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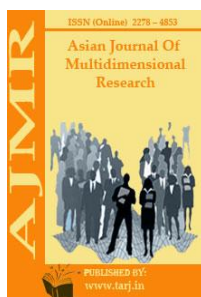
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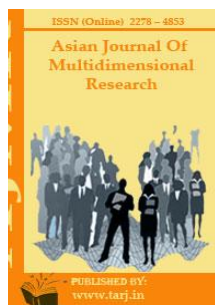
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# AJMR:

## Asian Journal of Multidimensional Research

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## THE PLACE OF THE PSYCHOLOGICAL ENVIRONMENT IN THE FAMILY TO INCREASE STUDENT ACTIVITY IN THE EDUCATIONAL PROCESS

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### ABSTRACT

*In this article, the family is considered as the main unit of society, where the positive and positive qualities of a person are formed. In addition, the family should have a strong foundation of marriage, where the bonds of mutual understanding, stability, mutual respect should be intertwined, where children should be raised by patriots, courageous, smart, etc.*

**KEYWORDS:** *Environment, Activity, Ideal, Specialist, Positive, Climate, Sphere, Atmosphere, Psychological, Sacred, Need, Depressed, Positive, Conflict, Situation, Negative, Contradictory, Tyrannical, Selfish, Relevant, Morality, Procedure, Responsibility, Competent, Spiritual, Defect, Failure, Self-Esteem.*

### INTRODUCTION

Each parent wants his child in the future to become an educated, versatile and ideal person, in addition, first of all, useful for society and others, and ultimately, a qualified specialist. To achieve this goal, an important role in the family is played by the psychological climate in which the future patriot of the country with his existence could ensure the further development of the economy of society and social life. In this sense, the family is the most sacred place in our society. Only in a family with a normal psychological climate can one become a happy person, able to feel his responsibility before society, and otherwise can feel depressed and unhappy. It is well known that the positive aspects of the psychological environment in the family have a great impact on the student and student behavior. If the student has problems in a family relationship, then his normal mental development may be negative. In this case, the student may have family conflicts. The more he seeks to get out of this situation, the more difficult this process becomes. Therefore, parents should not be negatively affected by the mental state of their child. It is well known that a child born in a controversial environment with an unhealthy psychological environment will not care about his parents, brothers, and especially about the people around him. He can grow up as a tyrant, selfish, contrary to the interests of society, easily accessible by external forces, and on this basis he can become a dangerous person not only for his family, but also for his people and, even, for the whole country. That is why every citizen of our society, every parent, every person is responsible for success in educating young people. This issue is very delicate and extremely serious, which never falls off the agenda, never loses its relevance. The development of our society depends on how we solve this problem today. The role of the family in the spiritual development of the student is great. Because the family has two important functions. Firstly, the birth of children, and secondly, properly educate them. Successful upbringing of our children, their morality and health largely depends on the psychological environment in the family. Parents should pay great attention to this and be exemplary in this regard themselves. Relationships between parents, such as sincerity, kindness, mutual respect



and caring for each other, have a great positive impact on the upbringing of children. Each parent must take care of his child and take care of the development of society if he fulfills parental responsibility. As a result, a well-educated person necessary for society is brought up in the family. If a child experiences any shortcomings in the learning process or is lame in some disciplines, parents should help in eliminating these problems. It is important to increase the child's self-esteem, as parents are always with him. The student must be sure that you can always rely on the parent. Sometimes it can be the other way around. Due to excessive exaggeration of the achievements or failures of the child, the student may be freed from self-esteem. Therefore, family members need to evaluate the abilities, talent of the child and organize as many cultural and spiritual events or trips as possible at the end of the week. Every child has the ability to match himself. It is only necessary to use the right approach and support from family members and educational psychologists. It is important that the child's ability to correctly direct in the necessary direction, to form his talent, increase his desire to make a career and make the right decisions. Child abuse by parents is unacceptable. An area in which he has no will and interest does nothing for him, and in the lesson he does not work on himself and is not responsible for it. Making mistakes to the student is normal. Because everyone has successes or failures in life. These errors and omissions must be corrected by family members or parents. For this, the psychological environment in the family should be such that the child feels that he is comfortable in the family. Because in the family he sees only his relatives and trusts them. Some conflicting relationships in the family should be quickly resolved by the parents and should be avoided, as this may adversely affect the psychological well-being of the child. Perhaps these situations may not seem obvious to us, but the student's internal experience and mentality begin to work. Such conflicting relationships must be dealt with honestly, honestly and democratically.

All parents want their children to do well. Sometimes we see that these actions are useless, the reasons for which may be:

- Increase or decrease in material assistance;
- Excessive useless disputes in children;
- Excessive confidence or disbelief;
- A lie, a promise, but not fulfillment;
- Never listen to your children and so on.

The ancient book of Zoroastrianism "Avesto" describes the family as a holy place, the responsibility of the husband and wife for the stability of the family and raising children. Relatively peaceful and prosperous life in the family it is said: "Porso is a place where people build houses, make fire, family, wife and children and enjoy their homes, and their husbands and children live comfortably in the house, if there is a lot of material in it, it's honorary. "Student psychology studies various age-related characteristics of the child's mental development. The study of these features is necessary for the proper organization of educational work with students of different ages. According to recent psychological studies, students in educational institutions are more likely to be more diligent than in previous years. These studies can serve as the basis for a thorough review of the content of various curricula. The development of the world is provided by the discoveries made by young people. One of the main reasons for this is young students.

It is also important to note that the importance of emotional and socio-psychological processes in a modern family is growing. Even in tasks that are purely material, the emotional feeling manifests itself more. The importance of sensory, emotional contact is stronger in urban families than in rural areas. Rural households, as well as household plots and livestock farming, play a more important role as a producer than in urban households. Occasionally there are unpleasant experiences among students and their parents. The reasons for this are:

- Failure to take into account the differences between worldviews;
- A great addiction of parents to alcohol or a charity attitude to moral standards;
- Non-education of children from childhood to work, study, independence;
- Not understanding the sense of duty to parents;
- Disagreements as a result of an insufficient level of psychological and pedagogical knowledge among parents, etc.

On this occasion, it will be appropriate to quote the head of our state Sh. Mirziyoyev about family education: "First of all, regardless of where they work, who they work, the family will not have the supremacy of family upbringing, family environment, family honesty, attitude and upbringing, nothing will be achieved. " As you can see, raising a child plays an important role in family education. To benefit society, it must be not only highly educated, but also useful.

Thus, students are equally responsible for the educational process, achieving a competitive state of the educational standards of the country, parents, family members, as well as the psychological environment and educational psychologists. Psychological educators need to work hard and be sure that young people are the fruits of our work. Young people should work hard on themselves, they should become specialists of the future, become mature, strong, educated and spiritually rich.

#### **LIST OF USED LITERATURE:**

1. Mirziyoyev Sh. M. We will build our great future together with our brave and noble people. 2017, page 488, Uzbekistan Press and Information Agency "Uzbekistan" will come up with a printing house.
2. Mirziyoyev Sh. M Together we will build a free and prosperous Democratic Republic of Uzbekistan. 2016, 56 page. Uzbekistan Press and Information Agency
3. Asmolov A.G. Psychology of treatment: principles of general psychological analysis. - M.: Sense, 2001- 416 Art.
4. Umarov B. M Psychology. Nopedologist Textbook for Higher Education Students. -T.: 2011 -480 bet.
5. E. Goziev. Otnogeniz psychology (scientific and experimental analysis). "NOSHIR" T.: 2010.
6. Z. Ibadullaev. Medical psychology. "IQTISODIY - MOLYAVIY" T.: 2008.
7. E.Yu. Yusupov. Philosophy textbook. General Publishing House of SHARQ Publishing House.T.: 1999.

## UNEMPLOYMENT REASONS, PECULIARITIES AND WAYS OF ITS PREVENTION IN UZBEKISTAN

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### ABSTRACT

*This article discusses the unemployment, reasons, peculiarities and ways of prevention in Uzbekistan, methodological and practical recommendations for resolving this problem, statistics and conditions about unemployment in Uzbekistan.*

**KEYWORDS:** *Employment, Unemployed, Monopsony, Full-Time Work, Competitive Environment, Temporary, Occasional and Seasonal Work, Inactive Population, Suppression Of Unemployment, Partial Forced Unemployment, Migration*

### INTRODUCTION

Achieving a high level of employment is one of the main objectives of state macroeconomic policy. The economic system, which creates an additional number of jobs, sets the task of increasing the quantity of the social product and thereby more fully satisfying the material needs of the population. With the incomplete use of available labor resources, the system works without reaching the limit of its production capabilities. Unemployment causes considerable damage to the vital interests of people, preventing them from applying their skills in the kind of activity in which a person can express himself most, or depriving them of such an opportunity, which is why people endure serious psychological stress. From the above, we can conclude that the unemployment rate is one of the key indicators for determining the general state of the economy, for assessing its effectiveness. The requirements of employers to the level of qualification of workers and newly hired are increasing. The possibility of employing young people, women, pensioners, disabled people, people who have been released from prison, and graduates of educational institutions is reduced. As a result of the decline in production generated by the rupture of economic ties, the economic situation is deteriorating, and the potential for unemployment is accumulating. The unemployed are the part of the country's population consisting of persons who have reached working age, who have no job and are in search of work for a certain period of time specified by law. At the same time, the unemployed are calculated on the basis of the data that represent the relevant authorities and institutions (for example, in many countries labor statistics are used), and labor is defined as the difference between the total population of a country and certain groups. The disabled population includes people who, due to their age and state of health, are not able to work: - persons who have not reached working age - persons in institutions (places of detention, psychiatric clinics) - persons who have left the workforce (pensioners, people with disabilities, etc.) It is important that the resulting unemployment rate is purely arithmetic. Assessing the socio-economic consequences of unemployment, it is necessary to consider its various types, which have different effects, both on the country's economy and on its social climate. There are several types of unemployment, such

as: Frictional unemployment is due to the fact that people who have left their previous employment are in motion, moving to a new enterprise. The main feature of such unemployment is its short duration. Institutional unemployment is generated by legal norms, the structure of the labor market, and factors affecting its supply and demand. So, excessive social payments cause a decrease in the labor supply, contribute to an increase in the unemployment rate. Voluntary unemployment is due to the fact that among the working population there are always people who for some reason do not want to work. Technological unemployment is especially noticeable in countries where scientific and technological progress is combined with a high level of income. Such a combination makes job cuts cost-effective. Structural unemployment occurs when large-scale structural transformations of the economy occur under the influence of scientific and technological progress. In some industries, investment demand, output and employment are growing, in others, production is curtailed and jobs are being reduced. Regional unemployment arises as a result of imbalances between demand and supply of labor in a given territory. It is formed under the influence of uneven economic development of territories, is experiencing the effects of demographic, historical, cultural and other specific factors. Seasonal unemployment due to seasonal fluctuations in the volume of production of certain sectors: agriculture, construction, industries, in which in the course of the year there are sharp changes in the demand for labor. Partial unemployment arises as a result of reduced demand for the company's products. Workers are forced to work part-time due to the lack of full-time work. Hidden unemployment is due to the fact that the employee formally has a job, but there is no actual employment, does not receive payment for his work and is not required in the activities of the organization. The main reasons for unemployment are: - excess population (the world economy is generally abundant and rapid population growth contributes to this) the presence of monopsony in the labor market (monopsonist enterprises dictate wage conditions and underestimate the amount of employment) - low effective demand. All these reasons, one way or another, cause unemployment or contribute to its further development. Uncontrolled development - this phenomenon can have serious macroeconomic consequences. As a result of high unemployment, incomes of the population are falling, that is, effective demand is falling. The fall in household income due to unemployment causes a reduction in real savings. Since savings are a source of investment, the state receives less tax revenues to the budget. The burden of unemployment to varying degrees affects different social groups. In addition, it must be remembered that unemployment is not just an economic, but a socio-economic phenomenon. The social costs of unemployment include: - the increase in social pessimism - the growth of psychological tension - the increase in social activity (strikes, rallies, mass demonstrations) - the increase in crime. The state in the conditions of unemployment faces the need to solve a complex complex task aimed at resolving a number of socio-economic problems. Accounting for the unemployed in Uzbekistan is carried out in two ways: on the basis of appeals to the employment service, and according to a population survey on employment, which is carried out in the amount of 0.06% of the population. Following the results of 2018, the unemployment rate in Uzbekistan amounted to 9.3% of the economically active population, having increased by 0.3 percentage points in the last quarter of the year (from 9%).

Such data are cited by the Ministry of Employment and Labor Relations with reference to a large-scale sociological survey in 66 cities and regions of the country.

The study was conducted in January by the Republican Scientific Center for Employment and Labor Protection under the Ministry and covered 330 citizens' self-government bodies, 3,300 households and about 17.4 thousand citizens.

Compared to 2017, the unemployment rate increased by 3.5% (from 5.8%), but the Ministry of Labor notes that this is not due to a sharp increase in the number of unemployed, but to improving the methodology for accounting for the unoccupied population needing employment.

The respondents from cities and districts of the republic, 462 citizens' self-government bodies, 4900 households and 25,691 citizens took part. Analysis of the results showed that the unemployment rate is 9.4% of the economically active population, which is 0.1 percentage points higher than in January-December 2018 (9.3%), but 0.3 percentage points lower than the January figure. March of the same year.

In the Republic of Karakalpakstan, Andijan, Kashkadarya, Samarkand, Syrdarya and Fergana regions, the highest unemployment rate was recorded - 9.7%, the lowest - in Tashkent (8%). The number of citizens in need of employment amounted to 1,391.1 thousand. The unemployment rate among young people (under 30) was 15.3%, among young people aged 15–25 years exceeded 17.1%, and unemployment among women was 13%.

The number of labor resources was determined at 18,953.8 thousand people and increased by 1% compared to January-March 2018 due to the growth of the working-age population by 183.2 thousand.

The number of economically active population reached 14,767.1 thousand people (an increase of 1% against the figure for January-March 2018). At the same time, employment in the official sector of the economy amounted to 5,412.1 thousand, an increase of 176.3 thousand (3.4%) due to an increase in the number of people employed in economic sectors (by 92.2 thousand), as well as the number of entrepreneurs without a legal entity having a patent (at 76.9 thousand).

Employment in the informal sector remained at the level of last year - 7963.9 thousand. At the same time, the number of temporary and occasional and seasonal work increased (by 41.9 thousand), and the number of people employed without formalizing labor relations and engaging in entrepreneurial activities without a permit was reduced by 3.6 thousand.

The number of economically inactive population was 4,186.8 thousand (an increase of 1%) due to an increase in women on leave to care for children under the age of 2 years (50.3 thousand), despite a slight decrease in voluntarily unemployed persons (by 8.7 thousand).

The survey results show that the number of persons who left to work outside the republic has slightly decreased (19.4 thousand) and amounts to 2365.4 thousand people.

In January-March 2019, 173,265 persons applied to the labor authorities (among whom there are 61,880 young people aged 16-30). Of these, 61,983 were employed, 49,016 were involved in public works, 6,977 were sent for professional retraining. Unemployment benefit was assigned to 3,863 unemployed.

The problem of unemployment is aggravated by the difficult financial situation, pushing to look for work for housewives, pensioners, students. The increase in the number of unemployed will be facilitated by the presence of the following factors: - suppression of unemployment; - partial forced unemployment (shorter working day, shorter working week, lengthening holidays); - conditional unemployment (non-permanent work); - temporary unemployment (maternity leave, care for a child, for disabled children, seriously ill patients and old people, leave without pay); - potential unemployment (due to disability); - structural unemployment (reorientation, closure, bankruptcy); - unemployment of young people (graduates of schools, vocational colleges and



lyceums, universities); - unemployment of youth expelled from educational institutions or discontinued learning on their own; - unemployment due to lack of professional qualifications; - subjective unemployment due to unwillingness or inability to retrain and get a different profession; - unemployment due to forced migration (refugees) - unemployment of returnees from places of detention; - unemployment of those who want to resume work after a long break; - unemployment due to natural disasters and extreme situations (accidents, earthquakes, floods, the destruction of enterprises and institutions as a result of explosions or military actions). Listed here is not all the real ways of replenishing the army of potential unemployed. By unaccounted sources are meant several groups of the population. As in every state, there is a certain part of the population in Uzbekistan that does not want to work - the lumpen element. This group is a permanent dependent of the state, the labor exchange will not and will not be registered as unemployed. However, this mass of people, reaching by some estimates several million people, without putting pressure on the labor market, will nevertheless constantly put pressure on the budget, especially when the law on poverty benefits comes into force. The second group is directly or indirectly related to the criminal world. As the state fights crime, people belonging to criminal groups will join the ranks of the unemployed. The third group is well-to-do people, but officially not working anywhere, they are also formally unemployed. Important for the elimination of unemployment, specific to the state in Uzbekistan is the removal of administrative, legal and economic restrictions that impede the free sale of labor, namely the abolition of the propiska institute, the development of the housing market, the overcoming of monopolism of state ownership, the development of the state employment regulation mechanism. The measures to reduce unemployment are as follows: 1. Employment directly in the enterprise by creating new jobs (expanding or creating divisions, retraining for other specialties); 2. Organization of public works (improvement of territories, forests and city streets, work on vegetable bases, on harvesting agricultural products); 3. Encouragement of private entrepreneurship and stimulation of self-employment of the population, development of small business (partnerships, cooperatives, farms); 4. Retraining and vocational training in scarce specialties and professions. 5. Using flexible forms of employment (home-based work, part-time work, weekly); 6. Broad public information about employment opportunities, holding job fairs, open doors, etc.

Both during their studies and after graduation, young people, in most cases, want to find work, but not everyone succeeds. Most believe that the high level of knowledge gained at the school guarantees them getting a job, but in fact education is not the only factor that employers take into account when applying for a job. For the employer is equally important experience. Among the people surveyed, many began their career in the period from 18 to 21 years. That is, usually while studying at university, college. The problem of unemployment and employment occupies a leading place in the development of each state. On this depends the standard of living of the population and the existence of people living below the poverty line. For over a decade, unemployment has been struggling all over the world and is developing various measures to reduce it, which should help solve one of the main problems of society. In a market economy, it is almost impossible to completely eliminate unemployment as a phenomenon, but it is necessary to take active measures to reduce it to an acceptable level that would ensure the normal functioning of the state's economy and the prosperity of each person. In this regard, a special role is played by the formulation of regional employment programs, on the basis of which it is possible to forecast the situation and develop a system of measures mitigating the negative consequences of its unfavorable development. The main principle of employment policies and



programs is the compliance of the proposed measures with the strategic goal: the creation of conditions for full, effective and freely chosen employment. The state should pay special attention to employment issues. The orientation of the state policy in the field of labor market regulation, the monitoring of processes in the labor sphere, the forecast of their development should be aimed primarily at preventing the occurrence of crisis situations, easing tensions in the labor market.

