alternative to the concept of spirituality in the Uzbek language is closer to concepts such as religious beliefs, firmness of faith, rather than the expression of maturity of thinking and behavior [4].

**Analysis.** It should be noted that in Uzbek, such alternatives as the term "ideology", which is an alternative to this concept, do not occur in English. In addition, as in the Uzbek language, the method of studying various elements of the conceptual sphere of "spirituality" in terms of national values creates a number of difficulties in the English language [5]. For example, the fact that English is recognized as the main state language in some countries, and the second state language in a number of countries, as well as the growing number of speakers of this language as a foreign language, affects the cultural roots of this language. Given that English culture and national identity in the world are increasingly influenced by globalization and synthesized with other cultural strata, it is natural that any concept should face a number of problems in the study of the national factor [6]. For this reason, the historical origin of concepts, the demand for their formation, and the study of their causes ensure the consistency of scientific research and increase its effectiveness. Thus, the category of “spirituality” in English can be conditionally studied on the basis of the following conceptual roots [7]:

- Historical formation of English spirituality;
- Sources of English spirituality;
- Foreign and domestic policy, which is the basis for the formation of English spirituality;
- English spiritual education tools;
- Factors affecting English spirituality;
- The scale of the impact of English spirituality on the process of globalization;
- The role of English spirituality in the phenomenon of popular culture.

All of these concepts, which are the product of holistic conceptual factors, can also occur as a single concept [8]. Major historical events, such as British colonization, the secession of the United States from Britain as an independent state, the British occupation of Australia, the British occupation of the Baburi Empire, and industrial development in England from the mid-seventeenth to mid-nineteenth centuries, played an important role in British spirituality. Sources of English spirituality include [9]:

- spiritual and material heritage;
- religious beliefs of different English-speaking peoples;
- discoveries



Although English was formed on the territory of the United Kingdom, today in a number of countries this language is the main means of communication. In this sense, the English spiritual and material heritage includes patterns created in different periods and in different places. The harmony of these sources, which are part of a great spiritual heritage, is ensured not by a single national idea, but by a system of universal ideas [10].

Unlike nations that relied on different religious beliefs at different times and experienced the dominance of a particular faith in each period, a culture that includes English speakers will be influenced by a number of religious beliefs over a period of time. Given that the concept of 'spirituality' in English is actually based on the concepts of 'spirit' and 'spirituality', this concept is accepted as a religious and moral norm for every speaker and its meaning is generally understood by all speakers in the same way [11]. Given that most of the world's religions promote goodness, reflecting certain moral criteria, we realize that the English concept of "spirituality" reflects not only the meaning of a concept based on religion, but universal values promoted by all religions. And, for this very reason, the concept of 'spirituality' is embodied in his mind as a beautiful set of morals, regardless of which religion the English-speaker believes or does not practice. Hence, it would be more accurate to evaluate the term 'spirituality' in English not only in a religious context, but also in terms of universal value [12].

**Discussion.** It is well known that the UK has been one of the founders of the industrial era in human history and one of the leaders in the development of this era. Also, the United States, where the majority of English speakers today live, is making a huge contribution to the development of modern science, particularly from medicine to space research. While industrial development in the UK has led to a stronger integration of the British as a nation, the U.S. contribution to the development of modern science has instilled a sense of national pride in people of different nationalities. In this sense, the discoveries, although not indirect, can be considered as an indirect spiritual source, as well as one of the causes of national-spiritual development. Indeed, every discovery of international historical significance triggers processes such as the formation of national pride and the realization of national identity.

Speaking of sources of "spirituality" above, although the concept of "spirituality" in English was originally formed as a religious concept, the colonial policy of English-speaking countries, as well as the widespread recognition of this language as an acceptable language for international communication maturity has made it a basic concept that defines moral norms in the minds and cultures of several nations.

Today, the linguistic category of "spirituality" has expanded from its original narrow religious concept of "psyche" to "spirit" and has gained the status of a conceptual concept that reflects the inner spiritual and moral qualities of man in general. It should be borne in mind that the terms and concepts they call cannot be evaluated solely on the basis of the historical-etymological meaning and content of the expression, otherwise it will falsify the actual essence of the concept, dilute the objective reality.



**Conclusion.** In conclusion, the concept can be understood and interpreted in two ways:

- 1) historical and etymological;
- 2) synchronous-modern.

While the historical-etymological approach helps to reveal the roots of the formation of the concept and to clarify how and to what extent the traces of the past are preserved in the essence reflected in its present state, the synchronous-modern approach allows an objective description of its practical essence. In general, giving priority to any of these approaches in revealing the essence of a concept contradicts the law of scientific objectivity in research and interpretation.

#### **References:**

- [1]. Crystal D. English as a Global Language. Second Edition. – New York, Cambridge University Press, 2003. – 229 p.
- [2]. Fisher, J.W. Spiritual Health: Its Nature and Place in the School Curriculum. PhD thesis, University of Melbourne, 1998, Melbourne, Australia, 2010 Available from <http://eprints.unimelb.edu.au/archive/00002994/> & Melbourne University Custom Book Centre: Melbourne, Australia, 2010 – 234p.
- [3]. Hay D.; Reich, K.H.; Utsch, M. Spiritual Development: Intersections and Divergence with Religious Development. in the Handbook of Spiritual Development in Childhood and Adolescence. King, P.E., Wagener, L.M., Benson, P.L., Eds.; Sage Publications: Thousand Oaks, CA, USA, 2006 – 59 p.
- [4]. Hill V. Spiritual Development in the Education Reform Act: A Source of Acrimony, Apathy or Accord. *Brit. J. Educ. Stud.*1989. – 182 p.
- [5]. Jose, N.; Taylor, E. Spiritual Health: A Look at Barriers to its Inclusion in the Health Education Curriculum. *Eta Sigma Gamman*, 1986.
- [6]. Muldoon M.; King, N. Spirituality, Health Care, and Bioethics. – *J. Relig. Health*, 1995, – P.329-349.
- [7]. Newman L.L. Faith, Spirituality and Religion: A Model for Understanding the Differences. *The College of Student Affairs Journal*, Volume 23, Number 2, 2004. – P. 102-110.
- [8]. Priestley, J.G. Towards Finding the Hidden Curriculum: A Consideration of the Spiritual Dimension of Experience in Curriculum Planning. *Brit. Journal of Relig. Educ.* 1985. – P. 112-119.
- [9]. Tanyi R. Nursing Theory and Concept Development or Analysis. Towards Clarification of the Meaning of Spirituality. – Blackwell Science Ltd, *Journal of Advanced Nursing*, EBSCO Publishing, 2002. – 509 p.
- [10]. Tisdell, E. The Politics of Medical Educators.: Incorporating Spirituality and Complementary Medicine into the Curriculum *Proceedings of the 45th Annual Adult Education Research Conference* . 2004. – 479-484 pp.
- [11]. Tisdell, E. & Tolliver, D. Claiming a Sacred Face: The Role of Spirituality and Cultural Identity in Transformative Adult Higher Education. *Journal of Transformative Education*, 1(4).2003. – 368-392 p.
- [12]. Victoria, BC: University of Victoria Welch, S.Sweet Dreams in America: Making Ethics and Spirituality Work. New York: Routledge,1999



UDC: 8.1751. 811/811.879

## TEACHING POLYSEMANTIC VOCABULARY OF THE ENGLISH LANGUAGE USING SHORT STORIES

**Odinaeva Nilufar Lukmonovna,**  
**Lecturer,**  
**Department of English literature,**  
**Bukhara State University.**  
[nilufar\\_o@gmail.com](mailto:nilufar_o@gmail.com)

**Annotatsiya:** maqolada polisemantik lug'atlar haqida umumiy ma'lumot va ularni o'qitish usullari keltirilgan. Shu bilan birga polisemantik lug'atlarni o'rgatish jarayonida qisqa hikoyalarning tutgan roli ahamiyatli ekanligi haqida ham fikrlar keltirilgan. Bundan tashqari bu usullarning qanchalik foydali ekanligi, foydali va zararli tomonlari tahlil qilingan.