#### **LIST OF USED LITERATURIES:**

1. Types, Causes, Effects & Solutions for Unemployment (electron recourse)  
<https://kun.uz/en/news/2019/01/28/the-unemployment-rate-in-uzbekistan-was-at-93-in-2018-ministry-of-labor>
2. Youth Unemployment in Europe and The World: Causes, Consequences and Solutions. Kiel Institute for World Economy. ISSN 2195-7525
3. Report “The unemployment rate in Uzbekistan 2018” <https://kun.uz/en/news/2019/01/28/the-unemployment-rate-in-uzbekistan-was-at-93-in-2018-ministry-of-labor>
4. Uzbekistan Unemployment Rate (electron recourse)  
<https://tradingeconomics.com/uzbekistan/unemployment-rate>

## THE PROCESS OF THE HUMAN FACTOR FORMATIONS ACCORDING TO THE SOCIAL VIEWS OF AHMAD DONISH

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### ABSTRACT

*This article discusses the social views of Ahmad Donish, issues related to changing the plight of the people, and the reforms that need to be implemented in the country. In food and clothing, the emperor must follow the lifestyle of just caliphs and not indulge in a passion for exquisite dishes and luxurious clothes, since without modesty there can be no justice. In conversation, the emperor should be courteous. In conclusion, Ahmad Donish examines in detail the question "How to form the Majlis (council)" and "On the attitude of the sovereign to close and close ones." The socio-political views of Ahmad Donish are clearly expressed in his writings "Rare Incidents" and "Risole."*

**KEYWORDS:** "Navodir-Ul-Wakoe", The "Parliament", "Dekhkan Democracy", "Rareest Incidents", "Ideal" Orders, Reforms.

### INTRODUCTION

At the beginning of the second half of the XIX-century, Central Asia was conquered by Tsarist Russia and turned into its colony. Such important socio-political changes could not but be reflected in the social thought of the peoples of this cultural area. The founder of the new direction of social thought of the Tajik people was the famous thinker-educator Ahmad Donish (1827-1879). The formation of his views was influenced not only by the socio-economic conditions of the Bukhara Khanate, but also by his acquaintance with Russia. The main work of Ahmad Donish, in which he sets out his enlightening ideas, is Navodir - ul - vakoe (Rare Incident). Ahmad Donish was essentially the first thinker who criticized the social order of the Bukhara emirate. The central problem around which discussions were held and criticism sounded was the attitude to the emir's despotic system. Therefore, Ahmad Donish put forward socio-political issues that helped to understand the specific tasks of reforming and transforming the Bukhara emirate. He urged people to fight for a new fair social order.

Ahmad Donish develops new ideas in the field of philosophy, journalism and fiction in his humanistic works. Along with general philosophical problems, the thinker puts forward utopian social ideas, in accordance with which the causes of social problems are rooted in the imperfection of individual individuals. The idealization of the spiritual factor as the decisive "silt" led him to the conclusion that some unreasonable people represented by the emirs of Ivanov brought the peoples of Central Asia to poverty and cultural backwardness. In his utopian social ideas, the struggle of progressive ideas against conservative obsolete socio-economic orders in the Bukhara emirate was vividly expressed. Speeches against stagnation for social justice and social progress were the starting point of his democratic and enlightening ideas. But

the nature of his criticism of the existing system was typically enlightening; the main ideal is enlightenment, the rule of law; the main evil is ignorance and lawlessness. However, his utopian social conception is based on the "will and predestination of the almighty God." (1.7)

Ahmad Donish was a famous scientist philosopher of his era and enjoyed great authority among the progressive Bukhara intelligentsia.

The main work of Ahmad Donish "Navodir-ul-wakoe" ("Rare Incidents") was written after his second trip to St. Petersburg, that is, between 1868 and 1873. Two chapters are an exception: "The Journey of Ambassador Abdulkadir and the Amazingness of Russian Society" and "Testament to Children and Description of the Essence of All Occupations and Professions", written, apparently, in 1875-77.

In all the works, Ahmad Donish acts as a critic, he exposes the conservatism and reactionaryness of the Bukhara emirate and its officials. He saw the decay of the emir's system and called for the improvement and renewal of the social system, while criticizing the emir, his officials and the court clergy as agents of social injustice. The voluminous work of Ahmad Donish - Navodir-ul-vokey (Rare Incidents) is a collection in which the author has combined separate treatises and articles written at different times on different issues.

In the preface to the book "Rareest Incidents", Ahmad Donish writes that he wrote down all the significant events he had witnessed, as well as interesting facts heard from others, on scattered pieces of paper. The "rarest incidents" of Ahmad Donish consist of 16 works on various social and partly natural science issues. In his book, Ahmad Donish attaches great importance to social problems in the Islamic state. The first chapter of this treatise is devoted to the question "On the excellence of the emirate." The second chapter discusses the question: "On the behavior of emirs in relation to the army, servants and humane attitude to them." In conclusion, Ahmad Donish examines in detail the question "How to form the Majlis (council)" and "On the attitude of the sovereign to close and close ones." The socio-political views of Ahmad Donish are clearly expressed in his writings "Rare Incidents" and "Risole." He undoubtedly was the spokesman for the thoughts of urban artisans and the peasantry. There is every reason to argue that Ahmad Donish is a representative of "dekhkan democracy", the democracy of the Tajik people in the 19th century. This can be seen from the content of his works, this is evidenced by his political activity and uncompromising criticism of the idle life of the upper layers of society, the court clergy of the despotic regime of the Bukhara emirate. All this confirms that he was the founder of the educational movement of the Tajik people in the XIX th century.

Ahmad Donish was the first and essentially the only scholar who at that time so sharply criticized the public order of the Bukhara Khanate, clearly demonstrated the unsuitability of the emir's system and the corruption of the Muslim clergy, and clearly outlined the poverty and suffering of the masses.

The central problem, around which the most fierce struggle was waged, was the problem of attitude to the emir's despotic system. It is no accident, therefore, that Ahmad Donish put forward, first of all, socio-political issues that helped to understand the specific tasks of improving the emir's feudal despotic system and the struggle for a new, just social system. In his social utopia, the basic idea is expressed that the state cannot remain in the hands of the ruling classes, which rule the country, relying solely on violence against their own people. Putting forth utopian ideas about the perfection of society, he could not in those conditions indicate the ways of combating despotism. In a figurative and vivid form, he revealed and condemned all the vices

of the emir system. "It is very unfortunate," wrote Ahmad Donish, "that in our age there are no ears that they hear, and no eyes that they see. There is only one thing left: write everything you know and cry yourself, re-reading what was written. There is no other way out."

Exposing all the imperfections of the existing social system, the thinker gave a sharp assessment of the "activity" of feudal officials, judges, imams, muftis and others who turned power into a craft for squeezing funds from poor people.

The judge, said Ahmad Donish, should, but cannot be, an honest and fair person. Ahmad Donish speculated that the activities of judges and other officials of the emir depend on their class affiliation. Judges, displaying maximum hypocrisy, make decisions in accordance with the desire of the ruling classes of society and, in the interests of the "sword bearers," encourage violence, endless oppression and robbery of the population. All expenses on the office, on the maintenance of close associates and employees are covered at the expense of the people.

Ahmad Donish recognized the need to create fair laws and demanded their fair implementation, but he was indignant that the laws were written in the interests of narrow groups that usurped power and ruled the country to please the interests of the ruling classes. Therefore, he proposed the adoption of laws that would express the interests of all sectors of society.

He sharply criticized the social order of the Emir of Bukhara, which impeded the implementation of these calls, the order in which mediocre, without any specialty people held high posts, As a result, "loafers became enemies of artisans" and antagonism arose between people of labor and exploiters. At the same time, as pointed out by Ahmad Donish, unearned (loafers) spoke poorly about people of work.

The thinker, in his utopian views and opinions, believes that in an "ideal" state, enlightened people from among the philosophers of the sages should govern. But the truth cannot be denied that ignoramus and vile people occupy a high position and large posts; no one pays attention to the activities of people of knowledge.

In all his works, Ahmad Donish contrasts the utopian "ideal" orders, customs and manners with the existing orders and customs in the Bukhara Khanate. He, critical of the reactionary order, exposes all the vices of the emir system. Due to the limitations of his utopian views, he could not offer drastic measures to improve the real social system. In his social projects and recommendations, he confined himself to the demand for reform of the political system on an equitable basis. Comparing social order in the Bukhara Khanate and alternative "ideal" orders, he noticed that "some enlightened countries" had advanced far in their development compared to the Bukhara Khanate, where the slave trade existed until the 70s of the last century. Comparing the outmoded Bukhara regimes with the "ideal" Russian reality, he condemns the exceptional backwardness of his country compared to the development of education in Russia, the absolute lack of amenities of the cities of the Khanate in comparison with the landscaped Petersburg.

Compared with his predecessors and contemporaries, Ahmad Donish contributed a lot of positive, new to the development of the socio-political thought of the Tajik people. He believed that the state is necessary to ensure the interests of the people. But from his point of view, the country can flourish only if five conditions are met: a country must have a fair, but powerful and powerful king. Honest and fair people who enjoy the respect and support of the population should work in the state apparatus. The state must have a well-established medical practice. The people should be generous and generous. The state should have an abundance of water.

The statements of Ahmad Donish do not have a coherent doctrine of the state, but contain interesting thoughts about the duties of the sovereign and the state apparatus. "The king must be fair and strong," writes Ahmad Donish, "and if the king is an oppressor and weak, then the neighbors will want to take over his country and trample his possession." Ahmad Donish believed that the tranquility and well-being of the inhabitants of the country depend on the sovereign's ability to govern.

But he immediately adds that all government officials and rulers must also be fair. "If the rulers and officials of the state are tyrants, and the king is just, all the same the cities will be destroyed, the subjects will abhor the state, the villages will be destroyed. The cruelty of the officials is in reality not without the knowledge of the king and everything is done with his consent." (2.10)

Comparing the state with a sofa or bed with four legs, Ahmad Donish says that "the head of state is" justice and justice, and the army, subjects, water and money are his feet. If any of these four legs turns out to be fragile, then three the rest cannot be a support, the foundation will collapse. " In this case, he writes, the matter can go to violence, the sovereign will force the army to serve under compulsion, he will forcefully take property from the people, the people will leave such a country, emigration will begin. "Army it is impossible to keep without money, and money cannot be found without subjects, and subjects cannot be left without water ".(2.80)

The Sultan should pay equal attention to all four foundations, otherwise, unable to withstand the violence of the emir, "the people can disperse and in a short time of the rule of anarchy there will not even be a trace from the kingdom." Therefore, says Ahmad Donish, the sovereign, as soon as he begins to fulfill his duties, he must first of all take care of all social layers of society, without giving priority to any of them.

In the book "Rare Incidents", Ahmad Donish in the form of a conversation between the Indian envoy and the Bukhara nobility shows the outrageous attitude of the Bukhara emirs to their own population. It is clear that Ahmad Donish, as the foremost thinker of his time, pays great attention to the needs and aspirations of the people. In interpreting this issue, he acts as an exponent of the interests of the masses of his era.

Although Ahmad Donish never speaks about the principles of the constitutional-monarchist system, but he definitely requires the creation of an advisory body to the sovereign. The wise sovereign, writes Ahmad Donish in the book, is obliged to create an advisory body, "because at present this is the most important principle of governing the country He indicates the following duties of the members of the deliberative body "mashvarati shuroii": "every day for several hours they should talk with the people about the improvement of the regions and the affairs of the state. They must unanimously decide without fear, truthfully report to the sovereign. All that they unanimously decide must be framed in the form of a draft law and implemented.

The Sultan is obliged to reckon with their wishes, and if he agrees with their proposals, he must sign a decree prepared by them. Deliberative body meetings needed convene and conduct in the absence of the Sultan. The members of the deliberative body must be objective and make decisions, regardless of their faces. They must receive a solid salary. "(3.90)

The "Parliament" proposed by Ahmad Donish is not elected. All members of the deliberative body must be selected by the emir himself. They enjoy deliberative rights, but the emir must reckon with their decisions. This reform, according to Ahmad Donish, does not limit the right of the absolute monarch - the emir. Ahmad Donish, as an enlightener, believed that if the sultan is

fair and his consultants work honestly, a firm order will be established in the state and the country will flourish. The utopian views of Ahmad Donish are completely obvious, for reality was far from his "ideal."(4.38)

Ahmad Donish points out that the ruler must be fair and at the same time adhere to the following rules: "When the sovereign decides matters, he must put himself in the position of subjects and represent them in his place. In each case, an acceptable solution for him, he must extend to the subjects. What he does not consider fair for himself, he should not be considered fair for others. If he does otherwise, he will commit a crime.

The emperor was not to admit that people in need of him were waiting for him at the palace. In food and clothing, the emperor must follow the lifestyle of just caliphs and not indulge in a passion for exquisite dishes and luxurious clothes, since without modesty there can be no justice. In conversation, the emperor should be courteous. Do not be rude, patiently listen to all requests addressed to him and not be upset if you need to listen to a lot of arguments; Do not be ashamed to talk with the poor.

The sovereign should not be indifferent to the dangers threatening the state. The emperor is obliged to always communicate with wise teachings, value their advice and beware of meeting with greedy people who, flatteringly praising him, want to win over to themselves only in order to illegally, cunning and insidious to get from him what they need. The sovereign should not trust all the information that his proxies give him and not be indifferent to the activities of the governors of the districts. He must check to see if they oppress his subjects. The sovereign should not be indifferent to the dangers threatening the state. The emperor is obliged to always communicate with wise teachings, value their advice and beware of meeting with greedy people who, flatteringly praising him, want to win over to themselves only in order to illegally, cunning and insidious to get from him what they need. The sovereign should not trust all the information that his proxies give him and not be indifferent to the activities of the governors of the districts. He must check to see if they oppress his subjects.(1.28)

Islam called for equality and justice at the time of its inception, hence many philosophers in the East, in search of social justice, appealed to the ideas of justice of the era of the righteous caliphs, to the "golden age" of Islam. And here the philosophy of Ahmad Donish is no exception.

## REFERENCES

1. Ahmadi Donish . Encouraged by wokeo. Dushanbe 1967. C 7 Ibid.
2. Ahmadi Donish. Navodululvakre (Rare events). Kitobi 2.-Dushanbe: Donish, 1989.333 s.
3. Rachabov. 3.Sh. Maorifparvar Ahmadi Donish (Illuminator Ahmad Donish) .- Dushanbe: Irfon, 1964.-306 p.
4. Olimova H.Kh. The truth of life and the artistic truth in "Navodirulvakoe" by Ahmad Donish: abstract. diss ... cand. Phil. sciences. -Dushanbe, 2007.



## METHODS OF PHRASE FORMATION AND PHRASEOLOGICAL CONTAMINATION

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### ABSTRACT

*In the article an author examines the phraseological contamination as one of varieties of method of phraseological derivation, realized within the framework of secondary phraseological formation and marks that the essence of phraseological mechanism consists of that they are directly unconnected with one or another type of derivational bases and only point at the certain technique of transformation of one of parties of dialectical unity of linguistic signs - their plan of expression \structural\ or their plan of content \semantic\.*

**KEYWORDS:** *Phraseological Contamination, Lexical System, Phraseological Formation, Derivation, Substitution, Phraseologisation.*

### INTRODUCTION

Phraseological contamination is a way of creating a new phraseological unit by partially or completely combining of the component composition of several phraseological units to materialize a new, modified in the aspect of connotation or unchanged initial value.

Phraseological contamination is a reproducible, stable and relatively productive method of phrase formation, enriching the lexical-phraseological system of the French language with new expressive means of expression.

The phenomenon of phraseological contamination is a sphere of lively, colloquial speech, from where contaminated forms penetrate the language of the Internet, newspapers and journalism, almost always being violations of the literary norm [1].

Let us turn to a direct study of the features of phraseological contamination from the standpoint of the theory of phraseological formation. The basic concepts of phrase formation, which open up the objective prerequisites for establishing the differential features of phraseological contamination, can be represented as follows:

- 1) the concept of phrase-formation is typical, indicating that the common and basic feature of phrase-formation acts is the materialization of ideal integral content, separated by a decorated verbal complex, the total value of the elements of which is not equal to the new objectivized semantics, but correlated with it on the basis of certain associative representations;
- 2) it is necessary to recognize primary phraseological formation by generic terms - the emergence of phraseological units (hereinafter phraseological units) on the basis of lexical units and their free combinations and secondary phrase formation - the creation of phraseological units on the basis of phraseological units, that is, stable verbal complexes of all types;

3) preserving the criteria of the derivational basis with further distinctions on intra-level sections, we come to specific concepts: the formation of phraseological units on the basis of individual words and free combinations of words, on the one hand, and on the basis of stable verbal complexes of non-phraseological types of phraseological units, on the other hand;

4) accounting for the number of source units contributes to the identification of subspecies concepts: the formation of phraseological units from one stable verbal complex of the non-phraseological type and as a result of their contamination, as well as the formation of phraseological units based on one phraseologism or the interaction of two or more phraseological units, i.e. phraseological contamination [4].

It should be noted here that most species and subspecies concepts in the specialized literature have received diverse and ambiguous terminological fixations, which explains the descriptive form of the transmission of their content in our presentation. In the future, we will use only the term “phraseological derivation” / concept of species level / to denote the secondary formation of phraseological units on the basis of available phraseology, of which the contamination of phraseological units is the aspect. So, this systematization of phrase-forming capabilities allows us to formulate important conclusions about the linguistic status of phraseological contamination:

- I. Formal and semantic features of units belonging to different levels of the language system predetermine substantial differences between the corresponding phraseological acts. For example, the rethinking of lexical units implies their parallel integration into the composition of certain verbal complexes, and free phrases used as derivational material, as a rule, do not undergo any formal changes, since they are separate formations. This relationship between the specifics of the original signs and the nature of phrase-forming modifications gives us reason to conclude that each type of derivative base corresponds to one distinctive abstract pattern for creating phraseological units, which is terminologically expedient to designate as a phrase-formation method.
- II. Phraseological contamination is one of the varieties of the phraseological derivation method implemented within the framework of secondary phraseological formation, and its categorical feature consists in the transformation of several initial phraseological units in a single onomasiological act. So you can formulate an extremely general definition of phraseological contamination, revealing its place in the system of phraseological methods of the French language.
- III. A comparison of the material shells of the initial and contaminated phraseological units shows that the latter can be, for example, a result / variative / replacement of an element of one basic phraseological unit with an element of another: hausser le menton + se pousser le col = hausser le col, or expansion of one basic phrase components of another: éclater de rire + rire du nez = éclater de rire du nez [5].

The same structural changes in derivational fundamentals are also characteristic for the formation of phraseological units in other ways, in particular, for the emergence of phraseological units based on one revolution: cracher blanc + blanc du coton = cracher blanc du coton. Added to the structure of the FE comparative comme union. These examples clearly illustrate the different status of phraseological contamination of other phraseological methods, on the one hand, and the replacement, expansion of the component composition of phraseological units, on the other hand. Therefore, for the terminological distinction and reflection of the fundamental, although often leveled differences between these groups of linguistic phenomena,

we propose to classify substitution, expansion, isolation and ellipse as structural phraseological mechanisms and similarly to metaphor, metonymy, antithesis, hyperbole, lithot and other associative transformations of the initial units when creating phraseological units as semantic phrase-forming mechanisms. The essence of phraseological mechanisms is that they are not directly related to one or another type of derivative bases, but only indicate a certain technique for transforming one of the sides of the dialectical unity of linguistic signs - their expression plan / structural / or their content plan / semantic / [5].

Within the framework of evolutionary phraseological formation theory, the process of formation of phraseological neoplasms is usually called phraseology. Since such neoplasms are not assigned the "status of a phraseological unit" or they are considered potential phraseological units [2], the basis of numerous definitions of phraseological units is the gradual rethinking of the component composition of a particular expression and its acquisition of other features of the phraseological unit. Depending on the basic units of future phraseological turns, the following are distinguished: primary phraseological unit / formation of the phraseological unit based on lexical signs /; and secondary phraseological unit / formation of phraseological unit based on phraseological signs / [3].

The meaning of the contaminated phraseological units has not clear boundaries; it is constantly modified under the influence of communicative-pragmatic tasks of the speaker, therefore it can be stated that the actualization of the transformed phraseological units has pragmatic conditionality.

Filling the phraseological unit with new semantic content is a rather often used method of contaminated transformation of phraseological units in order to create a pragmatic effect. It relies on the use of the phraseological units in an unusual meaning for them in connection with the disturbance of the consistent pattern of their connection in a communicative situation:

*"En fait "d'épargne volontaire", les travailleurs sont servis avec les décisions consistant à rendre plus difficiles les achats à crédit par des versements initiaux plus élevés et un remboursement plus rapide.'... Les riches n'achetant pas à crédit, les travailleurs à faibles salaires, les jeunes ménages, les personnes âgées, sont particulièrement lésés par ces mesures, Pompidou leur avait promis des exemptions. En réalité, ils sont les premiers à passer à la casserole de sa peu ragoûtante cuisine". (France Nouvelle, 3,IX, 69)*

Here we are faced with the contamination of an expression of an argotic character "passer qn. à la casserole", which means "to make someone an evil" and free phrase. The same method of concretization the phraseological unit allows us to strengthen its pragmatic - stylistic function. Owing to this, subjective expression, repressed in phraseological units to the background by their settled objective meanings, again temporarily prevails over objective logic. The evaluation function of phraseological units is strengthened, their emotional richness increases, their imagery takes on fresh colors. The word-play, being the result of the contamination of the phraseological unit and the word, presents a great difficulty for understanding the general meaning of the utterance, but this problem can be solved only with a clear understanding of the pragmatic function of the phraseology used.

For instance:

*"...les avions militaires supersoniques n'en finissent pas de casser les oreilles - et les vitres - des paisibles citoyens" (Figaro)*

(These supersonic military aircrafts burst the eardrums - and glass in the houses of citizens).

Contamination of a phraseological unit and free collocation in an author's speech is capable of conveying all shades of comical - from mild humor to caustic satire, where contamination, in which a nuclear word is simultaneously becomes a part of a phraseological turn and free collocation, creates an expressive collective portrait of snobs, arrogantly, pretentiously leading absolutely empty talk: *Ils parlent... ils parlent du nez, de la pluie et du beau temps. (Prevere. La Crosse en l'air).*

Thus, contamination occurs when the speaker becomes incensed of the need to strengthen the semantics of phraseological units that exist in the language. The meaning of many phraseological expressions coincides or approaches to the semantics of one of the original components, which leads in this case. In contaminated phraseology, the meaning of the original component is strongly emphasized by the presence of the second component with its additional meaning. The combination of this semantic marking with a stylistically brightly colored way of merging the components of the original phraseological units also forms the semantical - expressive, thereby pragmatical - stylistic basis of the contaminated phraseological units.

Developing the provisions of the above mentioned concept, we note that in the theory of phrase formation it is logical and legitimate to consider the process of functioning in speech of casual and phraseological units, since the speech development of the phraseological unit is characterized by a specific time duration, sequence of stages, which makes up the conceptual core of the term "process".

## REFERENCES

1. Babkin A.M. Russian phraseology (its development and sources). - L.: Science, 1970.
2. Kunin A.V. The basic concepts of English phraseology as a linguistic discipline and the creation of the English-Russian phraseological dictionary: Dis. of Dr. of philological science. M., 1964.
3. Kunin A.V. The phraseology course of modern English: Textbook for institutes and faculties of foreign language. M., Dubna, 1996.
4. Mamatov A.E. Essays on the French phraseological stylistics. -T.: "Ukituvchi". 1989.
5. Nazaryan A.G. Phraseology of the modern French language. M., 1976.

## THE IMPACT OF E-COMMERCE TO DEVELOP A DIGITAL INDUSTRY IN UZBEKISTAN

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### ABSTRACT

*The paper discusses the importance of encouraging e-commerce in Uzbekistan and reviews digital infrastructure of the country. Subsequently, briefly explores the USA and China digital economy models. The paper culminates in a series of recommendations for Uzbekistan to shape its digital industrial policies.*

**KEYWORDS:** *E-Commerce, Digitalization. Digital Infrastructure, Digital Industrialization, Economic Growth.*

### INTRODUCTION

Since 2012, the Government of Uzbekistan has made solid stride towards executing computerized advances and has propelled two projects to progress advanced improvement in the nation: the "ICT Infrastructure Development Program 2015-2019" (9 projects) and the "E-Government Development Program 2013– 2020" (28 projects). The Ministry for Development of Information Technologies and Communications administers these projects (since 2015). Inside the E-Government program, Uzbekistan has propelled 265 online administrations and 600 government organizations, actualized client criticism on administration quality and e-investment, expanded straightforwardness in open administration conveyance, set-up a call-focus, and set up "One-Stop-Shops" in 194 regions of the nation. Uzbekistan has affirmed its availability to work together with the World Bank and with different nations in the area to build up a focused ICT segment and triple its weight in the national economy. [1]

Digitalization can be contrasted with industrialization in what might be its possible effect on financial and social establishments. As industrialization put machine control at the focal point of the economy, digitalization makes advanced insight its new support. The processing plant as the site of motorized generation was the focal monetary establishment of the modern age. For computerized age, it is sectoral stages that re-compose whole financial exercises in any segment dependent on advanced insight emerging from information. Internet business is a shallow method to assign this wonder. Computerized economy is characterized by advanced insight administrations, particularly as they show in the activity of segment wide stages. [2]

Future exchange gains and the prospects for exchange drove improvement in creating nations will rely upon how great they are at retaining these advances and applying them to existing industry. To be "exchange prepared" in the advanced economy, they will require two arrangements of abilities. The first is standard abilities, know-how, and skills that are basic for the assembling area and to make new items and procedures interfacing assembling and administrations, as in traditional industrialization. Given that a lot of internet business is selling conventional merchandise and enterprises on the web, the absence of capacity to deliver numerous assortments of modern yield will straightforwardly influence the dimension of



cooperation and offer of additions. A second arrangement of abilities is the aptitudes, information, and specialized skill of specific centrality to Industry 4.0. This implies information researchers, RPA architects, and individuals represented considerable authority specifically sectoral innovations. After some time, all industrialization will confront transformational weights to wind up computerized industrialization. That is the reason it will be essential to create interdisciplinary abilities that consolidate specialized mastery with explicit plant the executive's skill to run half and half generation frameworks. A double spotlight on the two sorts of capacities is expected to adjust and hold occupations while in the meantime advancing nearby modern substance.

A focal pawn in the amusement is information, meriting an uncommon notice. The web creates stunning measures of information each second through web indexes, presentation pages, online stages, and internet based life. These can help to methodically outline conduct and rivalry inclines and create value correlations (in this way appearing at cut expenses). Be that as it may, access to information alone does not ensure data. Getting significant bits of knowledge from this immense measure of data requires abilities for information examination, and creating other computerized items utilizing information can be overwhelming without high innovation aptitudes.

Computerized mechanical strategies are in this manner critical to fortify the attention on capacities and hold space for nearby man oeuvre. They can enable nations to control and check cross-outskirt information streams, advance purchaser assurance and wellbeing of online exchanges, and secure individual protection. Be that as it may, albeit such strategies are harbingers of expectation, they will likewise confront a few restrictions. A first restriction is the decision of modern arrangement instruments, since a large number of them involve exchange offs and worries of security and improvement might be profoundly interwoven. For instance, information confinement is regularly supported as a modern strategy choice to hold information control and advance neighborhood businesses (by sharing the information), while a few nations likewise consider it to be a critical instrument to guarantee singular protection. In any case, what isn't clear is the way information power – which depends on a nation's endeavors to make huge scale computerized foundation to course its web traffic and expecting organizations to store all data produced inside national limits – can truly help make specialized insurance from information abuse.

In useful terms, modern strategies in this field ought to help manufacture abilities as well as guarantee that business sectors for computerized items stay aggressive with the goal that nearby firms can contend and flourish. This is in no way, shape or form a simple errand. It includes administering vast "officeholder" worldwide firms and keeping them from utilizing huge information examination to shape markets and market gains. There are a few manners by which substantial firms can utilize huge information. They can structure their very own extension to guarantee more prominent benefits and market control; offer new advanced items, for example, the web of things, in light of information created on their online stages, to additionally concrete their monopolistic positions; or even offer their information pools to different firms on a particular premise. Computerized modern approaches will have their restrictions in anticipating and deflecting such enemy of focused practices, since an extensive number of these impacts will unavoidably be cross-outskirt in nature.

In an advanced domain, the Internet's development and online business starts to make crucial change to government, social orders, and economies with social, monetary and political



ramifications. [3] E-trade has effectively improved business esteem by in a general sense changing the manners in which items are imagined, showcased, conveyed, and upheld. The relationship and collaboration of different partners, for example, clients, providers, key accomplices, operators, or wholesalers is recognizably changed. The genuine effect of internet business is its capacity to diminish expenses and costs and make working together progressively proficient. These funds pervade the whole esteem chain and effect fundamentally in business associations with different organizations. [4]

Advanced modern approaches are in this manner critical to strengthen the attention on capacities and hold space for neighborhood man oeuvre. They can enable nations to control and check cross-fringe information streams, advance buyer assurance and wellbeing of online exchanges, and ensure singular protection. Be that as it may, albeit such arrangements are harbingers of expectation, they will likewise confront a few constraints. A first impediment is the decision of modern strategy instruments, since a significant number of them involve exchange offs and worries of protection and improvement might be profoundly interwoven. For instance, information limitation is regularly pushed as a mechanical arrangement alternative to hold information control and advance nearby ventures (by sharing the information), while a few nations likewise consider it to be an imperative instrument to guarantee singular security. In any case, what isn't clear is the manner by which information sway – which depends on a nation's endeavors to make extensive scale advanced foundation to course its web traffic and expecting organizations to store all data produced inside national limits – can truly help make specialized insurance from information abuse.

Even though, some important reforms have been made to develop digital industry in Uzbekistan, the government is still suffering from challenges on establishing advanced digital infrastructure the country. Uzbekistan, therefore should begin shaping digital industrial policies based on mixed, China's and USA's digital economy models which are currently dominant and most successful throughout the globe, thanks to their giant commercial internet platforms (Baidu, Alibaba, Tencent, Amazon, Netflix, Uber, Lyft, Youtube.com, Facebook, Google etc.).

The digital economy accounted for 6.9 percent of the U.S. gross domestic product, or \$1.35 trillion, in 2017, according to a new batch of statistics released by the Bureau of Economic Analysis. The digital economy supported 5.1 million jobs in 2017, which accounted for 3.3 percent of total U.S. employment of 152.1 million jobs. Employees working in the digital economy earned \$132,223 in average annual compensation in 2017, compared to \$68,506 per worker for the total U.S. economy. [5]

While, China's digital economy hit 27.2 trillion yuan, 32.9 percent of the country's total GDP growth (2017). CAICT expects China's digital economy to be valued at 32 trillion yuan and account for 35 percent of the country's total GDP by 2020. [6]

According to the program “**Uzbekistan Digital 2030**” by 2030 the share of digital economy will account for roughly 30 percent of the country's total GDP.

TABLE-1[7]

KEY DIGITAL STATISTICAL INDICATORS OF UZBEKISTAN (2018)					
#	TOTAL POPULATION	INTERNET USERS	MOBILE CONNECTIONS	ACTIVE SOCIAL MEDIA USERS	ACTIVE MOBILE INTERNET USERS
In Million	31.49	15.45	22.65	1.30	9.51

As can be seen from the graph, 48% of the whole population is the active internet users. 9.51 million (30%) people utilize mobile phones, while, the rest residences use other internet devices (Laptop, PC, tablet) to connect to the internet in Uzbekistan. 1.30 million citizens of Uzbekistan are active social media users (Facebook, Instagram, Telegram and YouTube).

TABLE-2[7]

ANNUAL DIGITAL GROWTH YEAR-ON-YEAR CHANGE IN KEY STATISTICAL INDICATORS BETWEEN 2017 AND 2018				
#	INTERNET USERS	ACTIVE SOCIAL MEDIA USERS	MOBILE CONNECTIONS	ACTIVE SOCIAL MEDIA USERS
In Percentage	+0	+69	+6	+40
In Thousands	Unchanged	+530	+999	+230

As is clear from the second graph, number of internet users levelled off between 2017 and 2018. However, there was significant increase in the number of active social media users and active mobile social media users 69 percent and 40 percent respectively. Number of mobile subscribers raised by 1 million in 2018.

TABLE-3[7]ALEXA'S RANKING OF TOP WEBSITES

(Rankings based on the number of visitors to each site, and the number of pages viewed on each site per visit)

WEBSITE	TIME	PAGES
GOOGLE.COM	7M 32S	8.56
YOUTUBE.COM	8M 18S	4.79
OK.RU	4M 48S	2.15
MOVER.UZ	12M 12S	8.00
YANDEX.RU	5M 21S	3.22
VK.COM	10M 28S	4.74
MAIL.RU	5M 23S	3.63
OLX.UZ	15M 38S	13.90
KUN.UZ	9M 43S	6.21
WIKIPEDIA.COM	4M 16S	3.31

Given is a table which depicts list of top 10 websites which are visited by the internet user of Uzbekistan. The most popular website amongst subscribers is Google.com on this website people spend normally 7 minute 32 second during their per visit. Next comes video content Youtube.com and OK.ru. The least visited websites in Uzbekistan are OLX.uz which is prominent and leading e-commerce website in the country and social media news source Kun.uz among websites provided in the table.

Apparently, websites based on e-commerce are not visited as much as other websites in Uzbekistan. However, the role of e-commerce is immense to develop digital economy in the state. With the assistance of web based business website architecture, you get a chance to have your items and administrations accessible to clients 24 hours. It gives a decent presentation to your business and help you to connect with potential clients. Since the vast majority of the general population likes to shop online because of lack of time, you can without much of a stretch make more income. With the assistance of a web based business site individuals can choose and purchase wanted items whenever. They can pay effectively through charge cards or other installment choices accessible in site.

With regards to purchasing presents for your family and companions, an online business shopping basket is the thing that individuals lean toward nowadays. Nearly everything is accessible over web. You simply need to visit the site, select an item, include it in your shopping basket and pay. The blessing will be conveyed to the referenced goal on schedule. Isn't that straightforward and bother free?

Since the entire procedure of acquiring things happens on the web, individuals at times question about the opportune conveyance of the items. In the event that your mentioned item does not contact you or achieves late, you can make a grumbling at the 'products return' segment. The required estimates will be taken at that point to guarantee you get what you requested for.

A web based business site likewise enables clients to post their remarks with respect to items and administrations. Staying in contact with the clients additionally helps an entrepreneur over the long haul. Subsequently, online business improvement is exceedingly imperative in the present aggressive condition. [8]

**Recommendations:** To establish well-developed digital infrastructure in our country and accomplish a main goal by 2030, innovative start-ups and venture businesses should be encouraged and supported by the government. Devices enabling us to connect to the internet should witness a price reduction. Privacy Policy of the individuals must be protected. National internet browsers and search engines also needed. All territory of the country must be covered by fixed broad bands and high speed mobile internet. Transparency between citizens and government agencies should be ensured.

According to *Parminder Jeet Singh*, a sound digital industrial policy will combine at least five elements [2]:

1. Providing enabling legal and regulatory frameworks, including for easy and secure e-transactions;
2. Supporting a start-up ecology and other domestic digital businesses;
3. Building public digital and data infrastructures;
4. Shaping regulatory frameworks for digital monopolies that are set to control whole sectors;

5. As required, developing public community digital platforms in some key areas.

**REFERENCES:**

1. [www.Worldbank.org](http://www.Worldbank.org)
2. Digital Industrialisation In Developing Countries (A Review Of The Business And Policy Landscape) Parminder Jeet Singh;
3. Boulton, Libert, & Samek, 2000; McGarvey, 2001
4. Bernardes, 2000; Sharma, 2004; Sharma & Gupta, 2003a
5. [www.bea.gov](http://www.bea.gov)
6. [www.global.chinadaily.com](http://www.global.chinadaily.com)
7. [www.linkedin.com](http://www.linkedin.com)
8. [www.consultpr.net](http://www.consultpr.net)
9. [www.stat.uz](http://www.stat.uz);
10. [www.statista.com](http://www.statista.com)
11. [www.ictsd.org](http://www.ictsd.org)

**NORMS OF RUSSIAN WRITTEN SPEECH IN THE MODERN WORLD**

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**ABSTRACT**

*This article discusses the most difficult facts of written and spoken language, presents the most acute conflicts in modern usage. In all cases, we will be able to show how the norms are formed, try to find the cause of their fluctuations and determine the general direction in the development of the Russian literary language. Although in recent years many interesting books and articles have been written about the culture of Russian speech, not all problems of this complex field of knowledge have found the same solution. In some cases, science does not yet have a generally accepted view of those or other language processes. The article points out the main points of view on the nature of the norms of the literary language and the methods of their study.*

**KEYWORDS:** *Generation, Everlasting, Renewal, Argument, Reason, Norms, Speech Skill, Distortion.*

**INTRODUCTION**

The language norm usually understands the combination of the most stable, traditionally sanctified language means and the rules for their use, adopted in this society in this era. In accordance with the structure of the language, orthoepic, lexical, grammatical (word-building, morphological, syntactic), spelling, punctuation norms are distinguished. All these norms are important for ensuring the functioning of the Russian language as the state language.