**Kalit so'zlar:** polisemantik lug'at, o'qitish usullari, lug'atni o'rgatish jarayoni, qisqa hikoyalar, adabiy janrlar.

**Аннотация:** в статье предоставлены общие сведения о многозначной лексике и методах их обучения. Однако также высказывалась мысль о роли рассказов обучении многозначной лексике. Также анализируется, насколько полезны эти методы, их преимущества и недостатки.

**Ключевые слова:** многозначная лексика, методы обучения, процесс обучения лексике, рассказы, литературные жанры.

**Abstract:** the article provides general information about complex vocabulary and methods of teaching it. However, the role of short stories in teaching of complex vocabulary has also been suggested. It also analyzes how useful these methods are, their advantages and disadvantages.

**Key words:** complex vocabulary, teaching methods, vocabulary teaching process, short stories, literary genres.

**Introduction.** Various studies show that the use of short stories in language teaching is very beneficial as it provides real material, cultural richness, language development and personal growth. Among the various literary genres, the short textbook is one of the most suitable for use in language lessons. This study was conducted to examine the perceptions of primary school students about vocabulary development. Research design, quantitative and qualitative data were collected using mixed methods from 30th-sixth graders at Global Sevilla Primary School in Jakarta. Quantitative data were collected using a questionnaire, and qualitative data were collected through an interview. The data obtained were analyzed descriptively using SPSS and Excel. The results showed that students' attitudes towards using a short story were positive. For them, short stories were interesting materials that could be used to develop vocabulary. Based on the information obtained, it is recommended to use short stories to develop students' vocabulary.

**Literature review.** Vocabulary is the most important component of language teaching for young learners. Teaching English vocabulary plays a very important role in ensuring that English language learners (EFL) learn English. According to Richard and Rogers, vocabulary is one of the most important elements of language proficiency



because it is the bases of how well students speak, write, listen, and read. Without a good command of vocabulary, students may become discouraged from using the language they are learning in their daily lessons. Thornbury noted that vocabulary plays a crucial role in English [2].

All words in a given language are defined by Hornby [1] as either “a list or set of words and phrases that are usually structured and interpreted or described in alphabetical order”. As Hammer points out, “without grammar, very little, without vocabulary, nothing can be delivered”. This means that vocabulary is a key element of communication [3].

**Analysis.** If students do not have the knowledge on vocabulary, it will be difficult to communicate with them. Similarly, Wallace [4] believes that vocabulary is an important key in learning English. Thus, mastering vocabulary is one of the key components in developing successful communication and literacy skills. Students can use phrases to listen, speak, read, and write. Students learn phrases directly and indirectly. If they know the vocabulary well, they can express their thoughts and understand the opinions of others. According to Thornbury, vocabulary teaching means the transfer of new information to an existing system of mental lexicon. Recognizing the importance of vocabulary in communication and language learning, helping students master a wide range of vocabulary is an integral part of any language teaching program. In addition, learning vocabulary is a difficult task for foreign language learners.

Thus, Thornbury recommended that vocabulary teaching become part of language teaching. Most EFL students suffer from a lack of adequate vocabulary and are frustrated by a lack of words to express their thoughts or not knowing the meaning of key phrases in a passage. Accordingly, they find the task of speaking, writing, or reading so tedious, arduous, that they soon give up the task. It is important to find ways to enrich their vocabulary to help them not become depressed quickly and to help them perform language learning tasks. Nunan proposed four principles of vocabulary teaching: First, the teacher must first focus on the most useful vocabulary. Some words can be used in a variety of contexts. The rest is much more limited [5].

Teaching useful words before less useful words gives students the best results for their reading efforts. The most useful words are the words that every English learner needs to listen, speak, read or write, or whether they use them in formal and informal situations. Second, the teacher needs to focus on vocabulary in the most appropriate way. This principle has to do with how students are taught and learned. Teachers need to differentiate high-frequency speech from low-frequency speech therapy methods. Third, the teacher should pay attention to high-frequency words in the four areas of the lesson. For most of the course, high-frequency phrases should be used. This should be deliberately addressed through teaching and reading, and should be used in communication with messages in listening, speaking, reading, and writing [6]. The high-frequency dictionary should also be easily accessible in the order of reception and production. Fourth, the teacher should encourage students to think about reading and take responsibility. This principle is very important and should be the basis for selection and study. Students need to understand that they are responsible for their own learning. Short stories are usually written in the form of prose and narrative and are a



work of art that is shorter than a novel. According to Wright, “stories”, in a very broad sense, include “any description of a true or fictional dramatic event, from complete stories in a book to a character”: traditional stories, local legends, contemporary fiction, news, personal anecdotes, and stories written by students ... storytelling, personal storytelling, television, theater, cinema, newspapers, and public events” [7].

Because it is relatively short, a short story is usually focused on a single central theme, a single plot, and a single protagonist (with a few additional small characters), whereas a novel can cover a variety of plots and themes. Short stories are an exciting and constantly evolving form of storytelling. They speak of the author’s attitude to life experience in relation to the human imagination. As a literary work, short stories are interesting for people to read and tell. They entertain, gain experience, and develop students’ vocabulary [8]. They are also effective in helping English language learners practice four language skills: reading, writing, listening, and speaking. Using short stories is an effective way to learn vocabulary in the EFL [9]. The vocabulary of many readers is wide. Stories allow students to use their imagination to create a new option, and hopefully try to think ahead. They help students explore the opinions of others as a dressing exercise for the future.

**Discussion.** These short stories encourage readers to use vocabulary to understand the whole story. Vocabularies learning through short stories helps teachers create a variety of contexts where students can communicate, share information, and express their ideas. Pardede’s research showed that many English teachers found interesting stories to use both as materials for enjoyment and as part of language skills lessons. In short, short stories teach media that help students learn more about vocabulary. Al-Dersi listed several strengths of using short stories in language learning. First, the short story makes learning English a fun and engaging process for students. Second, the short story arouses students’ interest in the target culture and language [10]. Third, the short story encourages students to master the language and learn the language. Fourth, the short story suggests new words that are used in a variety of ways in practice so that students can understand the meaning and use of new words.

**Conclusion.** Based on the above data and interpretations, it can be concluded that the majority of respondents are positive about the use of short stories to develop vocabulary. Most of them found the short stories useful and interesting, so about 80% of them accepted them with interest to read the stories. Short stories help them develop vocabulary more easily because the content of the story provides effective tips for understanding the meaning of unfamiliar words. Because students have a positive perception of the use of short stories to develop vocabulary, and because they find short stories useful and interesting, English teachers use this tool optimally to help students learn vocabulary. In doing so, teachers need to keep in mind the need to carefully select short stories that suit the interests, needs, and abilities of the students. Only one school student participated in the study. Data were collected only through simultaneous surveys and interviews. Thus, the results may only apply to one school student. For more complete results, future research is recommended to involve more participants from different schools. In addition, the use of short stories in the study of EFL can be explored using a variety of research designs, such as experimental or motion studies.