The norms of language are a historical phenomenon that is constantly changing. Changes in literary norms are associated with the development of language, social changes, the development of literature, etc. What was the norm in the last century and even 10 years ago today may be a deviation from it. If you look at the dictionaries 100 years ago, you can see how the norms have changed, for example, pronunciation and stress.

It is wrong to think that the norm is motionless. She is constantly shaken by the usus (from lat. Usus 'use'). The rate changes and develops over time.

If grammar norms are more stable, then orthoepic norms are very mobile. Pronunciation options are often given in dictionaries: *твори́шь – твои́рог, исче́ркать – исче́рка́ть, не́прчитъ – не́рчи́ть.*

An outstanding Russian scientist-encyclopedist M.V. paid a lot of attention to the issues of language regulation. Lomonosov. In 1755, he substantiated the theory of "three calm" - "high", "medium" and "low", which laid the foundation for a scientific study of the stylistic diversity of the Russian language.

A norm is a combination of the most suitable means of serving a society of a language that develops as a result of the selection of linguistic elements from among coexisting, present, formed again or extracted from a passive stock of the past in the process of social, in the broad sense, evaluation of these elements [1].

The concept of norm applies to all levels of the language. In accordance with the level of correlation and specificity, the following types of language norms are distinguished [1]: lexical - ensure the correct choice of words;

The vocabulary of any living language is in constant change - neologisms continuously enter the language and old words gradually disappear. The following methods of vocabulary replenishment are distinguished [2]

Word formation, that is, the creation of new word forms from components already existing in the language: for example, from the foundations of pairs that existed in Russian in the 19th century, the two-core word steam engine was formed, which denoted a new concept at that time.

1. Polysemy is the acquisition of new meanings by existing words: the existing word "gate" (a doorway in a wall or a fence closed by means of barriers) has acquired a new meaning as a sports term (a special construction on a sports ground where you need to direct the ball or other sports equipment).
2. Conversion - the transition of some parts of speech to others without the use of affixes: in this way, an adverb is well transformed into a noun well in the meaning of school marks.
3. Borrowings from other languages, such words as a computer (from the English computer) or an encyclopedia (from the Latin encyclopaedia, which in turn came from other Greek. Ἐγκύκλιος παιδεία).
4. Creation of abbreviations: such as a university (from a higher educational institution) or BDT (from the Big Russian Encyclopedia).

- accentological - provide for the correct formulation of stress;

Accentology (Latin accentus - stress, Greek λόγος - word, doctrine) - a section of linguistics that studies the nature, features and functions of stress. Sometimes tone and some other prosodic phenomena are also referred to the field of accentology. Accentology is also called a system of phenomena of language associated with stress [3].

The study of stress in the morphological aspect poses the following tasks:

establishing the connection of the presence or absence of stress with varieties of morphemes or their combinations (auto-accentuating, requiring stress, for example, Russian vy- (cf. drink - drink, write - write, but - under the influence of the suffix -you- write out), located before the stress, and post-accent morphemes);

- deriving the rules for stress displacement during inflection and word formation (accent curves for lexemes or accent paradigms for their classes).
- Distinguished phonological stress attributable to a syllable or sea, and morphological stress characterizing a particular morphological element. In cases where we are talking about word forms with non-syllable or zero morphemes, they talk about conditional morphological stress that can fall, for example, to zero ending (cf. Russian table - table) [3].



- orthoepic - describe the correct pronunciation of words;
- Orthoepy (from other Greek: ὀρθός “correct” and ἔπος “speech”) is a combination of the rules of spoken language enshrined in the literary language. Different authors interpret the concept of orthoepy slightly differently, the “broad” approach includes pronunciation and stress, the “narrow” approach excludes emphasis from the rules of orthoepy.
- Orthoepic norms are very important in speech activity, because incorrect pronunciation or stress distracts attention from the meaning of the statement, makes it difficult to understand, and often just makes an unpleasant impression on the listener. [4] In the history of the Russian literary language, the orthoepic norm by the beginning of the 20th century mainly prevailed over local pronunciations. So, the dialectic pronunciation on o disappeared: «м[о]л[о]дой», «х[о]р[о]шо» instead of the literary «м[ъ]л[ъ]дой», «х[ъ]р[ъ]шо» etc. However, some dialectisms are stable, for example, a solid pronunciation of the sound “ч” in the west and east, the pronunciation of «пóля», «мóря» instead of «поле», «море» in the center, etc. But there are especially many cases when it is impossible to assert confidently which of the options for the literary language is “correct”. At the moment, Russian orthoepy is not yet fully established and continues to develop.
- spelling - fix the uniformity of speech transmission in writing;
- Spelling, spelling (dr. Greek ὀρθογραφία, from ὀρθός - “correct”, and γράφω - “write”) - the uniformity of the transmission of words and grammatical forms of speech in writing. Also, a set of rules ensuring this uniformity, and the section of applied linguistics dealing with it.
- Spelling is a section of linguistics that studies the rules of spelling words.
- Reflects the weakening of unstressed vowels (instead of O and E it is written A and Я), some phenomena associated with consonants (written in ЦЦА instead of ТСЯ/ТЬСЯ). It does not reflect the phenomena associated with consonants (e.g. voiced consonants at the end of a word are stunned, but letters corresponding to voiced are written anyway).
- morphological - inflection and derivation rules described in grammars;
- Morphology (from other Greek. Μορφή - “form” and λόγος - “word, doctrine”) is a section of grammar, the main objects of which are the words of natural languages, their significant parts and morphological characteristics. The tasks of morphology, therefore, include the definition of a word as a special language object and a description of its internal structure. The close connection between the concepts of morphology and the word (the more precise term “word form” is often used in the same meaning) makes the very existence of morphology dependent on the existence of words in a particular language. Meanwhile, this concept is one of the most controversial in linguistics and, most likely, not universal. In other words, a word is such an object that, apparently, does not exist in all languages, which means that not all languages also have morphology as an independent section of grammar. In languages that have no (or almost no) words, morphology cannot be distinguished from syntax: it does not have either an independent object or an independent problematic.
- syntactic - regulate the correct construction of grammatical constructions.
- Syntaxis (dr. Greek σύν-ταξις [5] “compilation”, “coordination”, “order”) is a section of linguistics in which nominative and communicative language units are studied: sentence and phrase. A word in a literal translation means not only compilation, but also organizing, coordinating, combining words into a coherent text.
- In linguistics, syntax is a collection of rules, theoretical systems and language processes that streamline and study the structure of sentences in any language. The goal of many syntaxes is to establish syntax rules common to all languages. The subject of study in syntax are

syntactic units, or language constructs, in which speech elements are combined with syntactic connections and relations [6]. The syntax is inextricable with the norms of communication, the structure of thinking and denoted by reality, which makes it the most universal part of the linguistic structure.

At the same time, each language has its own specific rules of syntactic relations and methods of their application. In many languages, the purpose of syntax is to create a set of rules and systems for processes occurring in a language environment that study and organize ways of combining words and the diverse structure of text:

- Grammar structure of the language: words that are members of a sentence; collocations; sentences are simple and complex; texts;
- A branch of the science of language that studies the types of syntactic relations, the lexical and grammatical meaning of phrases in a sentence.

Morphological and syntactic norms are included in the number of grammatical norms.

NORMA LANGUAGE, all the most complete set of the most stable traditional implementation of the language system, was selected and secreted in the course of the process of general public communication. The norm as a combination of stable and unified linguistic means and the rule of their use is consciously recognized fixed-cultured and cultured society, is a specific prize for literature. a new language in a particular period of its existence. In a wider way, the norm is understood as an inevitable language at all stages of its development

## CONCLUSION

The new generation relies on existing texts, steady speech, ways of designing thoughts. From the language of these texts, it selects the most appropriate words and turns of speech, takes from what has been worked out by previous generations actual for itself, introducing its own in order to express new ideas, ideas, new vision of the world. Naturally, new generations are abandoning what seems archaic, not in tune with the new way of formulating thoughts, conveying their feelings, attitudes towards people and events. Sometimes they return to archaic forms, giving them a new content, new perspectives of understanding.

In every historical era, the norm is a complex phenomenon and exists in rather difficult conditions. So, norms help the literary language maintain its integrity and general understanding, protect it from the flow of dialect speech, social jargons, vernacular; language norms are constantly changing. This is an objective process that does not depend on the will and desire of individual speakers; norms help the literary language to maintain its integrity and comprehensibility. They protect the literary language from the flow of dialect speech, social and professional jargons, vernacular. This allows the literary language to perform one of the most important functions - cultural.

## REFERENCES

1. The norm is the language. Russian humanitarian encyclopedic dictionary. Archived September 25, 2015
2. A. M. Kuznetsov. Vocabulary. Linguistic Encyclopedic Dictionary. Ch. ed. V. N. Yartseva. - M.: Soviet Encyclopedia, 1990.

3. Kasevich VB. Accentology. Linguistic Encyclopedic Dictionary. Editor-in-chief V.N.Yartseva. - M.: Soviet Encyclopedia, 1990. - 685 p. - ISBN 5-85270-031 2.
4. Elena Malysheva, Olga Rogaleva. Modern Russian language. Part II. Orthoepy. Flint, 2014.
5. Ancient Greek-Russian Dictionary of the Butler "σύν-τάξις". Date of treatment February 15, 2020. Archived December 28, 2014.
6. L. A. Belovolskaya. Syntax of collocation and simple sentence. <http://www.philology.ru>. (2001). Circulation date May 1, 2019.

## MEANS AND METHODS OF DEVELOPMENT OF PHYSICAL QUALITIES IN PUPILS OF PRESCHOOL EDUCATION

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### ABSTRACT

*It should be noted that the scientific research conducted by pedagogical scientists of our country in the field of theory and methods of physical education of preschool children on physical education, games and exercises, on the effective organization of sports competitions with the participation of preschool children. Although a number of scientific researches have been carried out, it is rare to find a methodologically correct organization of physical education classes in kindergartens, ways to organize children in classes. For this reason, we have devoted the topic of our graduate work and our research on the use of teaching methods in the organization and conduct of physical education classes.*

**KEYWORDS:** Physical Activity, Strength, Balance, Preschool Institutions, Balance Exercises, Fitness.

### INTRODUCTION

Regular Exercise significantly reduces the high blood pressure, risk of developing heart disease, stroke, some cancers, diabetes, and may help to remove the stress, anxiety, and depression. At any age, being physically fit is an advantage to your overall health.

Exercise is a subcategory of physical activity that is planned, structured, and repetitive for the purpose of conditioning any part of the body. Exercise is used to improve health, maintain fitness and is important as a means of physical rehabilitation. Also we can define exercise as any bodily movement performed in order to develop or maintain physical fitness and overall health. Exercise and physical activity fall into four basic categories—endurance, strength, balance, and flexibility. Most people have a habit of to focus on one activity or type of exercise and think they're doing enough for their health.

Each type of exercise is different, however, doing them all will give you extra benefits. Mixing it up also helps to reduce boredom and stop the possibility of injury. Endurance, or aerobic, activities increase your breathing and heart rate. They keep your heart, lungs, and circulatory system healthy and improve your overall fitness. Building your endurance makes it easier to carry out many of your everyday activities. Walking or jogging, mowing, raking, digging and Dancing are kinds of this type.

Sport not only strengthens health, but also heals the will, which is a strong shield on the path of courageous passage from the trials of life, various spiritual and ideological documents. strict adherence to educational laws, methods and techniques is required for the problematic acquisition of skills and competencies. A child who learns the rules of exercise from a pre-school

age will develop a passion for sports, love a certain sport, and as a result, this situation will continue in school.

At school, students who are familiar with sports do not have time for all kinds of leisure activities. There are many types of physical education activities in preschool education. These include regular weekly physical education classes, morning physical education classes, daily outdoor games, and physical activity. Of these

Physical activity in preschool institutions due to the large number of activities related to physical education and sports, as well as the fact that the process of training for physical education begins at an early age. They must be organized in accordance with the methods of teaching. For this reason, there is a need for a more comprehensive study of the methodologically sound nature of physical education in preschool education.

Strength exercises make your muscles stronger. Even small increases in strength can make a big difference in your ability. We can find this type of exercise in Lifting weights, using a resistance band with your own body weight. Balance exercises help prevent falls, a public problem in older adults. Many lower-body strength exercises also will improve your balance. This type can be noticeable in Standing on one foot, Heel-to-toe walk and Tai Chi. Flexibility exercises stretch your muscles and can help your body stay limber. Being flexible gives you more freedom of movement for other exercises as well as for your everyday activities. Some examples for that in Shoulder and upper arm.

Aerobic exercise without ball is any physical activity that uses large muscle groups and causes the body to use more oxygen than it would while resting. The goal of aerobic exercise is to increase cardiovascular endurance [8]. Examples of aerobic exercise include cycling, swimming, and brisk walking, skipping rope, rowing, hiking, playing tennis, continuous training, and long slow distance training.

Anaerobic exercise with ball, which includes strength and its function. According to the intensities of the exercise it can also be divided to three categories, heart Rate is typically used as a measure of exercise intensity [10]. Heart rate can be an indicator of the challenge to the cardiovascular system that the exercise represents. Physical education. One of the main components of universal education is physical education, which aims to ensure the normal physical development of young people in Uzbekistan.

Physical education is to take care of the normal growth and development of the body of children and adolescents, their health. The task of physical education is as follows;

- Constant monitoring and control of children's health, ensuring the physical development of each child;
- Prevention of children's fatigue, creation of conditions that help to improve the working skills of students;
- Inculcation of personal and social hygiene skills in students;
- Ensuring the preparation of students for work and defense of the motherland in accordance with the norms established for a certain age;
- Develop a sense of rhythm, expressiveness of characters and a sense of aesthetic appreciation of them;



-information of theoretical knowledge of gymnastics and sports, as well as the formation of skills for independent practice of gymnastics and sports;

- Encouraging young people to master the various sports, participate in city, district, regional and world competitions, win, raise the flag of our independent Republic in front of the peoples of the world.

The science of pedagogy in our independent democratic republic is a science that studies the general laws of upbringing the younger generation as a perfect person, the essence of teaching, as well as its principles. So, the main part of Pedagogy is physical culture or physical education. If we consider that child-rearing begins at home, that is, in the family, then the physical education and its culture are formed from the family.

Exercise plays a vital role in preventing health diseases and stroke. The health benefits of doing regular Exercise have been shown in many studies. This paper reviews the evidence of the benefits of exercise for all the body systems. Physical activity and exercise can reduce stress and anxiety, boost happy chemicals, improve self-confidence, increase the brain power, sharpen the memory and increase our muscles and bones strength. It also helps in preventing and reducing heart disease, obesity, blood sugar fluctuations, cardiovascular diseases and Cancer. Physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure. The term "Physical activity" is not equal to "exercise".

Exercise is a subcategory of physical activity which is structured, repetitive, and purposeful [1]. "A sound body has a sound mind".

It means that if a person is weak, dull, and sick, he is not able to do his work efficiently and quickly. It is very important to have a fresh mind before any work, like office work, study or some creative work. The people who make exercise as an essential part of their routine are more happy and efficient than others.

## REFERENCES

1. Exercise. Medical-dictionary. The freedictionary.com. In turn citing: Gale Encyclopedia of Medicine. Copyright 2008. Citation: Strengthening exercise increases muscle strength and mass, bone strength, and the body's metabolism. It can help attain and maintain proper weight and improve body image and self-esteem
2. Diet, Exercise, and Sleep. National Sleep Foundation. Retrieved 20 April, 2016.
3. WHO: Obesity and overweight. who.int.
4. American Association of Kidney Patients, Physical Activity and Exercise: The Wonder Drug Retrieved, 2014.
5. Pimlott N. The miracle drug. Can FAM Physician 2010; 56:407-409.
6. Buckley JP, Hedge A, Yates T, Copeland RJ, Loosemore M, Hamer M *et al.* The sedentary office: a growing case for change towards better health and productivity. Expert statement commissioned by Public Health England and the Active Working Community Interest Company. British Journal of Sports Medicine. 2015.

## DEVELOPMENT OF DIDACTIC SUPPORT FOR THE PREPARATION OF FUTURE PHYSICAL EDUCATION TEACHERS FOR INNOVATIVE ACTIVITIES IN THE FIELD OF WOMEN'S SPORT EDUCATION

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### ABSTRACT

*This article deals with the development of didactic support for the preparation of future teachers of physical education. Any healthy person may become unfit physically if he does not practice exercise regularly. The efficiency of our muscles reduces if we are not doing regular physical workout. So we must do physical fitness exercises every day. The components of universal education and the connection between them include the general process of human education or physical and moral education, polytechnic, labor, career choice, spiritual and moral, aesthetic, legal, international, economic, national pride and environmental education. It also helps in preventing and reducing heart disease, obesity, blood sugar fluctuations, cardiovascular diseases and Cancer. Physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure.*

**KEYWORDS:** Didactic, Field, Innovative, Education, Activity.

### INTRODUCTION

Exercise does not mean to go to gym or some club for daily activity; it only means to do some physical activity no matter how and where. Exercise is useful in preventing or treating coronary heart disease, osteoporosis, weakness, diabetes, obesity, and depression. Regular Physical activity and exercise can help you stay healthy, energetic and independent as you get older. In the democratic society of Uzbekistan there is no contradiction between the demand of the people in the field of education and the state policy in the field of education. They both have the same goal and will improve in the process of achieving that goal. Before we talk about physical education, let's talk about the subject of "Pedagogy".

Critically and positively uses the heritage of progressive pedagogy in educating, educating and training the younger generation in Uzbekistan. Pedagogy "pedagogos" means "child" and "leadership" in Greek. That is, in ancient Greece, those who were tasked with carrying and bringing the child of a slave to school, as well as keeping an eye on him, were called so. Later, it became customary to call those who were engaged in childrearing in general teachers, pedagogue, pedagogue, professor, master, and bachelor. The components of universal education and the connection between them include the general process of human education or physical and moral education, polytechnic, labor, career choice, spiritual and moral, aesthetic, legal, international, economic, national pride and environmental education. All these components of upbringing are interconnected and closely intertwined in the living process of composing a person for a common goal.

**Mental education.** Mental education is an integral part of universal education and is a leader in the field of education in human society. The content of mental education is to form a scientific worldview in the younger generation, to cultivate and strengthen the qualities of high consciousness, to raise awareness of the basics of science, to develop the skills of abstract thinking and speech.

**Polytechnic education.** Polytechnic education is also a basic and integral part of perfect human education. Polytechnic education serves to gradually eliminate the important differences between mental and physical labor while developing the abilities of the people of the new society.

**Spiritual and moral education.** Spiritual and moral upbringing of students is also an integral part of the education of a perfect person, spiritual depth, mental purity is the norm of behavior, which is manifested in the relationship to himself, others, production, society.

**Aesthetic education.** Aesthetic education is an integral part of universal education, which is to cultivate a sense of beauty and an understanding of beauty. This involves organizing students to use their activities in the field of perception, understanding of beauty in the world of objects and human relationships, the creation of beauties.

**Physical education.** One of the main components of universal education is physical education, which aims to ensure the normal physical development of young people in Uzbekistan. Physical education is to take care of the normal growth and development of the body of children and adolescents, their health. The task of physical education is as follows;

- Constant monitoring and control of children's health, ensuring the physical development of each child;
- Prevention of children's fatigue, creation of conditions that help to improve the working skills of students;
- Inculcation of personal and social hygiene skills in students;
- Ensuring the preparation of students for work and defense of the motherland in accordance with the norms established for a certain age;
- Develop a sense of rhythm, expressiveness of characters and a sense of aesthetic appreciation of them;
- Information of theoretical knowledge of gymnastics and sports, as well as the formation of skills for independent practice of gymnastics and sports;
- Encouraging young people to master the various sports, participate in city, district, regional and world competitions, win, raise the flag of our independent Republic in front of the peoples of the world.

The science of pedagogy in our independent democratic republic is a science that studies the general laws of upbringing the younger generation as a perfect person, the essence of teaching, as well as its principles. So, the main part of Pedagogy is physical culture or physical education. If we consider that child-rearing begins at home, that is, in the family, then the physical education and its culture are formed from the family. Exercise plays a vital role in preventing health diseases and stroke. The health benefits of doing regular Exercise have been shown in many studies. This paper reviews the evidence of the benefits of exercise for all the body systems. Physical activity and exercise can reduce stress and anxiety, boost happy chemicals,

improve self-confidence, increase the brain power, sharpen the memory and increase our muscles and bones strength. It also helps in preventing and reducing heart disease, obesity, blood sugar fluctuations, cardiovascular diseases and Cancer. Physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure.

The term “Physical activity” is not equal to “exercise”. Exercise is a subcategory of physical activity which is structured, repetitive, and purposeful [1]. “A sound body has a sound mind” It means that if a person is weak, dull, and sick, he is not able to do his work efficiently and quickly. It is very important to have a fresh mind before any work, like office work, study or some creative work. The people who make exercise as essential part of their routine are more happy and efficient than others. Strengthening exercises provide appropriate resistance to the muscles to increase endurance and strength. Cardiac rehabilitation exercises are developed and individualized to improve the cardiovascular system for prevention and rehabilitation of cardiac disorders and diseases.

A well-balanced exercise program can improve general health, build endurance, and slow many of the effects of aging. The benefits of exercise not only improve physical health, but also enhance emotional well-being. Regular physical activity remains an essential behavior for endorsing health, postponing or preventing predominant musculoskeletal disorders such as mechanical low back pain, neck and shoulder pain and decreasing the risk of increasing coronary heart disease, hypertension, diabetes, osteoporosis, obesity and colon cancers [2, 3]. The period of adolescence represents the transition from childhood to adulthood and lifetime habits such as regular exercise are normally begun at this time [4]. But unfortunately research indicated that physical activity rates decline consistently during the adolescent years [5, 6]. No matter what your age or shape, you should exercise daily.

Not only does exercise so you can wear your favorite dress, it strengthens your muscles, keeps your bones strong, and improves your skin, increased relaxation, better sleep and mood, strong immune function, and more. Daily exercise helps in strengthening of heart muscles. It helps maintain desired cholesterol levels. Daily physical activity reduces one's chances of stroke and the risk of heart disease. Regular exercise lowers blood pressure and improves blood circulation. Exercise helps in reduction of excess body weight leading to lower blood pressure. Exercise results in the burning of calories. If supplemented with proper nutrition, exercise is the way to prevent obesity. Any healthy person may become unfit physically if he does not practice exercise regularly. The efficiency of our muscles reduces if we are not doing regular physical workout. So we must do physical fitness exercises every day. Exercise is linked with many physical and physiological benefits that help an individual to function effectively and feel good. Exercise provides an entertaining way to spend enjoyable time. People of all age who are usually inactive can improve their health and well-being by becoming active at a level of moderate intensity in daily basis.

Light exercise: Does not induce sweating unless it's a hot, humid day. There is no obvious change in breathing patterns, sleeping, writing, desk work, typing, very slow walking, are examples for the first category.

## REFERENCES

1. Exercise. Medical-dictionary. The freedictionary.com. In turn citing: Gale Encyclopedia of Medicine. Copyright 2008. Citation: Strengthening exercise increases muscle strength and mass,

bone strength, and the body's metabolism. It can help attain and maintain proper weight and improve body image and self-esteem

2. Diet, Exercise, and Sleep. National Sleep Foundation. Retrieved 20 April, 2016.

3. WHO: Obesity and overweight. who.int.

4. American Association of Kidney Patients, Physical Activity and Exercise: The Wonder Drug Retrieved, 2014.

5. Pimlott N. The miracle drug. Can FAM Physician 2010; 56:407-409.

6. Buckley JP, Hedge A, Yates T, Copeland RJ, Loosemore M, Hamer Metal. The sedentary office: a growing case for change towards better health and productivity. Expert statement commissioned by Public Health England and the Active Working Community Interest Company. British Journal of Sports Medicine. 2015.

7. Meyers, Jonathan. Exercise and Cardiovascular Health. Circulation 2003; 107:2e-5. Retrieved 20 April 2016.

8. <http://www.merckmanuals.com/home/fundamentals/exercise-and-fitness/benefits-of-exercise>. Reviewed on, 2016.

9. Andrea L Dunn, Madhukar H Trivedi, James B Kampert, Camillia G Clark, Heather O. Chambliss Exercise treatment for depression: Efficacy and dose response American Journal of Preventive Medicine. 2005; 28(1):1- 8.



## CURRENT ISSUES OF FORMATION OF HISTORICAL CONSCIOUSNESS IN YOUTH

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### ABSTRACT

*This article deals with the issues of solving the fate of development by spiritually mature, modern knowledge and high-tech personnel with strong knowledge, strong will, faith and deep thinking. It is necessary that the legacy of our great thinker of the past has gone beyond the space in which he lived, where he grew up, and has become a universal value. The formation of historical consciousness also depends on the extent to which historical heritage is understood. As a result, the Uzbek people have not been able to enjoy their original history. By tying its history to ignorance and depriving it of its study, the dictatorial regime sought to make our nation dependent on it.*

**KEYWORDS:** Cultural, Independent, Civilization, Perfect, Culture, Mechanics, National, Temurs Rules.

### INTRODUCTION

In strengthening the foundations of our independence, the development of our country, the transformation of Uzbekistan into a great state, the rational organization of educational work, regular acquaintance of citizens with the achievements of science, culture, technology and engineering is of great importance. The great statesman and public figure I.A. In his works, Karimov stressed that the implementation of the issues raised in the field of education, the formation of the attitude to our past is a very complex, urgent and responsible task. The formation of the historical consciousness of the younger generation of future professionals is great importance in strengthening the national foundations of the training system. This ancient land, called Uzbekistan, is one of the ancient cultural centers of world civilization. Our country has a rich and immortal cultural and spiritual heritage. Thanks to independence, we have the opportunity to study our own history. With the rise of history, science began its renaissance.

### MAIN BODY

Preliminary work on the fair creation and restoration of our past, research and scientific observation has begun. Curricula, manuals and textbooks were created. But these existing textbooks did not have the scientific potential to shape the historical worldview of the next generation. There was a need for historical literature based on local sources, objective and truthful criteria.

In his works and speeches, our first President speaks with special pride about the unique place of our history. In particular, on June 26, 1998, Karimov met with a group of prominent historians, journalists and the media to discuss current issues in the field of science that need to be

addressed. As a result of the meeting, the book "There is no future without historical memory" was published. This play provides an in-depth analysis of the role of history in self-awareness. Self-awareness begins with knowing history. History unites the nation, the people for a bright future. So is his mighty power. The history of a nation is the history of a nation, its centuries-old aspirations and aspirations. It is known that the age-old dream of the Uzbek people was freedom and liberty.. Thanks to independence, these noble goals have been achieved. In the history of the homeland, not in the past of our nation, but in its golden pages, the memory of the people, the thinking and worldview of the ancestors, the great spiritual heritage are embodied. I.A Karimov emphasizes that "the nation must be preserved, and in order to preserve the nation, its true history must be studied and carefully protected." Self-awareness begins with knowing history. "Self-awareness" and "knowledge of history" are two complementary and inseparable concepts. A nation that understands itself recognizes the world and has a place in the development of the world. The reason why the fair study of our past has risen to the level of public policy is that our ancient history has been oppressed by dictatorial ideology at various times. Our true history has been falsified, and rare manuscripts from the past As a result, the Uzbek people have not been able to enjoy their original history. By tying its history to ignorance and depriving it of its study, the dictatorial regime sought to make our nation dependent on it. Therefore, through the formation of historical consciousness in our people, an attempt was made to awaken national pride, national consciousness, people's conscience, the nation felt its identity, existence and potential.

When we look at our great history, we look with admiration, not envy, at the scientific potential of our ancestors, at the rich historical, spiritual and cultural heritage they left behind. Have not been studied. Sources that do not serve to understand and encourage the historical consciousness of our people and the truth were kept as far away from the public eye as possible. The glorious path traversed by our ancestors is a source of example and experience for us. History plays an important role in the system of sciences in the education of perfect people, in the formation of their spirituality. The education of the perfect man is a priority of state policy. The great coaching role of history in the upbringing of a perfect person is that it awakens in young people a national conscience, teaches them the experiences of our ancestors. It is important to improve and increase the effectiveness of the process of teaching and learning history among students, the organization of lessons on the basis of new pedagogical technologies.

The most important thing in the study of history is to explain to the youth in a broader and more complete way the issues of "Uzbek statehood, history", "Ethnogenesis and ethnic history of the Uzbek people." The history taught in the education system is based on the following scientific theories.

- To provide students with in-depth historical knowledge.
- In the process of teaching and learning history, science, objectivity, evidence-based, the priority of truth should be the main direction.
- The main idea in the study of the history of the homeland is to develop in young people such qualities as patriotism, humanity, inter-ethnicity.

"History should inspire loyalty to the motherland and confidence in building a great state of the future, as well as instill in young people a sense of pride in the heritage of their ancestors."

In the formation of the historical consciousness of future young professionals, along with a careful study of our centuries-old colorful culture, traditions and values, knowledge of historical literature, the activities of historical figures of our people is a great practical importance. We must emphasize the state of Amir Temur, in which the history of our great statehood has played an important role in shaping the historical consciousness of young people. If we analyze the etiquette of public administration, the guidelines for maintaining the kingdom, A. Temur's "Temur's rules" are an exemplary source. The charter states, "I conducted public affairs in accordance with the rules of the kingdom. I have maintained the rule of my kingdom in such a way that no one has been able to interfere in the affairs of my kingdom and cause harm." If we compare the views of our great ancestor Amir Temur with the views of our President, we see the commonality and similarity of the examples of selflessness in the interests of the people, state and nation. If we carefully study and observe the policy and practical work carried out in our country, it becomes clear that the same teachings of Amir Temur are being fully implemented. "Read carefully, never forget and apply the testaments and rules that my sons leave to you for the pleasure and loyalty of the nation," our ancestor said in his charter. The development of historical consciousness requires knowledge of the principle of inheritance, its application in theoretical and practical activities. Each generation adjusts its height according to the greatness of the ancestors. Whoever wants his home to unite with the wider world, to find a part of the world in his home It is necessary that the legacy of our great thinker of the past has gone beyond the space in which he lived, where he grew up, and has become a universal value. The formation of historical consciousness also depends on the extent to which historical heritage is understood. The transition from one stage of historical development to another cannot take place without hereditary ties. After all, for a person his creative activity is an active process of implementing the principle of inheritance. The fate of historical development depends on the decision of behavior.

## CONCLUSION

The successful implementation of these tasks requires to a certain extent, the formation of the historical consciousness of young people. Historical consciousness and historical memory are closely intertwined.

Abu NarsFarobi explains that historical memory occurs only when the spiritual riches created by each nation are added to the treasury of universal cultural heritage. Al-Farabi writes, "When a generation of people dies, their bodies disappear, but their souls are freed from the body and attain bliss. Then others will take their place and do what they did." Historical memory and consciousness are formed and strengthened in a person by knowing the history of his homeland, his people and ancestors.

## REFERENCES:

1. Mirziyoyev Sh.M. Together we will build a free and prosperous, democratic state of Uzbekistan. Speech at the joint session of the chambers of the Oliy Majlis dedicated to the inauguration of the President of the Republic of Uzbekistan - T.: Uzbekistan, 2016.-56 p.
2. IAKarimov "There is no future without historical memory". Tashkent. Uzbekistan.
3. "Temurtuzuklari" Tashkent, Gafur Gulam Publishing House of Literature and Art, 1991.
4. B. Kadyrov "Pedagogical bases of perfect human education". Tashkent "Mehnat" 2001.

## ANALYSIS OF BIOECOLOGICAL RESOURCES OF THE REGION AND THEIR CURRENT STATE

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### ABSTRACT

*The article analyzes the sources of emissions of pollutants into the atmosphere and their impact on dust-collecting equipment (chstu), as well as the impact of toxic and non-toxic waste. Also studied the world of many unique plants and the danger of extinction of rare plant species.*

**KEYWORDS:** Ecological Zone, Atmosphere, Soil, Desert Ecosystems, Mountains, Flora, Fauna

### INTRODUCTION

According to its natural and biogeographic structure, the Kashkadarya ecological zone is divided into mountain and plain parts. According to these indicators, 5 biogeographic zones are defined, which differ in the composition of flora and fauna and the main indicators of environmental conditions, certain differences

1. Desert ecosystems of the plains.
2. Foothill semi-deserts and steppes.
3. River and coastal ecosystems of major rivers.
4. Ecosystems of wetlands and deltas.
5. Mountain ecosystems.

Each zone has a complex of various natural compounds that determine the activity and development of special associations of flora and fauna.

**1. Steppe ecosystems of the plains.** The Kashkadarya Steppe ecosystem is mainly represented by the Karshi desert.

Steppe areas are divided into sandy, saline, podzolic, stony and gypsum (gravel) deserts. All of them are located at absolute altitudes from 100 to 300 meters above sea level and have relatively similar climatic conditions, determined by a number of factors: the average annual temperature of 11-18 °C, precipitation from 100 mm to 150 mm. Kashkadarya steppe ecosystem is characterized by rich, diverse flora and fauna. The desert ecosystem is a space of unique and endangered creatures, such as the Indian honeyeater, steppe cat, Jeyran, marble hernia, morhur, lamb, white-headed kumai, Falcon, bustard and white-headed buldurak. Of the rare reptiles, 5 species live in deserts. Steppe ecosystems can include 15 species of birds belonging to temporary species.

Sandy desert. Sandy deserts are found in sandy areas of the desert. The area of sandy massifs is 27% of the area of the Republic's plains. The largest sand massif is the sand spit in the inter-river

area of the Kashkadarya valleys. The climate of sandy deserts is characterized by severe dry and sharply continental. The minimum temperature in winter reaches  $-36^{\circ}\text{C}$ ,  $-32^{\circ}\text{C}$ , and in summer the temperature rises to  $46^{\circ}\text{C}$ ,  $47^{\circ}\text{C}$ . There is very little precipitation-only 75-100 mm.

Tree and shrub vegetation is the main part of the psammophyte plant and makes up about 30% of the flora: groups of perennial herbaceous plants are ephemeroids (10%) and summer seasonal grasses (20%).

Among the most characteristic representatives of the family of sandy desert animals are psammophilic species: matratere and red-tailed lizards and some species of gerbils, comb, Liechtenstein and Bobrinsky. They are representative of typical sand forms among sand and desert rodents. About 50 species of birds are adapted to live in a sandy desert. Saxauls and shrubs serve as a convenient place for nesting.

The climate of the sandy desert is generally similar to that of other deserts. The average annual temperature is about  $10-14^{\circ}\text{C}$ , the minimum is  $32^{\circ}\text{C}$ , the maximum is about  $46^{\circ}\text{C}$ . Precipitation is not high-in the North up to 100 mm, in the South up to 200 mm. Stony brownish-gray soil is a distinctive feature of the steppe soil, which has a brownish layer. The reason for this is an increase in its density, a layer of gypsum with a small stone and a depth of up to 1 meter.

The foliage layer forms low-growing plants that are not deeply rooted in the plants of the steppes.

The stony steppe fauna is home to vertebrates, birds, and mammals. It is home to 30 species of birds that belong to the nesting birds. Among them: water owl, black owl, bustard, gastropod, black-tailed Loon, Golden owl and lark. The main mammals are rodents, among them: big Sandstone, jerboa severtseva, small jerboa, reptiles are home to takirs and matrapian arthropods, steppe Agama and yasherits.