### References:

- [1]. Hornby, A.S. (2000). Oxford advanced learner's dictionary (6th ed.). New York: Oxford University Press
- [2]. Thornbury, S. (2004). A course in language teaching: Practice and theory. Cambridge: Cambridge University Press.
- [3]. Thornbury, S. (2005). How to teach speaking. England: Pearson Education Limited Longman.
- [4]. Hammer. (2002). How to teach vocabulary. England: Series Editor.
- [5]. Wallace, C. (2007). Vocabulary: The key to teaching English language learners to read. Jacksonville State University
- [6]. Nunan, D. (2003). Practical teaching English language teaching. USA: McGraw-Hill Company.
- [7]. Wright, A. (2002). Ways of using stories. Hungary: International Languages Institute.
- [8]. Pardede, P. (2011). Using short stories to teach language skills. Journal of English Teaching, 1(1), 14-27. DOI: <http://dx.doi.org/10.33541/jet.v1i1.49>
- [9]. Pardede, P. (2010). Short stories use in language skills classes: Students' interest and perception. The Proceeding of the 4th International Seminar 2010: Bringing Linguistics and Literature into EFL Classrooms (pp. 1-17). Salatiga: Satya Wacana Christian University
- [10]. Cron, L. (2012). Wired for story. Barkeley: Ten Speed Press

**UDC: 811.11-112**

### **THE EXPRESSION OF LEXICAL UNITS IN ENGLISH AND UZBEK LANGUAGES AS A RESULT OF ECONOMY OF COGNITIVE STRUCTURES**

**Saidov Khayrulla Shavkatovich,**  
Lecturer of  
English linguistics department,  
Bukhara State University  
[renu2004@mail.ru](mailto:renu2004@mail.ru)

**Annotatsiya.** Maqolaning maqsadi zamonaviy ingliz va o'zbek tillarida til tejamkorligining o'ziga xos xususiyatlarini o'rganishdir. Ishda qo'llanilgan tadqiqot uslublariga terminologik materialni uzluksiz tanlash usuli, so'z shakllantiruvchi modellarni qayta qurish usuli, ta'riflash va tarkibiy tahlil usullari, sifat va miqdoriy tahlil usullari va boshqalar kiradi.

**Kalit so'zlar:** til tejamkorligi, tejamkorlik taqsimoti, eng kam harakat qonuni, lingvistik tejash

**Аннотация.** Целью статьи является изучение особенностей языковой экономики в современном англоязычном и узбекском языках. Методы исследования, которые использовались в работе, включают метод непрерывного отбора терминологического материала, метод реконструкции



словообразовательных моделей, методы дефиниционного и компонентного анализа, методы качественного и количественного анализа и др.

**Ключевые слова:** языковая экономика, экономическое распределение, закон наименьшего усилия, экономия языковых.

**Abstract.** The aim of the article is to study the peculiarities of language economy in the modern English- and Uzbek-language. The methods of research which have been used in the work include the method of continuous selection of terminological material, method of reconstruction of word-formative models, methods of definitional and component analysis, methods of qualitative and quantitative analysis, etc.

**Key words:** language economy, economical distribution, the law of least effort, saving linguistic

**Introduction.** A change in the language, both of individual units of the language, and of the entire language system as a whole, is due to a number of reasons and is subject to certain principles. The development and functioning of the language is due to numerous processes. One of the fundamental processes of language development is the principle of saving linguistic means. This trend is universal and affects all levels of the language system, which is why the principle of linguistic economy from a certain point of view can be considered as one of the reasons for linguistic changes. The fact that the tendency to economize on linguistic means is the basic law of language development is recognized by the majority of linguists, who also attribute to it the status of one of the main driving forces of the evolution of the language as a whole.

In world linguistics, this trend is called differently: G. Paul – “economy of linguistic means”, F. de Saussure – “the law of least effort”, O. Jespersen - "theory of convenience", A. Martinet, G. Sweet and P. Passy – “the principle of economy”, and the Russian linguist E. D. Polivanov called it “human laziness”. [1]

**Literature review.** Despite the variety of names, the essence of linguistic economy is as follows: linguistic economy is a universal category inherent in all languages of the world, characterized by the desire to save money, avoid excessive costs of physiological and psychological efforts when using speech, and manifests itself at all levels of the language system.

The interest in economy as a linguistic phenomenon has always been the focus of linguists' attention. However, its role in the development and improvement of the language system is assessed in different ways. Some scholars recognize it as the main law of the development of language (I.A. not all changes occurring in the language system can be explained by this law (F. de Saussure, O. Espersen), and still others deny the role of economy in the development and functioning of language The thought that language structure should be defined.

**Analysis.** Economical distribution” between its parts became widespread already in the XVII-XVIII centuries. in connection with the discussion of various projects for the creation of artificial languages. In 1629, in particular, Rene Descartes wrote to the Abbot Merseny that an artificial language should have only “... one way of conjugation, declension and construction of words.” Such a language “... would not have at all ... irregular forms arising from the habit of distortion. Changes in verbs and word-formation forms would be made using prefixes added to the beginning or end of root words. These prefixes should be in the general dictionary. Average people (les

esprits vulgaires), using this dictionary, will be able to freely master such a language within six months. “The idea of creating an artificial language, which everyone can freely master in a few months, was of great interest to the thinkers of the 17th-18th centuries. This idea turned out to be so tempting (“a language without tears and without torment”) that later, in the 19th century, it was partially spread to natural languages, trying to “Simplify” them, prove the possibility of similar operations on them. At the same time, they began to refer to the “nature of the language itself.” [3]

The beginning of a systematic study of the problem of linguistic economy is noted in the 80s of the XIX century and is associated with the names of such scientists as I.A. Baudouin de Courtenay, P. Passy, G. Suite, O. Espersen. However, the beginnings of the doctrine of linguistic economics can be found already in the works of philosophers of linguists of antiquity. So, Aristotle wrote that if you want to speak succinctly (that is, economically), you should use names instead of concepts, for example, “circle” instead of “a flat surface, all points of which are equally spaced from the center”. [2]

I.A. Baudouin de Courtenay drew attention to the phenomenon of economy in language and speech, noting that “the cause, the engine of all language changes is the desire for convenience, the desire for relief in three areas of language activity: in the field of pronunciation (phonation), in the field of listening and perception (audition) and, finally, in the field of linguistic thinking (cerebration)”. B. de Courtenay pointed out in one of his lectures: “General reasons, general factors that cause the development of a language and determine its structure and composition, it is very fair to call forces. These are, by the way:

- 1) habit, i.e. unconscious memory;
- 2) the pursuit of convenience, expressed by:
  - a) in the transition of sounds and consonants more difficult to easier ones to preserve muscles and nerves;
  - b) in an effort to simplify forms (the action of the analogy of stronger ones on weaker ones);
  - c) in the transition from the concrete to the abstract, to facilitate the abstract movement of thought.”

In his understanding, language represents a living organism. So, a little later, he wrote: “Linguistic life is a continuous organic work. ... And in organic work one can notice the desire to save energy and to not waste them unnecessarily, the desire for the purposefulness of efforts and movements, the desire for benefit and benefit.” [5]

In the 17th - 18th centuries, in connection with the discussion of projects for the creation of artificial languages, the idea that the linguistic structure should be determined by "economical distribution" between its parts became widespread. However, a systematic study of this problem began much later, in the 19th century. Attempts have been made to simplify natural languages in order to make them easier to learn. At the same time, it was noted that this impact on the language only accelerates the natural process of simplification that occurs in the course of its development.

G. Spencer considered the question of linguistic economy in its quantitative understanding. He argued that in the process of development, following the "natural laws of evolution", the language moves from the complex to the simple. Long words

become short, "wordy sentences become single-word sentences." The British once resorted to constructions like we tellen, now - we tell "we say" (the ending is lost). Having traced the history of the development of English words, we see that at each stage of its development, as a result of the reduction of endings in the middle period and the loss of final consonants in unstressed syllables in the 15th century. Long words turn into short, polysyllabic ones - into monosyllabic ones, for example: Drincan -> drinken -> drinke-> drink - ichmoq.

Spencer's statement traces the idea that language moves from more complex to simpler ways of expressing the same content, but does not simplify its general structure, since this would inevitably mean its impoverishment, a decrease in expressive capabilities.