Loamy deserts. The soil of this desert is mostly hard land. Loamy deserts are more rich in surface water, and their condition depends more on the climate. The average annual precipitation is 200-300 mm, the average annual temperature is  $14-16^{\circ}\text{C}$ , the minimum temperature is  $-28^{\circ}\text{C}$  -  $30^{\circ}\text{C}$ , the maximum warm temperature ranges from  $44^{\circ}\text{C}$  to  $49^{\circ}\text{C}$ . The so-called soil-steppe flora has some similarities with the small-leaved steppe, where dense vegetation is formed due to high soil humidity in the spring. In General structure, the native steppe fauna is similar to the small-leaved steppe fauna. Representatives of a kind of creatures: the Central Asian turtle, Jackal and various types of lizards, turpentine snakes. Among birds, there are bivalves and steppe cranes, as well as bats and cranes.

**2. Mountain steppes.** Mountain steppes are located at an altitude of 2000-2600 meters above sea level. The main soil cover is light gray and brown mountain-steppe soils in the upper part of the dark-hard cover. The average annual temperature is  $11-14^{\circ}\text{C}$ . In this place there are shrubs, trees, and semi-shrubs. The group of reptiles consists of the Turkestan Agama, the Asian barefoot snake, the long-legged skink, the yellow snake, the Tajik lizard, and the Central Asian snake. From birds: farmer, steppe Mickey, Loon, Golden owl, blue crow, bustard; among mammals, there are: steppe capercaillie, gray squirrel, steppe mouse, badger, and Gazelle.

**3. River and coastal ecosystems.** In the composition of river ecosystems, the main place is occupied by Tukai and Cairo forests. The composition of animals, though not rich, has its own characteristics. The diversity of river ecosystem conditions allows us to distinguish three main



types of habitat: reeds, open shallow waters and thickets. Their total area is more than 1660 thousand hectares. Some types of Tukaican be found in the Kashkadarya lowland.

Many root plants are found in tugai. Typical tugai plants are mostly about 40 species. The abundance of moisture allows amphibians to move to tugai places. Among reptiles yellow snake, and on dry areas asareca. In this place there are always Viper, water snake, black snake. Especially peacocks are typical for this area. It is also home to black crows, magpies, and small sparrows. Blue cutan, blackies form colonies. Kalhoty, hawks and other birds build nests. From predatory mammals live: tugai cat, jackals, Fox, badger, rodent-Arctic Fox, rat, Caspian field mouse, ungulates: boar and Bukhara deer.

**4. Inland wetland ecosystems.** This ecosystem embodies a combination of humid and desert areas of Uzbekistan. These moistened areas can be divided into artificial and natural. Natural territories have undergone very strong changes. Wetland and wetland ecosystems are similar to riverine and coastal ecosystems, but in contrast they are characterized by an overall high level of moisture and extensive wetlands. This ecosystem is rare in Kashkadarya region. The main reptile species are the lizard and water snake, the grey Sparrow, the steppe Agama, and a variety of multicolored spotted snakes.

Antropogennye wet areas. In General, this ecosystem mainly consists of artificial reservoirs, which for several decades have replaced shorelines and the conservation of waterfowl and the reduction of fish stocks in natural reservoirs. The largest reservoirs include, first of all, such large reservoirs as Talimarjan, Chimkurgan and others. They have two different origins: lakes that discharge waste water, and reservoirs that are saturated with rivers. The former are characterized by a relatively stable hydrological regime and the presence of coastal vegetation, the latter are characterized by the absence of coastal vegetation due to the variability of hydrological factors of the state of lakes and reservoirs, on which rivers directly depend. The plant world is represented by tugai reeds, which are typical for natural pools.

**5. Mountain ecosystems.** Foothill semi-deserts make up the foothill region at an altitude of 800-1200 meters above sea level. The soils in some places are gypsum and gravel-hungry glacial soils. The average annual temperature is 15-17 °C on the Hissar ranges, the average annual precipitation is 250-400 mm. The region of foothill semi-deserts has a width of 30-35 km and occupies 2/3 of the mountainous territory of the Republic, an area of 64,000 sq. km. it is about km. In the plants of this region, 14 species of wormwood are xerophilic species of the main semi-shrubs.

Foothill semi-deserts reptile fauna: Central Asian turtle, Turkestan Gecko, takir round, yellow snake, monitor lizard, colorful and fast-running lizards (black-eyed in the South), colorful water snake; birds: bustard, sparrows, etc.; mammals: yellow ground squirrel, red tail and large Sandstone, jerboa, etc.

Juniper forest. Juniper forests grow at an altitude of 1400-3000 meters above sea level. The soils of this area consist of wooded-gray soils. Juniper forests are the basis of mountain forests of the Republic. The area covered by forest is 105 thousand ha. 85.6 thousand ha. They are found on the slopes of the Hissar ranges.

Juniper forests are home to a special complex of vertebrates, some species of birds. These are representatives of the Chinese or Himalayan fauna. These include juniper, Himalayan Finch, pink Sparrow, tit, white-necked Nightingale, magpie, and large Sandstone. From mammals:



juniper field mouse, forest mouse, hare, Fox, wolf, stone sable, from reptiles: Olay naked, Chernovskaya Agama, Himalayan and Turkestan Agamas and shield-bearing snakes. They are located at an altitude of 2700-2800 to 3600-3700 meters above sea level. The highest amount of precipitation - up to 800 mm, the average annual temperature-80 0C, characterized by a relatively cold climate.

Insects are characterized by the bee, amphibians are also found green frogs: barefoot Olay, Himalayan Agama, thyroid snakes of reptiles. Among mammals: bear, snow leopard, white mouse, wolf, Siberian mountain goat, ermine, Menzbir, long-tailed ground squirrel, field mouse and red-tailed mouse. The biological diversity of Uzbekistan is about 27,000 species. Of these, more than 1,500 species are animals. The group of arthropods from vertebrates is more widespread than at all. The main number of species consists of insects. Of these, from 400 to 3000 species are divided into 7 main categories of diversity.

Vertebrates are protected by five classes of 664 species. Uzbekistan is an important habitat for endemic animal species of Central Asian origin. Some species originated and evolved first in the Amu Darya and Syr Darya rivers, and then began to spread to other places in Central Asia. Currently, there are 53 species and subspecies of vertebrates that are endemic to Uzbekistan and Central Asia. Among fish, the level of endemism is 52%. The flora of Uzbekistan is protected by at least 4800 species of vascular plants of 650 categories and 115 families. The endemism of species is relatively low, with endemics within the flora (about 400 species) accounting for 8% of the total number of species. Ancient endemics make up 10-12% of all endemics.

Kashkadarya ecological zone the map of the division of the environment into districts is shown in figure 3.2. it is Noteworthy that in recent years, sources of pollutants into the atmosphere and their equipment for cleaning from dust (chstu) have been operated in the region (see table 3.8).

The number of organizations that have sources of air pollution increases from year to year. If in 2014 there were 61, in 2015-64, and in 2016-66. You can also see that the number of used sources of emissions at the end of the year is also growing

**In Kashkadarya region with sources of emissions of pollutants into the atmosphere and their dust-collecting equipment (chstu)**

Source and equipment	2014year	2015 year	2016 year	Middle
Number of organizations that have sources of air pollution	61	64	66	64
Number of used sources of emissions at the end of the year, total	6961	7111	7430	7167
Including: organized	4794	5064	5297	5052
The use of waste with the use of sources	297	398	332	342

3.8. the table shows that in 2014 their number was 6911, in 2015-7111, and in 2016-7430. From the analysis, it became known that you can also see a dynamically growing dependence on dust-collecting equipment (DSTU). Over the past three years (2014-2016), their number has increased by 342 units. This indicates that compared to 2014, there are 35 more of them. The availability of necessary wastewater leads to a faster release of toxic and non-toxic waste generated in the region

**Toxic and non-toxic waste generated in Kashkadarya region (thousand tons)**

№	Years	Total	Toxic waste	Non-toxic waste
1	2014 year	789455,8	73,8	789380,0
2	2015 year	787412,2	331,3	787080,9
3	2016 year	716952,8	289,1	716663,7
Middle		764606,2	231,4	764374,8

In total, the generated toxic waste (toxic and non-toxic waste were not taken into account in the state statistics reports).

If in 2014 789453.8 thousand tons of toxic and non-toxic waste were neutralized in the region, then by 2015 we can see a decrease of 716952.8 thousand tons or 15%. The same condition led to a reduction in unprofitable waste.

Reducing emissions can be considered a change in the activities of relevant organizations in the region, the growth of the spiritual Outlook of citizens and the modernization of existing technologies. Emissions to the atmosphere of pollutants from stationary sources in the region and the results of their treatment and disposal 3.10. - in the table, as well as in pictures 3.3 and 3.4.

**In Kashkadarya region, emissions of pollutants from stationary sources into the atmosphere, their cleaning and disposal (2014-2016, at the expense of thousands of tons).**

Pollutants	The amount of pollution generated			Pollutants entering treatment facilities, total			Which of them are being held and neutralized						Pollutants released into the atmosphere, total			Delayed and neutralized amount of pollutants, %		
							Bcero			Уларда н утилизация қилингани								
	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Kashkadarya region	210	227,9	220,6	43,2	58,2	60,0	38,5	51,8	53,1	34,4	46,3	46,7	17,5	17,6	16,5	18,3	22,7	24
Including:																		
Solid	5,7	5,3	5,9	4,5	4,0	4,6	3,9	3,4	3,7	2,7	2,4	2,3	1,8	1,9	2,2	68	64,8	63
Gases and liquid	204,2	214,5	215	38,7	54,2	55,3	34,6	48,3	49,4	31,7	44	44,5	16,9,7	17,4,2	16,5,2	16,9	21,7	23
From them:																		
Anhydride of Sultana	124	142,7	144	36,2	50,7	51,1	32,4	45,3	45,7	29,5	41,8	41,5	91,7	97,3	98,3	26	32	31

Carbon oxide	27,1	27,5	19,3	0	0	0	0	0	0	0	0	0	27,2	27,5	19,4	0	0	0
Nitrogen dioxide	9,6	10,0	10,0	0	0	0	0	0	0	0	0	0	9,6	10,2	10,0	0	0	0
Nitrogen oxide	1,8	2,1	2,2	0	0	0	0	0	0	0	0	0	1,8	2,1	2,2	0	0	0
Carbohydrates	38,9	37,2	35,7	0,03	0,10	0,10	0,02	0,8	0,8	0	0	0	38,9	36,4	34,8	0,07	2,2	2
Volatile organic compounds	0,2	0,2	0,1	0	0,02	0,0	0	0,02	0	0	0,02	0	0,2	0,2	0,1	0	9,7	0
Other modal gases	2,5	2,5	3,3	2,4	2,4	3,2	2,2	2,2	2,9	2,2	2,2	2,2	0,3	0,3	0,3	88,6	86,3	89

In the region in 2014, 210.0 thousand tons of pollutants were exported to the atmosphere, by 2015 their number increased by 227.9 thousand tons, by 2016-by 220.6 thousand tons. It turned out that about 20-30 percent of the extracted substances were treated by treatment facilities, more than 43.2-60.0 tons-by treatment facilities.

It is gratifying to note that most of the seized and neutralized substances were disposed of. So, in 2014, 34.4 thousand tons were disposed of, in 2015-45.3 thousand tons, in 2016-46.3 thousand tons. As a result, the number of pollutants contained and neutralized from year to year increased by 18.3% in 2014, to 22.7% in 2015 and 24.0% in 2016.

From the analysis, it became known that it is also possible to see the difference between different forms of pollutants. Among the pollutants released into the atmosphere, anhydride sulfate averaged 95.3 thousand tons over 3 years, carbon monoxide-24.7 thousand tons, nitrogen dioxide-2.0 thousand tons, carbohydrates-36.7 thousand tons, other gaseous and liquid substances-0.3 tons.

From the above data, it became known that even in the region, we consider it appropriate to take a number of practical measures to reduce the types and amount of emissions into the atmosphere: compliance with sanitary rules, modernization, repair of wastewater, and most importantly, strengthening environmental culture.

Biological resources and their state. The ecological zone of Kashkadarya is characterized by an abundance of flora and fauna, but most of them need protection and reproduction. Thus, the Red book of Uzbekistan includes 162 species of rare and native plants, 17 species of mammals, 41 species of birds, 6 species of fish, 6 species of amphibians and reptiles, 8 species of reptiles and 113 species of invertebrates. Forest plants are of great interest from the point of view of the

economy. The forest Fund of Kashkadarya mainly consists of Caucasian white pine, pine, stone oak, black birch, fir and other valuable tree species.

From observations, it became known that the state of the unique vegetation cover is increasingly deteriorating. There are many unique fauna and rare species under threat of extinction. The increase in anthropogenic weight coming to natural and changing biota leads to the fact that animals leave their natural habitat, reduce their area, and disintegrate.

In the last ten years, the region has seen a decrease in the number of hunting animals. According to the data, in the next 10-12 years, there is a decrease in the number of large ungulate mammals and bears. The disappearance of Caucasian primeval deer and mountain bison kangaroos is a dangerous obstacle. The number of wild pigs that are important for hunting is extremely small.

Resources of the plant world. In recent years (2002-2017), the number of tree felling has decreased significantly. According to statistics, the felling of trees for use in the main purposes has decreased by 4 times, for sanitary purposes-by 3 times, for the rest-by 2 times. An analysis of the organization and use of forests shows that for all types of main forests, plots account for from 1 ha to 10 ha in area size. It is a matter of concern that work is underway to update the varieties of forest trees aimed at replacing forest trees with Arsa, shumtol and oak, pine and poplar. In this regard, in every place where trees are cut down, restoration work aimed at organizing the area where valuable varieties will be planted is not enough.

Analyses show that tree fragmentation, illegal logging, and vacant land are becoming commonplace for other purposes. Mountain forests suffer the most from this. According to experts, the volume of illegally felled trees is 40 percent. Analysis in this regard shows that in areas where trees need more wood materials, sanitation or care of young shoots is carried out, or cutting for other purposes (including land allocation for construction or organization of garden plots). To preserve biodiversity and preserve forest biodiversity from the point of view of ensuring the functioning of natural ecosystems in a natural state, it is necessary to preserve virgin forests and forests that are valuable from the point of view of nature protection, that is, old natural forests that correspond to changes in nature and have a forest-forming structure.

The resources of the animal world. The animal world is an important component of biodiversity. To preserve and reproduce animals, data on certain taxa of the animal world and the biological productivity of various geographical regions are required.

According to A. A. Likhovidov, wild animals are one of the important biogeographic objects, the history of their origin is connected with the definition and development of biological resources of various territories. The development of society and its talents reflect the harmony of needs and knowledge. According to V. A. Minoransky, continuous properties of the animal world played an important role in the biogeography and landscape studies of plant series. In addition, the balance of animal species in different time periods, their change occurring naturally or under the influence of anthropogenic factors, reflects the state of some natural components.

In the province, hunting is one of the main traditional uses of wildlife. It is home to about 60 species of mammals and 70 species of birds, which are permanent objects of traditional and Amateur hunting. Protected areas play an important role in the conservation of hunting resources. The lands located nearby here are of particular importance for the purpose of enriching the animal world, where the problem of long-term reservation of habitats of near-water

animals is solved. The land protected by most hunters has a much higher population density than the surrounding land. In nature reserves animals in a natural way move in the border areas.

#### REFERENCES

1. Tursunov L., Kamilova D., Turabaev A. Structure of soil cover in the mountain region and their morphology. Works in nature reserves of Uzbekistan. Tashkent, 2008.
2. Tursunov Kh. Soil Mineralogy.(Textbook). Uzbek publishing house. Tashkent, 2000
3. L. Tursunov. Soil conditions are favorable for irrigated land. Western part of Uzbekistan.Tashkent, 2008
4. Tursunov Kh. h. micromorphology of the soil. (Textbook).Tashkent, 1994.

**ACHIEVEMENTS AND PROSPECTS IN ACTION STRATEGY**

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**ABSTRACT**

*The article reflects the main models of healthcare systems organization. A comparative analysis of the development of the sphere in the period 2017-2020 is given. it is concluded that the further development of healthcare is determined by the activation of the role of the state, ensuring broad access of the population to various types of general medical and highly specialized medical services.*

**KEYWORDS:** *Medicine, Healthcare, Health, Development Of Medicine.*

**INTRODUCTION**

It was emphasized that as a result of the measures taken, the basic social indicators of the country's population's health improved, the mortality rate of the population throughout the country was reduced, and child mortality was reduced. These and other positive changes in the health of the population ultimately contribute to the growth of the average life expectancy of the population of the country. With the acquisition of state independence, a developed healthcare system was created in the Republic of Uzbekistan, which ensured wide public access to various types of general medical and highly specialized medical services, since public health is a combination of political, economic, social, legal, scientific, medical, sanitary and hygienic, anti-epidemic measures and cultural in nature, aimed at preserving and strengthening the physical and mental health of each person, maintaining his long-term active life, providing him with medical assistance in case of ill health. Hospitals and medical outpatient clinics created in the country fully comply with international standards; a wide network of rural medical centers has been created.

The basic law of the state in article 40 states that: "Everyone has the right to qualified medical care." Today, qualified medical assistance is provided by highly qualified doctors of all areas and profiles. Due to the expansion of the network of medical educational institutions, there are significantly fewer people per doctor than in many other countries. The main direction in the health care system is the prevention of various diseases in the republic, special attention is paid to improving the activities of outpatient facilities, expanding the ability to identify diseases, cost-effective new forms of medical care, in particular family clinics, day hospitals, non-stationary surgical centers, specialized treatment complexes in outpatient clinics, as well as medical examination of the population. In order to improve treatment and prevention services, the



branches of sanatoriums and dispensaries have expanded. The ongoing reforms contribute to further strengthening the material and technical base of rural health care and the creation of a market for medical institutions. In order to carry out qualitative transformations in recent years alone, over 50 decrees, resolutions and orders of the President of the country, more than 70 resolutions and orders of the Cabinet of Ministers have been adopted in the field. Six new scientific and practical medical centers have been organized, the total number of which has reached 16. As a result of relevant scientific research in more than twenty areas of medicine, more than 1000 medical diagnostic standards have been developed.