**Discussion.** G. Paul, in turn, considered the problem of "economy" of the language differently. In his opinion, saving does not mean narrowing the resources of the language, eliminating excesses, it only ensures the expansion of the resources of the language. G. Paul notes: "One already useless memory overload is a sufficient reason to eliminate these excesses." In the book "Principles of the History of Language" G. Paul sets out his thoughts aimed at the tendency of linguistic economy in two chapters "Economy of linguistic means" and "Differentiation of meanings".

The study of linguistic economy at the initial stage took place mainly in the field of phonology, since a characteristic feature of that period, in our opinion, was an increased interest in the study of mainly the phonological tier of the language. It should be noted that the beginning of the systematic study of linguistic economics is associated with the names of P. Passy, W. Whitney, G. Suit, G. Kurtius, O. Espersen.

The principle of "economy" of language was especially famous in phonetics, and later in phonology. Paul Passy in 1890, referring to the sound system of the French language, declared: "The language is constantly striving to get rid of what is superfluous and to highlight what is necessary." Following Sweet, Passy called the first trend "the law of least effort" and the second "the principle of economy." [6]

P. Passy tried to find the reason for some phonetic changes in the language. Taking into account the fact of the effect of linguistic economy, he drew attention to the fact that there is a "search for the least effort" in the language, therefore in some phonetic changes can be explained precisely by the economy of pronunciation efforts. Revealing the essence of these processes, he drew attention to the following facts:

- 1) the language is constantly striving to get rid of unnecessary things;
- 2) the language constantly strives to highlight the necessary.

The first tendency, according to P. Passy, is the implementation of the principle of linguistic economy, and the second is the principle of emphasis. "The first principle," notes P. Passy, "is usually viewed as a tendency to create light articulations, sometimes called the law of least effort. I prefer to call it, together with Sweet, the principle of economy, because its action does not always lead to making the effort less necessary. The principle of economy manifests itself in the language very actively. It is expressed in the weakening of less needed syllables, in assimilation, the reduction of long syllables, the elimination of subtle differences, etc. The second principle is the principle of emphasis. It finds expression in such phenomena as aspiration of



consonants, insertion of vowels between consonants, dissimilation, replacement of less sonorous sounds with more sonorous ones, etc.”

In the process of studying this trend, he raises the question of the unconsciousness of linguistic economy by speakers. His assumptions are based on the fact that “Everything that is necessary in order to be understood and well understood is carefully preserved in the language. Attention is not paid to everything else; it leaves the language and is consigned to oblivion.” P. Passy concludes that the principle of economy is the desire to get rid of unnecessary things.

**Conclusion.** Thus, economy is a linguistic law that manifests its universal role at all levels of the language system. It should be noted that the principle of economy is recognized by leading linguists as one of the driving forces in the development and enrichment of the language. The systematic study of this problem began in the 19th century, but its relevance has not yet been exhausted, since the dynamics of language development towards linguistic economy has not yet been sufficiently studied.

#### **References:**

- [1] Akhmanova O.S. Dictionary of linguistic terms / O.S. Akhmanov. - M.: Editorial URSS, 2007.569 p.
- [2] Barkhudarov L.S. Structure of a simple sentence in modern English - M.: LKI, 23 2012.200 p.
- [3] Bühler K.L. Theory of language. Representative function of language. Moscow: Progress, 1993.501 p.
- [4] Galperin I.R. Essays on the style of the English language / I.R. Halperin. 2nd ed., Rev. M.: URSS, 2012.375 p.
- [5] Stam I.S. Language of the newspaper: a textbook on the English language / IS Stam. - Publishing house Moscow University, 1992.71 p.
- [6] Official website of the New York Times / URL <https://www.nytimes.com/>
- [7] USA Today official website / URL: <https://www.usatoday.com/>
- [8] The Washington Post official website / URL <https://www.washingtonpost.com/>



UDC: 633.88: 581.9 (471.9)

**A NEW LOCATION OF FERULA SUMBUL (KAUFFM.) HOOK.F. AND  
MOSSES IN THE TURKESTAN RIDGE**

**Tadjiev Jamshid Jonizakovich**  
Samarkand Medical Institute,  
Academic Lyceum.

**Mukumov Ilkhom Uktamovich**  
Samarkand State University,  
Department of Botany, Associate  
Professor.

**Abdirasulov Farrukh Abdirassul o'gli**  
Samarkand State University,  
Department of Botany, PhD student  
[farruxabdirasulov@mail.ru](mailto:farruxabdirasulov@mail.ru)

**Dustov Begnazar Sayfullaevich**  
Samarkand State University,  
Department of Botany, PhD student  
[dustovbegnazir@gmail.com](mailto:dustovbegnazir@gmail.com)

**Anatatsiya:** Maqolada *Ferula turiga* 185 ga yaqin tur kiradi, ularning aksariyati Markaziy Osiyoda tarqalgan. Barcha kovraklar ko'p yillik o'simliklardir, ularning ba'zilari juda baland bo'lib, gullash davrida balandligi ikki metrga yetadi. Barcha kovraklar efemeroidlar guruhiga kiradi. Yo'sinlar *Brachythecium rutabulum* (Hedw.) Schimp., *B. Salebrosum* (Hoffm. Ex F. Weber & D. Mohr) Schimp., *Bryum Schleicheri* DC., *Amblystegium Serpens* (Hedw.) Schimp., *Fontunalis hypnoides* Hartman., *Conocephalum conicum* (L.) Dum. yo'sinlar turlari keltirilgan.

**Kalit so'zlar:** ferula, o'simlik, ildiz, tibbiyot, zarafshan, zaxiralar, moxlar.

**Аннотация:** Род Ферула включает около 185 видов, большинство из которых распространено в Средней Азии. Все ферулы – многолетние травянистые растения, среди которых есть довольно крупные, в период цветения достигающее двух метров в высоту. Все ферулы относятся к группе эфемероидов. В результате было обнаружено виды мхов *Brachythecium rutabulum* (Hedw.) Schimp., *B. Salebrosum* (Hoffm. Ex F. Weber & D. Mohr) Schimp., *Bryum Schleicheri* DC., *Amblystegium Serpens* (Hedw.) Schimp., *Fontunalis hypnoides* Hartman., *Conocephalum conicum* (L.) Dum.

**Ключевые слова:** ферула, растение, корни, медицина, зарафшан, ресурсы, мхи.

**Abstract:** The *Ferula* genus includes about 185 species, most of which are distributed in Central Asia. All *Ferula* are perennial herbaceous plants, some of which are quite large, reaching two meters in height during the flowering period. All *Ferula* belong to the group of ephemerides. As a result, the species of mosses *Brachythecium Rutabulum* (Hedw.) Schimp., *B. Salebrosum* (Hoffm. Ex F. Weber & D. Mohr)



Schimp., Bryum Schleicheri DC., Amblystegium Serpens (Hedw.) Schimp., Fontunalis hypnoides Hartman., Conocephalum Conicum (L.) Dum.

**Keywords:** Ferula, plant, roots, medicine, Zarafshan, resources, mosses.

**Introduction.** The Ridge of Turkistan is a high-altitude ridge of a latitudinal direction, about 340 km long, belonging to the Gissar-Alay mountain system. The Ridge joins the Alay range in the east through the Matcha mountain knot and is extended to the Samarkand flatland in the west. The northern slope is long and gentle, with juniper forests and woodlands, the southern one is short and steep, with rocks and talus. In the south, the valley of the Zeravshan River is separated from the Zaravshan Range. The highest points are Skalisty Peak (5621 m above sea level) and Pyramidalny Peak (5509 m above sea level). The Geben ridge, especially in the eastern part, is covered with mountain glaciers. The largest glaciers such as Tolstoy, Shurovsky, and Zaravshan are located at the beginning part of the Zaravshan River. The Dushanbe-Khujand highway passes through one of the mountain passes - Shakhristan at an altitude of 3378 meters. The slopes are dissected by river valleys of the Isfara, Ak-Suu, Kara-Suu rivers. On the northern slope, there is a mountain lake Ai-Kel. The border of Tajikistan with Uzbekistan and Kyrgyzstan runs along the ridge [1].