On March 30, 2017, the Decree of President Sh.M. Mirziyayev "On measures to further improve the emergency medical care system" was issued. In order to save the lives of patients, measures were identified to purchase at the expense of funds in 2017 1,200 units of specialized vehicles to strengthen the material and technical base of institutions of the emergency medical care system, to update the fleet of medical ambulance services. It should be noted that this measure served as an important factor in ensuring the further accelerated and high-quality work of the emergency medical care system. It should also be emphasized that in order to meet the needs of the population in high-quality and affordable medicines in remote areas, the activities of on-site pharmacies are organized. On-site pharmacies have been established in specially equipped ISUZU isometric vans and DAMAS vehicles of the drugs joint-stock company. I want to emphasize that as a result of the measures taken, the basic social indicators of the country's population's health, a decrease in mortality rates throughout the country, and a decrease in child mortality are improved. These and other positive changes in the health of the population ultimately contribute to the growth of the average life expectancy of the population of the country. On December 12, 2017, under the chairmanship of the President of the Republic of Uzbekistan Shavkat Mirziyoyev, a meeting was held on topical issues in the health sector of our country, at which the head of the country emphasized that "Further improving the health of the population, ensuring its satisfaction with the activities of the medical system is our most important task." It should be noted that attention is currently being paid to further improving the healthcare system, stimulating the work of medical workers, and the widespread adoption of modern technologies and treatment methods has significantly increased. As the President of Uzbekistan Shavkat Mirziyoyev has repeatedly noted, the main goal of the ongoing reforms is to improve people's lives, in which high-quality medicine occupies an important place. To date, the country has achieved national goals and objectives in the field of sustainable development, ensuring universal coverage of health services, increasing the availability of qualified, specialized and high-tech medical care, developing a system for protecting mothers and children, increasing financing for healthcare, and achieving full and uniform provision of medical and pharmaceutical the personnel of the country's regions and other goals, in the process of ongoing reforms, much attention is paid to the study of international best practices, achievements of modern medicine, as well as international cooperation in this field. Special attention is also paid to the provision of medical and social services; provision of needy persons with rehabilitation technical equipment has increased to 90 percent. The provision of wheelchairs, hearing aids and other means has doubled. 49.3 billion soums were allocated for the construction and reconstruction of medical and social institutions, that is, 2 times more. The scope of training for the field has been expanded. The number of admission quotas for training doctors with higher education has been brought up to 3445, of which 1180 are targeted regional quotas. Increased quotas for training in clinical residency. It should be noted that the ongoing reforms in the medical system are proceeding at an accelerated pace. In particular, the scope of financing of the

sphere has been significantly increased. For example, if in 2017 a sum of 7.1 trillion soums was directed to the sphere, then in 2019 -12.1 trillion soums. As a result of measures to develop the private health sector, the number of medical services provided by its entities was increased from 50 to 126, tax and customs benefits were extended until 2022, the Asaka Bank established a Development Fund for non-state medical institutions, and the number of private medical institutions increased to 400. Together In this way, an atmosphere of healthy competition between public and private medical institutions has been formed. The amount of funds allocated for the purchase of medicines and medical devices has increased, while the volume of attracted foreign investment is growing. The republic also takes comprehensive measures to protect motherhood and childhood, taking into account the improvement of the provision of prenatal services for pregnant women, reducing the mortality of mothers, newborns and children, preventing the birth of children with congenital malformations and hereditary diseases, strengthening the material and technical base of maternity complexes and children's hospitals, equipping their modern equipment, the introduction of a full-fledged medical examination of women for the prevention, early detection and treatment of cancer.

Summing up, we note that thanks to the ongoing reforms, an effective system for protecting the family, motherhood and childhood has been created in Uzbekistan, measures are being taken to create favorable conditions for the birth and upbringing of a healthy generation. The ultimate goal of the ongoing reforms is primarily to improve the nation's gene pool, increase the medical culture and improve the quality of life of the population. To a large extent, the effectiveness of all reforms depends on the younger generation of doctors, who will contribute to increasing the level of medical care for citizens of our independent country.

#### LITERATURE:

1. The Constitution of the Republic of Uzbekistan. 2019 year
2. Messages from President Sh. Mirziyoyev Oliy Majlis of the Republic of Uzbekistan. T .: 2018, 2019, 2020
3. The legislative act on health care reform // access mode: [www.lex.uz](http://www.lex.uz)
4. Mahmudova A.N. Legal socialization and legal culture of youth in modern civil society. Monografia pokonferencyjna Science, research, development # 16 Barcelona 260-264
5. A. Mahmudova Guarantee of legal basic of supporting human rights in new level of Uzbekistan's development. International Journal of Advanced Science and Technology Vol.29 .No.5, (2020), pp.1761-1770 <http://sersec.org/journals/index.php/IJAST/article/view/10305/5558>
6. Mazhidov Sh.F. The development of civic culture through the prism of modernization of education (on the example of the Republic of Uzbekistan) St. Petersburg 2016
7. Halimbetov Yu.M. and other factors of the spiritual development of youth. BOTTOM No. 12 (53) 2019 p. 34-36
8. A.N. Mahmudova Legal socialization problems of personality in modern civilian society. Scientific Bulletin of Namangan State University <http://uzjournals.edu.uz/namdu/vol11/> 145-151pp

## PROCESSES TO INCREASE THE EFFECTIVENESS OF PREPARING GIRLS FOR FUTURE PEDAGOGICAL ACTIVITIES IN THE FIELD OF WOMEN'S SPORT EDUCATION

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### ABSTRACT

*This article deals with the processes to increase the effectiveness of sport and preparing girls for future pedagogical activities in women's sport. Cardiac rehabilitation exercises are developed and individualized to improve the cardiovascular system for prevention and rehabilitation of cardiac disorders and diseases. A well-balanced exercise program can improve general health, build endurance, and slow many of the effects of aging. A well-balanced exercise program can improve general health, build endurance, and slow many of the effects of aging. The benefits of exercise not only improve physical health, but also enhance emotional well-being.*

**KEYWORDS:** Process, Physical, Pedagogical, Movement, Education.

### INTRODUCTION

Exercise does not mean to go to gym or some club for daily activity; it only means to do some physical activity no matter how and where. Exercise is useful in preventing or treating coronary heart disease, osteoporosis, weakness, diabetes, obesity, and depression. In today's world, the modernization of education is important as it focuses on the spiritual and physical development of the individual and the improvement of the quality of the educational process.

The study of scientific and methodological literature of domestic and foreign scientists (including TS Usmankhodjaev, VK Balsevich, VA Bogdanova, etc.) shows that a number of scientific studies on the conduct of physical education in secondary schools. The term of the real estate insurance contract and the conditions of its termination, the tariff rate for real estate insurance, the regulation of the process of calculating and paying insurance premiums, the underwriter's responsibilities in determining and managing damage caused by insurance events, incoming risks and their stratification, analysis, assessment and selection of insurance risks is an important component of underwriting.

Insurance companies should create a structural unit consisting of specialists with special knowledge and skills to carry out insurance underwriting. In this case, the relationship of this unit with other units of the insurance company plays an important role.

Insurance companies need to automate the underwriting of real estate insurance on the basis of foreign experience and introduce computer programs. This can have the following effects:

- a) The period of risk identification and insurance is reduced;
- b) accelerates the collection and analysis of information from departments, the exchange of information with departments and reduces financial costs;

c) Allows to calculate reserves, conclude contracts, set tariff rates, timely payment of benefits;  
d) Prepares the ground for the growth of the insurance company's reputation, the transition to the provision of insurance services at the level of world standards.

Insurance underwriters in Uzbekistan need to develop specific methods of insuring insurance risks based on the experience of foreign insurance companies for use in their activities. This in turn allows you to quickly form an insurance portfolio and manage it effectively. It is advisable to publish together with foreign insurance and reinsurance companies a set of samples and templates required for insurance underwriting. The problems of organizing health-oriented physical education classes have been studied in the research of D. Antonyus and others. The analysis of age characteristics in the physical fitness of schoolchildren was studied through the work of AA Gugalovsky, VILyah, AG Sukharev, VP Guba and others.

The world's leading educational institutions are studying a set of measures aimed at strengthening the health of students in physical education classes, mainly in educational institutions, the problems aimed at shaping the value of health and a healthy lifestyle.

Research methods: analysis of scientific and methodological literature, interviews, pedagogical observation, expert evaluation, mathematical and statistical analysis.

The research was conducted among students of secondary schools 125, 214, 218 in Mirabad district of Tashkent, 105 in Yunusabad district, 282 in Yashnabad district, in Chust district of Namangan region. More than 500 schoolchildren participated in the study. In order to assess the performance of students in the 5th grade in general education schools in the 1st quarter, a team of experts consisting of qualified specialists was formed ( $n = 24$ ). At the same time, the assessment of the degree of conformity of the opinions of experts - the coefficient of concordance ( $W$ ) in our study was sufficiently high ( $W = 0.86$ ) and reliable ( $p < 0.05$ ).

The group of experts assessed the technical performance of students as follows:

"excellent" - absolutely correct performance of technical actions - 5 points; "Good" - performance of technical actions with small errors - 4 points; "Satisfactory" - performance of actions with big mistakes - 3 points; "Unsatisfactory" - technical actions performed are less than 2 points.

The group of experts rated the placement, movement and basic posture of 5th grade students on the field as 17.5% - "excellent", 16.5% - "good", 31% - "satisfactory", 35% - "unsatisfactory". 21% - "excellent", 18% - "good", 24% - "satisfactory", 37% - "unsatisfactory"; as well as 21% - "excellent", 19% - "good", 24% - "satisfactory", 36% - "unsatisfactory". 24% of 5th graders performed "excellent" and 31% performed "unsatisfactorily". 14% - "excellent", 23% - "good", 28% - "satisfactory", 35% - "unsatisfactory". The technique of returning and passing the ball from below with both hands on the wrists was rated 5% - "excellent", 9% - "good", 41% - "satisfactory", 45% - "unsatisfactory".

Placement, movement and independent performance of key positions on the field were rated 4% - "excellent", 13% - "good", 32% - "satisfactory", 51% - "unsatisfactory".

1. According to the results of the analysis of the literature, there is a need to take into account the age characteristics of the pedagogical methods used in the study of the technical movements of sports games in the 5th grade of secondary schools.

2. It is expedient to teach physical education classes to students of different types of physical training in the technical movements of sports, to develop a methodology aimed at maintaining their health and strengthening their general physical fitness.
3. The mistakes made by the group of experts in performing basic technical actions on sports games of 5th grade students of secondary schools are mainly explained by the fact that students do not have a conscious enough understanding of the technical actions performed in sports.
4. There is a need to prepare electronic multimedia textbooks for all sports for in-depth teaching of physical education in secondary schools. Strengthening exercises provide appropriate resistance to the muscles to increase endurance and strength. Physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure. The term "Physical activity" is not equal to "exercise". Exercise is a subcategory of physical activity which is structured, repetitive, and purposeful [1]. "A sound body has a sound mind" It means that if a person is weak, dull, and sick, he is not able to do his work efficiently and quickly. It is very important to have a fresh mind before any work, like office work, study or some creative work.

The people who make exercise as an essential part of their routine are more happy and efficient than others. Cardiac rehabilitation exercises are developed and individualized to improve the cardiovascular system for prevention and rehabilitation of cardiac disorders and diseases. A well-balanced exercise program can improve general health, build endurance, and slow many of the effects of aging. The benefits of exercise not only improve physical health, but also enhance emotional well-being. Regular physical activity remains an essential behavior for endorsing health, postponing or preventing predominant musculoskeletal disorders such as mechanical low back pain, neck and shoulder pain and decreasing the risk of increasing coronary heart disease, hypertension, diabetes, osteoporosis, obesity and colon cancers [2, 3].

The period of adolescence represents the transition from childhood to adulthood and lifetime habits such as regular exercise are normally begun at this time [4]. But unfortunately research indicated that physical activity rates decline consistently during the adolescent years [5, 6]. No matter what your age or shape, you should exercise daily. Not only does exercise so you can wear your favorite dress, it strengthens your muscles, keeps your bones strong, and improves your skin, increased relaxation, better sleep and mood, strong immune function, and more.

## REFERENCES

1. World Health Organization (Regional office for Europe) WHO. Reviewed on 12 July 2016.
2. Jones DA, Ainsworth BE, Croft JB. Moderate leisure-time activity: who is meeting the public health recommendations? A national cross-sectional study. *Archives of Family Medicine*. 1998; 285-289.
3. Vuori I. Exercise and physical health: Musculoskeletal health and functional capabilities. *Research Quarterly for Exercise and Sport*. 1995; 66:276-285.
4. Andersen LB, Haraldsdottir J. Tracking of cardiovascular disease risk factors including maximal oxygen uptake and physical activity from late teenage to adulthood: an 8 year follow-up study. *Journal of Internal Medicine*. 1993; 234:309-315.
5. Youth risk behavior surveillance: United States, Morbidity and mortality weekly report. CDC surveillance summaries/Centers for Disease Control 1999; 49(5):1-32.

6. Trost SG, Pate RR, Sallis JF, Freedson PS, Taylor WC, Dowda M *et al.* Age and gender differences in objectively measured physical activity in youth. *Medicine Science & Sports Exercise*. 2002; 34:350-5.
7. National Institutes of Health, National Heart, Lung, and Blood Institute. Your Guide to Physical Activity and Your Heart (PDF). U.S. Department of Health and Human Services. 2006.



## LANGUAGE POLICY IN MODERN UZBEKISTAN

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### ABSTRACT

*The article analyzes the conduct of language policy in multiethnic Uzbekistan. An analysis of this problem indicates that the leadership of the Republic of Uzbekistan is carrying out a phased implementation of the Law "On the State Language", granting equal rights and opportunities to all the peoples of the republic. Strong confirmation of positive processes in this sphere was the increase in the network of schools and mass media in various languages, as well as the creation of national cultural centers, which contributes to the improvement and harmonization of interethnic relations and the strengthening of stability in the republic.*

**KEYWORDS:** Language Policy, Uzbekistan, Rights, Ethnic Minorities, Diasporas, National Cultural Center

### INTRODUCTION

The declaration of state independence on August 31, 1991 by the Republic Uzbekistan marked the beginning of a new era in the life of not only the Uzbek people, but also all nations and nationalities living in Uzbekistan. The most important achievement of this period is interethnic and interfaith harmony, which served as the key to peace and stability, increase efficiency carrying out reforms. On the way to achieving interethnic harmony, the people of Uzbekistan It was a difficult path. Tolerant Ethnic Policy from the First Days of Independence was aimed at abandoning old dogmas and introducing ideas and principles into the minds of people national independence and spiritual renewal of society. These principles were laid down in the Constitution of the Republic of Uzbekistan and formed the basis of the state national policy pursued by the First President of Uzbekistan I.A. Karimov that was the guarantor of stability in interethnic relations. To improve interpersonal relationships, adaptation in a multi-ethnic environment the possession of persons of all nationalities was and has been significant living in a particular country, in the official language. And the solution to this complex and long-term objectives should not be accompanied by the escalation of interethnic confrontation. "And isn't it wonderful," noted First President I.A. Karimov, -if representatives of Russian nationality know the Uzbek language, and Uzbeks -Russian, and our youth will also learn a third language "[1, p. 48]. Phased relief in the life of the peoples of Uzbekistan was facilitated by a phased implementation of the Law "On the State Language" adopted in 1989, in which respect for the languages of all nations and nationalities was ensured, living in Uzbekistan, which created the conditions for their development. Quite the positive thing was that in implementing the language program the state the government was not in a hurry, given the multi-nationality of the people of Uzbekistan, where representatives of 130 ethnic groups lived and live side by side. To achieve this important goal At the state level, a special program was adopted to expand the scope of influence of the Uzbek language. In accordance with it, a wide network of free courses on the study of the state language, increased attention to its teaching in educational institutions,

increased publication of textbooks, dictionaries, diverse literature in Uzbek. In language policy, it has been strictly observed and is being observed. the principle of equal rights of representatives of all nations and nationalities of the country, enshrined in Constitution of the Republic of Uzbekistan. The Law was also of great importance for interethnic harmony in the country. Of the Republic of Uzbekistan "On the state language" (as amended), approved Oliy Majlis on December 21, 1995, in which, along with the state language significantly expanded the right to use Russian and other national languages minorities in all walks of life. "In the Republic of Uzbekistan, - is specified in article 24 of this the law, - neglect or hostility to the state is prohibited or other languages. Persons hindering the exercise of citizens' rights to free language choice in communication, education and training, are responsible in accordance with legislation "[2, p. 343]. It is such a widespread implementation of the law allowed to solve the language problem without prejudice to the interests of other nationalities.

Adequately responding to the ongoing language policy in the country, many Russians and Russian-speaking minorities who remained to live in the republic began to give their children away kindergartens and elementary schools with the Uzbek language of instruction. It is important to state that the declaration of the Uzbek language as the state language did not become a negative factor in influencing development of other languages. An important indicator of the effectiveness of ethnic and linguistic policies of the Republic of Uzbekistan aimed at interethnic harmony in society, the functioning of the education system in 7 languages has become. Total in the Republic there are 8867 schools with instruction in the Uzbek language, 383 - in Karakalpak, 739 - in Russian, 505 - in Kazakh, 267 - in Tajik, 62 - in Kyrgyz, 50 - in Turkmen [3]. In all universities of Uzbekistan, training is carried out in Uzbek and Russian, and in Republic of Karakalpakstan - in Karakalpak, Uzbek and Russian languages. Besides, in many universities there are branches and groups with instruction in the languages of indigenous ethnic groups Uzbekistan: in Kazakh, Tajik, Turkmen [4]. The country also pays serious attention to the study of foreign languages. There are lyceums with in-depth study of English, German, Korean, Chinese, Japanese, Arabic, Iranian and Hebrew.

The development of a network of mass media makes a significant contribution to the formation of multilingualism information in 12 languages. So, from the total number of print publications issued in the second half of the 1990s newspapers and magazines 238 newspapers and 31 magazines were published in Uzbek language 52 newspapers and 15 magazines - in Russian; 44 newspapers and 15 magazines in Russian and Uzbek languages; 20 newspapers and 7 magazines - in Karakalpak language; 15 newspapers - on Tajik language 8 newspapers - in the Kazakh language, etc. The body and broadcasts in Uzbek, Russian, Kazakh, Tajik, Kyrgyz, Turkmen and other languages [5, p. 128]. In the contemporary socio-political and cultural life of the republic, the Russian language, which is one of the 10 largest world languages, occupies an important place. It is perceived in Uzbekistan as an intermediary language in a multi-ethnic environment and as a language - a carrier of scientific and technical information, therefore, special attention is paid to it.

Given the need to learn the Russian language, in a system of higher and secondary special education in a number of universities, it was decided to increase the number of hours, allocated to the study of the Russian language. In particular, at the National University of Uzbekistan named after M. Ulugbek, it was decided to increase the practical course Russian language from 70 to 140 hours. According to this decision, from 2003/2004 academic year, the Russian language was studied at the undergraduate level for three semesters and to end with a state exam [6, 21-26].