The problem of drug provision for the population of the Republic of Uzbekistan is of current interest. The shortage of medicinal products is associated with the collapse of the USSR, disrupted economic and economic ties, the suspension of some chemical-pharmaceutical plants, factories, and workshops with outdated equipment and technology that pollutes the environment. It is impossible to solve the problem by exporting medicinal products from abroad.

In this regard, the botanists of sovereign Uzbekistan have been assigned an urgent task of comprehensive study, development of measures for the rational use of raw materials, and the development of medicinal plant growing. In solving this problem, an important place is occupied by the determination of the rate of recovery of the thickets of a medicinal plant after harvesting.

**Literature Review.** "Sumbul" is a Persian and Arabic word that refers to different roots. The plant was discovered in 1869 by the Russian scientist Fedchenko in the mountains southeast of Samarkand. It is near the small town of Panjakent on the Zarafshan River. In 1871, the plant was described by Kaufman as a new species. At that time, the plant was grown in Moscow botanical gardens.

The main collectors of herbarium collections made in Uzbekistan in the twentieth century by Ferula Sumbul are N.K. Betger (1916), M. Ch. Popov (1916), M. Ch. Popov, A. Androsov (1926), M.V. Kultiasov, A.I. Granitov (1927), V. Bochantsev, A. Butkov (1936), E. Demurina (1937), S.N. Kudryashev (1937), L. Nazarenko (1946), A. Pyataeva (1940, 1948, 1955), M.G. Pimenov (1983), I.U. Mukumov (1991), K. Taizhanov (1996), and others.

Regional works on bryophytes in Central Asia and part of Russia are quite numerous. According to our data, systematic comprehensive studies of Bryoflora were carried out for the first time, initial bryological studies in Central Asia were carried out by scientists A. Fedchenko and O. Fedchenko, subsequent studies were continued by A.E. Regel, V.L. Komarov, V.I. Lipsky, S.I. Korzhensky, B.A. Fedchenko, and after the revolution, scientists V.F. Brotherus, S.M. Vislouho, A.A. Elenkin and O.

Fedchenko. The Bryoflora of the Pamir-Alai was studied by A.S. Lazarenko, P.I. Ovchinnikov, K.S. Afanasyev [1,8]. O.F. Gaze, in his work devoted to the study of bryophytes in the Zarafshan valley, provides data on the floristic features of 49 species of mosses [6]. Large-scale studies aimed at studying bryophytes were carried out in the 60s of the last century by A.M. Muzafarov, A.L. Abramova, I.I. Abramov, E.K. Tyvel, M.S. Kozlova, M.I. Godvinsky, A.S. Lazarenko, E.M. Lesnyak, L.I. Savich-Lyubitsky, U.K. Mamatkulov, B. Boborajabov and others [7-9].

**Materials and Methodology of the research.** Floristic material was collected by us during the field seasons 2018-2021. The studies were carried out by the route method. Based on these studies, the author compiled a preliminary list of *Ferula* species and bryophytes [10,11]. At present, the list of Jum-Jumsay bryophytes has been significantly replenished. As a result, about 50 samples of bryophytes were collected on the territory of Jum-Jumsay. All samples are kept in the Herbarium of Samarkand State University (SSU). The nomenclature of bryophyte taxa corresponds to that accepted in the biological literature.

**Results and its discussion.** *Ferula Sumbul* (Kauffman) Hook f. *Ferula Sumbul* (F. Musk) or Musk root (lat. *Ferula Sumbul*) is a flowering plant of the Apiaceae family (Celery), up to 150 cm high. There are several stems, thin, in the upper part, corymbose branching. The root is thick, multi-headed. Leaves are harsh, slightly pubescent below, basal leaves are oval-triangular, with long petioles articulated with a plate, the leaf blade is three times persistor-countable, 20-30 mm long, 10-15 mm wide, stem leaves with a simplified plate, upper ones are narrow lanceolate sheaths ... The umbrellas are different. Central - 6-10 ray, 4-6 cm wide, lateral solitary or sitting in two. Umbels 10-15 flowered, calyx toothed, yellow petals, 0.7 mm long, oblong-oval. The fruits are small, 7 mm long and 4 mm wide. Blossoms in June; bears fruit in July. Propagated by seeds.



**Ferula sumbul in the nature**

*F. sumbul* is known to be one of the least studied medicinal herbs. It grows primarily in Eastern Europe, northern India, Uzbekistan (Nuratau, Zarafshan, Gissar, Turkestan), and Tajikistan. It is possible to find it in rocky slopes of the middle belt of mountains, among thickets of bushes.

The plant is valued for its medicinal roots. Interestingly, the name "Musk Root" was not easy given, because the plant has a fibrous cork bark, which emits a characteristic musky smell.



In general, the roots contain balsamic resins and essential oils, starch, gum, and wax. The main components of the musk root are oleic, palmitic, stearic, and linoleic oils, as well as dextrin, ash, and sucrose. Acetic acid, betaine, and fiber are also found in *Ferula Sumbul* [2-4].

In medicine, *Sumbul* is used for mental disorders. First of all, with insomnia and nervousness.

It was originally imported to Russia as a substitute for musk. It was eventually incorporated into British pharmacological practice in 1867. It has been described as a digestive aid and a cure for hysteria [5].

*Sumbul* is used to treat a wide range of digestive ailments from flatulence to dyspepsia. Sometimes a local remedy is prepared from the root powder to relieve pain directly in the abdomen. It is excellent for relieving cramp pain and improving digestion.

In addition, due to its aromatic qualities, this herb is used for asthma. Besides, it is a good folk remedy for pneumonia, to cleanse the lungs and make breathing easier. As a result of field research in 2018-2021, a survey was carried out on the territory of Uzbekistan, and herbarium substances were collected, processing of this material. During the expedition, a new location *Ferula Sumbul* was found in the vicinity of the village of Jum-Jum, the right bank of the Jum-Jum (Bakhmal district, Jizzakh region).

The species was found in the Turkestan ridge, at an altitude of 1875 m above sea level, coordinates 67.836577 / p 39673161.

Recent researches showed that in Turkestan ridge which *Ferula Sumbul* takes part in the ferul-shrub association, the year 4.07.2021 was described for which *Ferula Kuhistanica* Korovin *Urtica dioica* L., *Codonopsis clematidea* Schronk, *Heracleum Lehmannianum* Bunge, *Juniperus pseudosabina* Fis. & C.A. Mey. (*J. Turkestanica* Kom.) *Ziziphora clinopodioides* Lam., *Origanum vulgare* (K. Koch) Jetsw. (*Origanum tutanthum* Gontsch.), *Hypericum perforatum* L., *Mentha longitolia* var. *Asiatica* (Boriss) Rech, f., *Polygonum coriarium* Grig, *Berberis oblonga* C.K. Schneid., *Adiantum capillus - Veneris* L., *Ephedra equisetina* Bunge, *Orchis pseudolaxiflora* Czerniak, *Carex enervis* C.A. Mey., *Hordeum bulbosum* L., *Thalictrum minus* L., *Onobrychis Grandis* tripsoy, *Cicer pungeus* Boiss, *Crataegus Songarica* C. Koch., *Rosa fedtschenkoana* Regel, *Geranium collinum* Stephan ex Willd., *Acer turkestanicum* Pax, *Ligularia tharkeomsonic* (CB ., in addition, from the bryophytes during the study when studying mosses in the Jum-Jumsay region of the North Turkestan ridge, it was for the first time revealed that there are 25 species of 15 genera belonging to 11 families for the region, and an article was published about this. Subsequent studies revealed taxonomic novelty for 5 more species. *Brachythecium rutabulum* (Hedw.) Schimp., *B. Salebrosum* (Hoffm. Ex F. Weber & D. Mohr) Schimp. (family *Brachytheciaceae*), *Bryum Schleicheri* DC (family *Bryaceae*), *Amblystegium Serpens* (Hedw.) Schimp. (family *Amblystegiaceae*), *Marshantia polymorpha* L. (family *Marshantiaceae*), *Fontinalis hypnoides* Hartman var. (*Fontinalis tenella* (Cardot) Cardot) (family *Fontinalaceae*).



***Bryum schleicheri* DC. in nature.** The decline in numbers was caused by centuries of intensive harvesting.

It is very rare, in small populations ranging from a few specimens to several dozen.

One of the reasons for the continued decline in numbers is severe damage to seeds by insect pests.

**Conclusion.** Thus, *Ferula Sumbul* is a valued plant, contains resin, essential oil, gums, carbohydrates and other substances. New location of *Ferula Sumbul* was found in the Turkestan ridge (Jum-Jum village). It is rare, in small populations, included in the Red Book of Uzbekistan, category 2. Today, 30 species of bryophytes from 17 genera and 13 families have been reliably registered in Jum-Jumsay. For the first time, 4 types (*Brachythecium rutabulum* (Hedw.) Schimp., *Brachythecium salebrosum* (Hoffm. ex F. Weber & D. Mohr) Schimp., *Amblystegium serpens* (Hedw.) Schimp., *Conocephalum conicum* (L.) Dum.) of bryophytes were found in the territory of Jum-Jumsay.

#### References:

- [1]. Turkestanский xrebet. // Tixoxodki – Ul'yanovo. M., Sovetskaya ensiklopediya, 1977.
- [2]. Sukervanik I.P., Simxaev N.G. Issledovanie korney *Ferula Sumbul* Hook. I tr. In-ta ximii AN UzSSR, 1948, vip. 1, s. 24-26.
- [3]. Goryaev M.I. Efirnoe masla flori SSSR. Alma-Ata, 1952, 330 s.
- [4]. Kudryashev S.N. Efiromaslichnie rasteniya i ix kul'tura v Sredney Azii. Tashkent, 1937, 336 s.
- [5]. Britisch Pharm. Codex. London. 1950, s. 119.
- [6]. Gaze O. F. Materiali k flore mxov Zeravshanskoj dolini. Tr. UzGU. Novaya seriya, 32. Botanika, 1947, s. 19-63.
- [7]. Rikovskiy G.F. Epifitnie mxi kak ekologicheskaya gruppya ekstremal'nix mestoobitaniy // Problemi briologii v SSSR: sbornik statey, pod redaksiey I.I. Abramova. L.: Nauka, 1989. S. 190-201
- [8]. Chernyad'eva I. V., Jalov X. X. Novie naxodki mxov v respublike uzbekistan. Novosti sistematiki nizshix rasteniy — Novosti sistematiki nizshix rasteniy: doi.org/10.31111/nsnr/2019.53.2.43, 2019. S. 431–479.
- [9]. Ignatov M.S. Check-list of mosses of east Europe and northe Asia / MIS. Ignatov, O.M. Afonina, E.A. Ignatova // Arctoa, 152006. P. 1-130.

[



**UDK: 538.975:621.383..535.216**

**PREPARATION OF PHOTO ELEMENTS FROM CHALCOGENIDE  
THIN CURTAINS**

**Naymanboyev Rakhmonali**

**Fergana branch of**

**Tashkent university of information technology**

**Docent of the department physics**

**Onarkulov Karimberdi Egamberdiyevich**

**Fergana state university**

**Professor of the department physics**

**Yuldashev Shohjaxon Abrorovich**

**Fergana state university, doctoral student**

**E-mail: [yshohjahon@list.ru](mailto:yshohjahon@list.ru)**

**Yuldashev Abror Abduvositovich**

**Fergana state university**

**Teacher of the department physics**

**Yuldasheva Shahrizoda Abrorovna**

**Student of Fergana state university**

**Annotatsiya.** Maqolada quyoshdan kelayotgan nurlanish spektral sostavidan unumli foydalanib yuqori samarador fotoelementlar yaratish haqida ma'lumot beriladi. Xalkogenid yupqa pardalaridan yassi ko'p qatlamli ko'p energetik sathli, bo'ylama va ko'ndalang tabiatga ega bo'lgan fotoelementlar yaratish borasidagi tadqiqotlar natijalari keltirilgan. Bunday fotoelementlarning universal xususiyatlari aniqlangan va uning o'tkazuvchan va dielektrik iste'molchi bilan moslashib ishlay oladigan tizimi yaratilgan.

**Kalit so'zlar:** Xalkogenid va xalkogenid birikmalar, yupqa pardali fotoelement, elektron teshik jufti, ionlashish, rekombinatsiya, foton qabul qilgich, foton nurlantirgich (foton manbasi), generatsiya, valent va o'tkazuvchanlik zonalari, taqiqlangan(man etilgan) zona.

**Annotation.** The article provides information on the creation of high-efficiency photocells using the spectral composition of radiation from the sun. The results of studies on the formation of flat multilayer multi-energy, longitudinal and transverse photovoltaic cells from chalcogenide thin films are presented. The universal properties of such photocells have been identified and a system has been developed that can work with both conductive and dielectric consumers.

**Key words:** Chalcogenide and chalcogenide compounds, thin-film photocell, electron hole pair, ionization, recombination, photon receiver, photon emitter (photon source), generation, valence and conduction zones, forbidden (forbidden) zone.



**Аннотация.** В статье представлена информация о создании высокоэффективных фотоэлементов, использующих спектральный состав излучения солнца. Представлены результаты исследований по формированию плоских многослойных многоэнергетических, продольных и поперечных фотоэлектрических элементов из тонких пленок халькогенидов. Выявлены универсальные свойства таких фотоэлементов и разработана система, которая может работать как с проводящими, так и с диэлектрическими потребителями.

**Ключевые слова:** халькогенидные и халькогенидные соединения, тонкопленочный фотоэлемент, электронно-дырочная пара, ионизация, рекомбинация, приемник фотонов, облучатель фотонов (источник фотонов), генерация, валентные зоны и зоны проводимости, запрещенная (запрещенная) зона.

**Introduction.** One of the most promising and effective ways out of the global energy crisis is to organize the widespread use of solar energy. The sun is a versatile energy source for huge ecological clean use. The fact that the development of solar energy for the long and near future for humanity will serve for the development of many areas is becoming more deeply ingrained in people's minds. In this field, the conversion of solar energy directly into electricity using semiconductor photocells is a very promising and effective direction. There is enough scientific and technical research in the field of photocells, which serve as a technical basis for large-scale production of solar energy.

**Literature review.** Photocells work based on the photovoltaic effect. This effect was first observed by Edmond Becquerel in an electrolytic cell. The photoelectric effect on solids was first observed in 1876 in London by Adams and Asem in photocells made from selenium [1]. Then, in 1930, at the St. Petersburg Institute of Physics and Technology under the leadership of A.F. Ioffe, a sulfur-thallium photocell was developed. A major step in this direction was the 1958 p-n transition of silicon, a photocell used on the Earth's satellite ("Sputnik-3") as a solar cell. By the early 1960s, the first solar photocells were created from the p-n transition of gallium arsenide. They were used as a power source in Soviet spacecraft "Lunahod-1" and "Lunahod-2" (1970 and 1972). By the mid-1980s, the development of silicon and gallium arsenide-based solar photovoltaics was largely based on relatively simple technologies in simple structures. In order to reduce the number of photovoltaic cells used in solar photovoltaic with light and recombination, "high-efficiency technologies have been proposed. [2]. Although the efficiency of laboratory samples of silicon photocells based on them was close to theoretical calculations, the cost was much higher than that of photocells obtained with simple technology [1,2]. In order to compact the photocell and reduce the losses associated with light as well as recombination (and other losses) in this study, the aim was to cover a larger area of the solar radiation spectrum using a new heteroepitaxial vacuum thin-film method. The goal was to narrow down its efficiency, cost, and their geometry by creating solar cells that would allow the use of more of the photon in the solar spectrum.

The sun is a huge source of energy for the Earth. From it, 1350 joules / m<sup>2</sup> of energy reaches the Earth's surface per second. On average, about 3000-5000 million cubic meters per square meter of the Earth's surface per year. Energy comes around

Joule. One of the most important problems of our time is the efficient use of such a large amount of solar energy. Some of the short-wave energy of radiation from the Sun is absorbed in the Earth's atmosphere, while most of the energy reaching the Earth's surface corresponds to the long-wavelength field of radiation. There are many ways to use solar energy. An efficient, high-efficiency method of converting solar energy into other types of energy is to create a solar cell (solar power plant) device by making a photocell from semiconductors. One of the important problems is to take the photocells from the semiconductors and to know the spectral composition of the radiation from the sun when creating solar cells from them. Therefore, it is important to choose semiconductor materials knowing the optical properties and characteristics of a semiconductor and the electrical, optical and photoelectric properties that can effectively convert solar energy into electricity, which determines which area of the solar spectrum can be used to use photocells as a solar element in solar power plants. The main parameter in determining such properties and characteristics of a semiconductor is the width ( $E_g$ ) of the forbidden zone of the semiconductor material.

When light strikes a semiconductor, the energy of the light photon must have an energy not less than the bandwidth of the band gap, i.e.  $h\nu \geq E_g$ , so that a stream of photons with a lower energy cannot emit electrons from the valence band of the semiconductor material into the conduction band. According to the photoeffect theory, the selection of a semiconductor with a small enough forbidden zone from the photon energy ( $E_g$ ) also does not give good results. Because the difference in  $E_g$  decreases,  $h\nu - E_g$  the excess energy of the photon increases, resulting in an increase in the temperature of the semiconductor and a decrease in the efficiency of the photocell. If a semiconductor with a large  $E_g$  is selected, the activity of the radiation photons ( $h\nu < E_g$ ) decreases and some of the photons in the spectrum do not participate in the absorption, because the short circuit ( $I_{q,t}$ ) of the photocell  $h\nu \geq E_g$  is determined by the number of photons that satisfy the photocurrent condition. The visible part of the spectral field of electromagnetic radiation is in the range of 0.38 to 0.72  $\mu\text{m}$ . The infrared part occupies a range of 0.72 to 1000  $\mu\text{m}$ .

The formula for photon energy is to measure photon energy in electron volts (EV) and wavelength  $\lambda$  in microns.  $E = \frac{1,234}{\lambda}$  is written in appearance. The graph of the expression is shown in Figure 1.

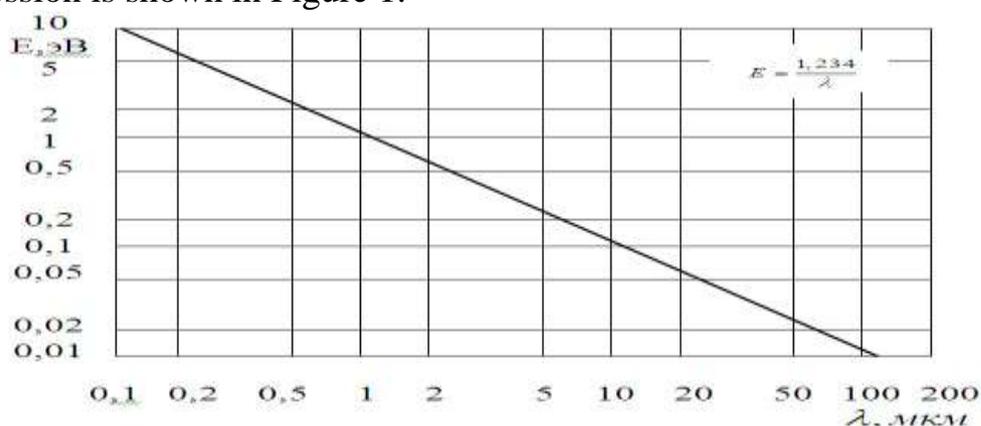
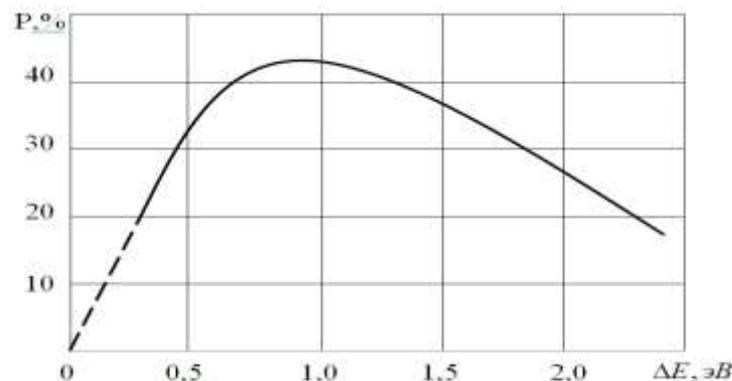
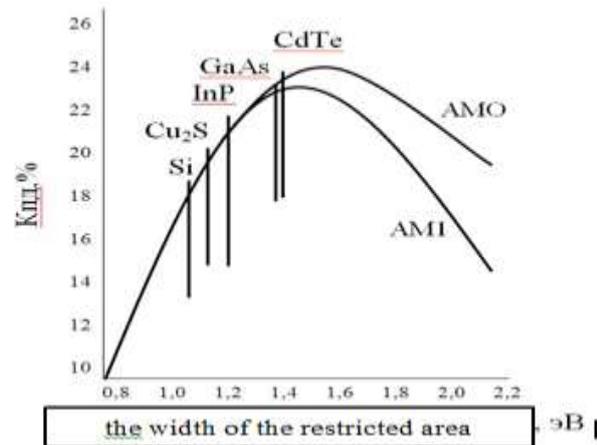


Figure 1: The relationship between photon energy and radiation wavelength.

It can be seen that in order for an electron-hole pair to be formed when light (sunlight) is absorbed, it is necessary to select a forbidden zonal semiconductor corresponding to the radiation energy. About 90% of the energy of solar radiation falls on the visible light field. For this reason, it is advisable to use a semiconductor material with a bandwidth of 1.0-2.2 eV when making a solar cell. The electron-hole pairs generated by sunlight in such semiconductors should not be recombined and destroyed without potential barrier. Their (current carriers) viability should be high, as well as the surface recombination rate (very) low. This is because the electron-hole pairs that form the light are formed in a thin layer of the semiconductor surface in the order of 1  $\mu\text{m}$ . They enter the semiconductor from the surface. The energy losses of electrons and holes in this process must be minimal. The photocell works based on the effect of light on the semiconductor. When a semiconductor p-n-transition region is illuminated, electrons and holes are formed. Electronically, the holes separate at the potential barrier of the p-n junction. In the salt mode, they accumulate at the p-n-junction poles without being able to travel to the outer circuit and generate an electromotive force (E.Y.K), the resulting photo E.Y.K.  $V = E_{\phi} = \frac{kT}{l} \ln \left( 1 + \frac{I_{\phi}}{I_T} \right)$  is found from the expression. Thus, if the p-n-junction is connected to an external chain (consumer), a photocurrent ( $I_{\phi}$ ) passes through the chain. Hence, a p-n-transition photocell can be used as a source that converts light directly into electrical energy. The photocell converts only part of the light that falls on it into electricity. This is because there is a loss of light energy due to the return of light from the semiconductor, passing through it, and its constituents that are absorbed but do not form an electron hole. There are also energy losses associated with the semiconductor. It should be taken into account that the energy of inert light of the electron-hole pair and the efficiency of the photocell are related to the width of the semiconductor band gap.



**Figure 2:** Dependence of solar radiation energy used to form electron-hole pairs on the bandwidth of a semiconductor



**Figure 3:** The relationship between the band gap and the solar cell

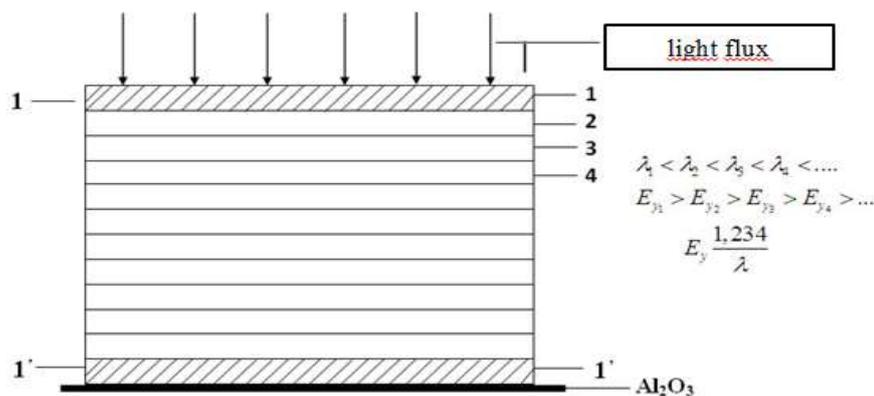
Based on the above interpretation, analysis, we present some physical fundamentals of creating high-efficiency compact, durable photocells. Due to the photosensitivity of almost all chalcogenides, high mobility and viability of charge carriers, it is possible to create high-efficiency compact photon receivers by making simple and complex photocells from them. Normal photocells consist of a single p-n junction, the voltage  $\frac{kT}{q}$  of which is limited in order, and the current transmitted to the

consumer is small. To increase its voltage, a large number of ordinary photocells are connected and a battery of photocells is formed. The complexity of the technical and technological implementation of this process and the consumption of semiconductor material are also sufficient. It is also possible to use an energy-saving, simple and minimal material waste method when creating a photocell battery. For example, a series of longitudinal chains of polycrystalline microparticles (crystalline) appear on the surface of anisotropically evaporated thin films of chalcogenides at high vacuum. As a result of anisotropic evaporation [3,4], these microparticles are arranged in such a way that each of them acts as a separate elemental photocell. As a result, chalcogenide thin films form a super system (SMS) of a large number of p-n junctions. When the super system of such micro-transitions [5] is illuminated, an anomalous high photovoltage is generated and becomes a source of a strong electric field. Such electric field sources work with dielectric consumers, for example, can be used in many electronic devices with MDP-transistors and devices in the quantum group [6]. The consumer of photocells is metal, which can use the monochromatic selectivity of the light spectrum under the influence of a semiconductor to provide it with high voltage and power transmission performance. To do this, it is necessary to create a transverse system of p-n-junctions.

Based on monochromatic selectivity, the penetration of monochromatic rays in the spectrum  $\left(\frac{1}{a}, a - \text{absorption coefficient}\right)$  into a semiconductor (including thin films) varies. That is, long-wavelength rays in the spectrum go deeper when they hit the surface of a semiconductor, and can also pass through if the wavelength is large enough. Therefore, the absorption of long-wavelength rays in areas close to the surface

is weak ( $d < \frac{1}{\alpha}$ ,  $d$  - the depth of penetration of light from the surface where the semiconductor light falls). In the shortwave field, the absorption is high near the surface of the semiconductor. Due to the small energy of the photons in the long-wavelength range of the spectrum  $\left(E_{\phi} = h \cdot \nu = \frac{hc}{\lambda}\right)$ , the photoactivity in semiconductors large enough in the band gap leads to a decrease in the number of useful photons. However, there is an optimal value of the width of the zone, in which a relative increase in absorption is observed [7]. Based on the monochromatic selectivity under the influence of light with a semiconductor, it is possible to create a photocell consisting of a system of transverse multilayer heteroconductors (GFE) [8] consisting of different zonal semiconductor membranes. The following semiconductor chalcogenide series can be selected as an example for the practical implementation (construction) of a system of multilayer GFEs,

The location of ZnS, CdS, CdSe, CdTe or PbTe, PbSe, PbS, corresponding to the monochromatic selectivity and the bandwidth of the layer semiconductor, is shown in Figure 4.



**Figure 4. Multilayer GFE s battery**

1-Transparent metal electrode ( $\text{SnO}_2$ ) on the light-emitting surface of GFE

1- The second metal electrode is placed on the  $\text{Al}_2\text{O}_3$  base

In the field of optical rays ( $5 \cdot 10^{-4} - 10^{-9} \text{ м}$ ,  $6 \cdot 10^{11} - 3 \cdot 10^{17} \text{ Гц}$ ) the luminous flux falls on a wide (2) semiconductor layer through a transparent metal electrode (1). The spectrally corresponding short-wavelength rays ( $\lambda_1$ ) are absorbed, and the remaining relatively longer wavelength rays ( $\lambda_2, \lambda_3, \lambda_4 \dots$ ) pass to the next layer (3). Thus monochromatic selection of light waves occurs. As a result, more rays in the light flux spectrum ( $\sim I_0$ ) are involved in the photoelectric process. So far, the theoretical method of determining the optimal number of layers in a multilayer photocell has not been scientifically substantiated, but the maximum value of voltage ( $E_m = U$ ) and short-circuit current ( $I_{q,t}$ ) for the 3-4 layer photovoltaic model have been calculated, respectively  $E_m = 2,25 \div 3V$ ;  $I_{q,t} = 40 - 45 \text{ mA/sm}^2$ . For such a photocell, F.I.K. reaches 36.4.

**Conclusion.** The physical basis for the creation of highly efficient compact, durable photocells based on chalcogenide semiconductor compounds has been created.



These photocells are thin-film and can be created on the basis of a single vacuum technology. It has been experimentally and theoretically proven that they consist of a super numerous system of longitudinal elemental photocells. Such photocells are universal, operating in the longitudinal direction as a source of strong electric field to the dielectric consumer, while operating in the transverse direction in the spectral selective mode, allowing the use of more photons in the spectrum (from purple to infrared). These photocells can also work in the transverse direction to the metal consumer. They can be used in microelectronics, quantum electronics and optoelectronic automatic remote control systems.

#### **References:**

- [1] W.G.Adams, R.E.Day.Phil.Trans.R.Soc., 167 (part I) 313 (1877)
- [2] M.E.Green, K.Emety, D.L.King, S.Igory, W.Warta. Progr. Photovolt: Res. Appl., 10.355 (2002)
- [3] E.I. Adirovich et al., “Fotoelektricheskie yavleniya v semuprovodnika i optoelektronika”, Tashkent, izd-vo “FAN”, 1972, p. 143.
- [4] R.Naymanbaev et al. Uzbek Journal of Physics. 2012. Vol.14 (№9; 5-6). Str. 311-315 (01.00.00; №5)
- [5] D.A.Aronov., Yu.M. Yuabov. FTP. 1984. T.18. №7. S. 1318-1321.
- [6] R.Naymanbaev et al. International certificate for author's work №ES-01-002438, INTEROCO, EUROPEAN DEPOSITORI Germany, Berlin August 8, 2019 №EC-01-001725, May, 18, 2018
- [7] A.Ambrozyak Construction and technology of semiconductor photoelectric devices, Moscow Publishing House "Sovradio", 1970, p. 278
- [8] J.I.Alfyorov et al. FTP, 2004, tom.38, vyp.8 pp.937.