Confirmation of the implementation of legislative acts in the linguistic The policy is to enable all diasporas to create national cultural centers (NCC). During the years of independent development, 138NCC. They are created regardless of the size of the diaspora. Creation of cultural centers minorities contributes to the process of activating various social strata and strengthening the trend of the movement for the revival and preservation of the language, ethno cultural traditions and identity. Thus, an analysis of this problem indicates that the leadership of the Republic Uzbekistan prioritizes ethnic issues linguistic sphere, providing equal rights and opportunities to all peoples republics. A clear confirmation of the positive processes in this area was the increase networks of schools and the media in various languages, as well as the creation of national cultural centers, which contributes to the improvement and harmonization interethnic relations, strengthening stability in the republic.

## REFERENCES

1. Karimov I.A. Uzbekistan is on the verge of achieving independence. Tashkent, 2011.S. 48.
2. Murtazaeva R.Kh. Uzbekistan is a unique land of interethnic harmony and tolerance // Uzbekistan - a country of peace and harmony: Sat. conference materials. Tashkent: Uzbekistan, 2017.S. 343.
3. Tolerance is the basis of democracy in the Republic of Uzbekistan. [Electronic resource]. Access mode: <http://ovnews.com/2017/07/23/tolerance-based-on-democracy-in/> (date appeals: 09/25/2018).
4. Nazarov R. R. Ethnic policy in a multi-ethnic society (on the example of Uzbekistan). [Electronic resource] [http://elar.urfu.ru/bitstream/10995/32345/1/klo\\_2015\\_198.pdf/](http://elar.urfu.ru/bitstream/10995/32345/1/klo_2015_198.pdf/) (accessed: September 25, 2018).
5. Levitin L., Carlisle D. S. Islam Karimov - President of the new Uzbekistan. Agrotek Vienna, Austria. Tashkent: Uzbekistan, 1998.S. 128.
6. Bashatova N.A., Isakova R.K., Guralskaya I.M. Functioning problems and teaching the Russian language in Uzbekistan in modern conditions // Bulletin MAPRYAL. M., 2006. No. 50. S. 21-26.

## IN POLYGONOMETRY OF RIVERS INCIDENTAL EFFICIENT RESEARCH INSTITUTION

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### ABSTRACT

*In the article, the question of the effect of refraction on the results of horizontal angles is specifically excluded. In the hot and dry climate of Uzbekistan, in the polygonometry of river banks, it is possible to increase the accuracy of horizontal angle and line measurements using geographic information systems based on the results of field experiments.*

**KEYWORDS:** *Electronic Technologies, High-Resolution Geodetic Measurements, Refraction Effects, Atmospheric Vibrations, Horizontal Refraction, Uneven Light Emission, Modern Geodetic Instruments And Their Capabilities.*

### INTRODUCTION

One of the most important reasons for limiting the accuracy of measuring horizontal angles using high-precision angular measurements is not the error of the so-called horizontal air refraction, which is caused by the external environment.

To investigate this phenomenon and eliminate its detrimental effects, triangulation and polygonometry, as far as possible, are the first task in science and production to improve the accuracy of the network.

In this direction, special attention is paid to the use of geodetic measurements in developed countries, including Russia, Ukraine, Germany, the USA and other countries, to take into account the environmental impact and improve the accuracy of measurements taking into account the properties of horizontal refraction, which have a significant impact on the measurement results.

Large-scale large-scale mapping with all the requirements for geodetic fundamentals and especially angular measurements requires a review of recently created and emerging systems for constructing geodetic bases and requires the development of new, innovative methods.

In this regard, the external environment is not always static, its laws are periodically subject to changes, and one of the main tasks is to improve measurement methods.

The new system of basic geodetic studies reduces the sides of triangles and polygonometry, since it requires a higher density of points. As a result, we observe a slight deterioration in the illumination of light along an uneven line, while at the same time demanding an increase in the accuracy of angular measurements. In this context, it is necessary to know about the influence of horizontal refraction on the accuracy of measuring horizontal angles in river polygonometry.

To accomplish these tasks, it is important to determine and improve a modern solution for measuring the impact of the external environment on horizontal angle measurements.

In the Strategy for the Further Development of the Republic of Uzbekistan for 2017-2021, the Republic of Uzbekistan "On Geodesy and Cartography", Decree of the President of the Republic of Uzbekistan dated May 31, 2017 N UP-5065 "On Further Improving the Activities of the State Committee for Land Resources, Geodesy, Cartography and cadastre of the Republic of Uzbekistan" other regulatory documents. [1,2]

These problems are especially relevant in the climate of the city of Karshi in the Republic of Uzbekistan. In both dry and hot climates, atmospheric variability is very large, which leads to large errors in the results of measurements of the horizontal angle; Therefore, methods for calculating the influence of the atmosphere on the results of horizontal angular measurements on the banks of the rivers were tested in moderately temperate latitudes and in other lower regions of the Republic, but were not studied at all in arid climate.

When studying the influence of horizontal refraction on geodetic measurements and taking it into account, the scientists of our republic A.S. Suyunov and T.M. Abdullaev conducted research in his research and achieved some positive results. [3]

Much attention is paid to the construction of a complex of newly constructed buildings and structures in the republic on the basis of integrated geodetic control with high accuracy, accuracy and relevance. The development of a method for increasing the accuracy of determining the degree of influence of the surface layer of the atmosphere on the results of geodetic measurements has not been studied at high temperatures in the southern regions of Uzbekistan. For this reason, this article is somewhat consistent with the above.

Sokoba's work on reforestation and riverbank research is based on a very short (six-hour) experience with a number of drawbacks. [4]

Therefore, the effect of refraction on geodetic measurements has not yet been studied in urban polygonometry.

In fact, the solution of this question is not enough for S.N. Marchenko [5] investigated in his polygonometric system of wall mounting, specifying the refraction effect in this case, without saying a word about the effect of light refraction. At the same time, polygon paths along city streets and river banks are approaching additional established signs, which leads to the fact that horizontal angles are distorted and significantly increase.

In particular, conclusions regarding the accuracy of measuring horizontal angles suggest that the effect of lateral refraction is significant in the lower classes of polygonometry [6]. The reason is as follows:

(a) Polygonometry usually develops in a flat enclosed space, where the temperature (density) of the air, as well as the destruction of the light beam, is exposed to high temperatures at low and altitudes of 1.5 m and in the zones of the barrier. In particular, in the field of polygonometry of classes 3 and 4 and urban polygonometry, the influence of light on "not behind the barriers" should be noted separately.

b) Polygonometry is estimated to be approximately 1.3 times greater than the error of triangulation [2].

The microclimatic regime in the near-surface atmosphere is primarily characterized by super-adiabatic vertical temperature gradients at day and night inversion temperatures with significant differences in the horizontal plane and large gradients on the nearest surface.



The general picture of the influence of microclimate on the local climate and coastal zones of watersheds and rivers is known.

Thus, it reduces the diurnal and annual amplitudes of air temperature near the ponds; in summer, along the coast and above the surface of the water, the temperature drops during the day and is higher than in places remote from the ponds at night; bodies of water are warmer in winter and the adjacent dry lands; The range of impacts of tens, and sometimes hundreds of kilometers, largely depends on the size of the water bodies.

Along the water and the coast, the most obvious temperature differences are observed in the rocks, in the upper layers of sand-concrete slabs;

This is also explained by the properties of thermal and radiation equilibrium. A.S. Suyunov and T.M. Abdullaev Based on the results of weather stations on the water surface near 5 geodetic points (5-10 m) near the Karatep reservoir, temperature gradients were determined and the influence of lateral refraction was studied. field experiments did not take into account environmental impact.

In the experimental zone, the atmospheric refractive index  $n$  has a dominant effect on the horizontal temperature gradient. In riverbanks, a horizontal moisture gradient can have a significant effect on coastal areas. Therefore, from a geodetic point of view, we are interested in the following questions:

- a) the values of the surface atmospheric surface above the ground and water within the first ten meters of horizontal gradients of temperature and humidity;
- b) the way in which a horizontal gradient of temperature and humidity changes the day and hour in each direction under different weather conditions;
- c) the density of the spatial distribution of light rays over the surface layer of the atmosphere, etc.

The answer to these questions is to a certain extent the research conducted by the dissertation group from June 2018 to July 2019 on the banks of the Beshkent canal near the geodetic dump in the Khudoyzod massif, Kashkadarya region, Republic of Uzbekistan.

Meteorological observations were carried out in open areas of the left bank of the Beshkent River. Water points were located 12 meters away. This river water flows along the Chapirgorg canal, not far from the Khudoabad massif (0.8-1.0 km). This place has an unusual width, landscape and natural features. Observation posts are several tens of meters wide, and the low (2-4 m) topography on the hillsides is difficult. The width of the direct massif with the observation point is 3.5 meters in the lower reaches of the river. Here, the Beshkent river is asymmetric on the left bank and extends up to 1-1.5 km in length, and its relief becomes a flat, flat hill. In 2018, temperature and humidity were measured at the main observation site with temperatures above the ground at 0.75 and 1.5 m. At the same time, atmospheric pressure, wind speed and direction were also determined. The state of the sky has been listed. Temperature and humidity were observed above the surface of the water, and its parameters were recorded. A special boat was built for this. The machines are equipped with modern electronic psychrometers. All measurements were carried out together with the authors of the expedition.

Thus, meteorological data were measured on the aforementioned meadows and at the same height of land and water at a distance of 3.5 m. Meteorological elements were used for



measurement: aneroid, hand-held anemometer, psychometry. Before all measurements, measuring instruments were examined.

All thermometers were monitored and compared every hour. Their pointers were set to a psychrometer sensor installed at 1.5 meters in the main zone. This method greatly improves gradient detection using psychometry and emphasizes their accuracy.

In each measurement, counting with thermometers was performed three times, and the second and third readings were measured at intervals of 2-4 minutes. As a result, the arithmetic mean of these numbers was obtained.

Our field experiments, compared to the 2019 meteorological measurements, show that the observations in 2018 were simultaneously closely related to angular measurements. The main observation point for these measurements was 7 m from the border with water.

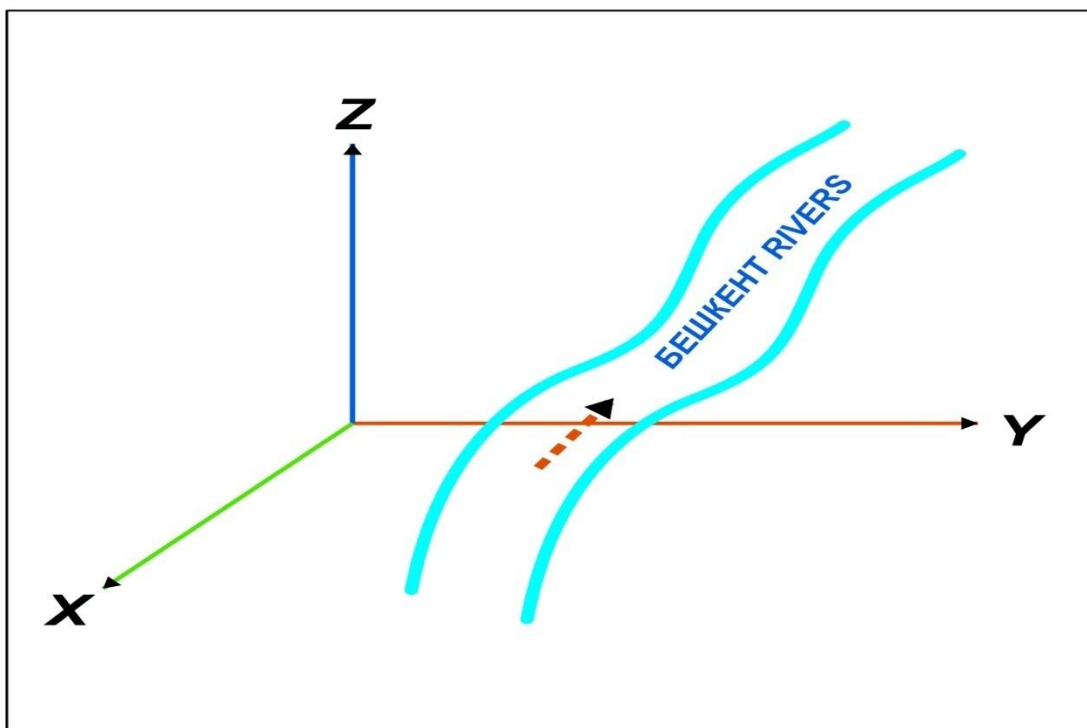
In addition, in 2018, the horizontal humidity gradient was not determined. In 2019, temperature, humidity and wind speed are estimated.

Accordingly, all measurements were carried out on an additional two psychrometers. Psychrometers are located on the right bank, like the station, 15 meters from the water and 50 meters from the station on the left. In turn, additional air temperatures were measured in 2018 at a distance of 400 m from the station. Observations of the state of the sky were recorded on a five-point scale, and these results are presented in table 3.

**TABLE 1 GIVEN THE STATE OF THE SKY FOR CHARACTERS**

The degree of cloud cover	In the afternoon		At night
	At the checkpoint		
	overcast	sunny	
The sky is cloudless	-	S	0
1/4	O1/4	S1/4	1/4
1/2	O1/2	S1/2	1/2
3/4	O3/4	S3/4	3/4
The sky is completely covered with clouds	O	-	1,0
The time when the sun shines through the clouds	S -O		-
F o g	F		F

All observations were usually carried out from morning to night, sometimes 24 hours. Further, to facilitate processing and thinking, meteorological observations, the main point of origin of the coordinate system of space. (Fig 1).



**1- image The spatial coordinate system of the metrological observation station**

The plane of this XOu system corresponds to the horizon plane. The axis is perpendicular to the river. As a result, the axis of the axis moves along the bank of the river, which is actually a parallel line equal to temperature and humidity.

Thus,

$$\frac{dT}{dY}, \frac{dT}{dZ}, \frac{de}{dY} \text{ and } \frac{de}{dZ} \quad (1)$$

(1) Differences in temperature and humidity are proportional to horizontal and vertical gradients.

We can arbitrarily call gradients positive or negative if the temperature and humidity of this coordinate axis fall or fall in their direction. As you can see, the average values of the horizontal t of temperature and air humidity of interest to us are calculated using the results of measurements in the middle of the river and river coordinates ( $x = 0$ ,  $u = 50$  m,  $z = 0$ ).

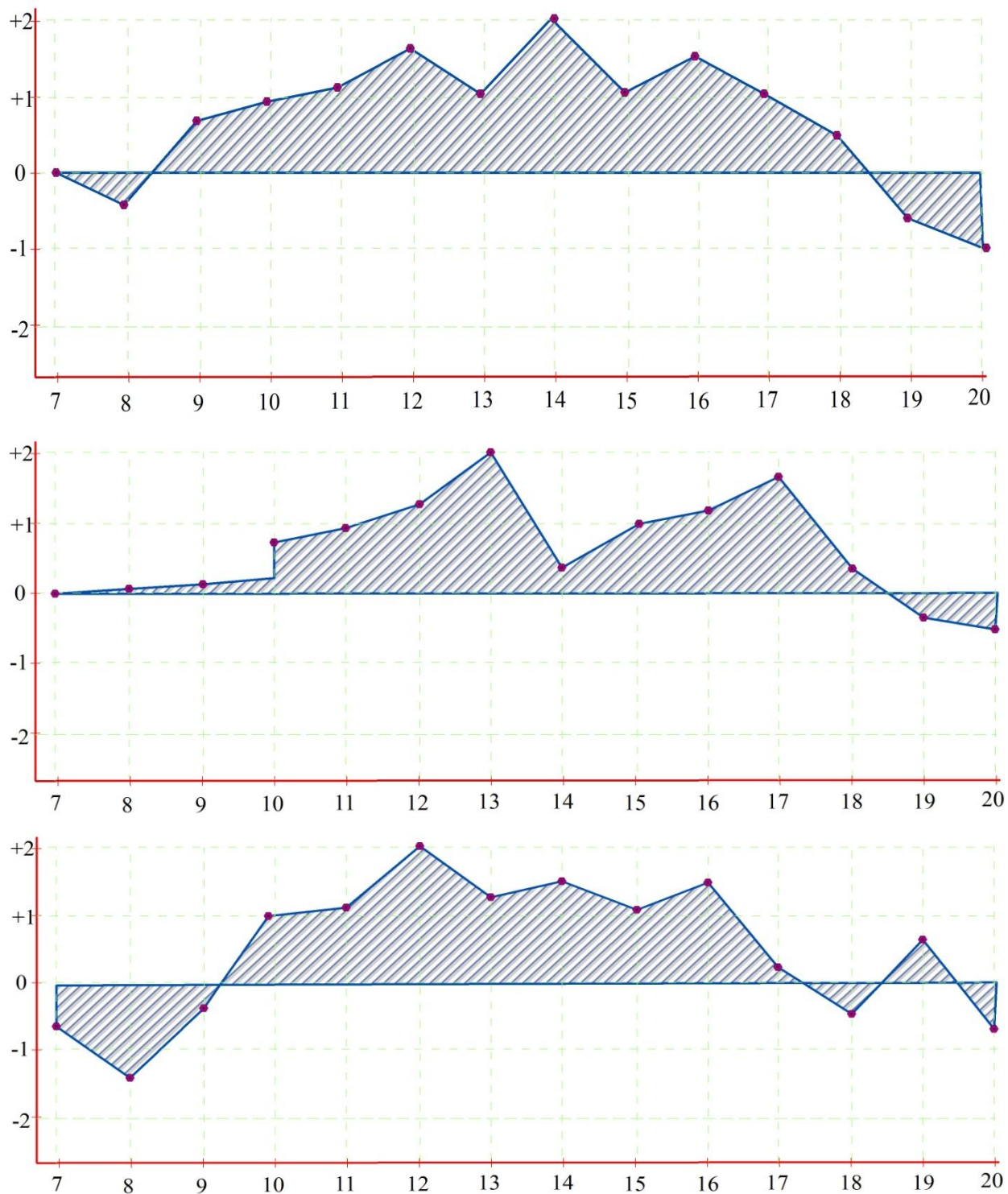
Figure 2 shows the results of field observations in the field in 2018 as an example that illustrates the diurnal variations in the difference in air temperature in the middle of the river, 5 m above sea level and 1.5 m above the river banks. ,

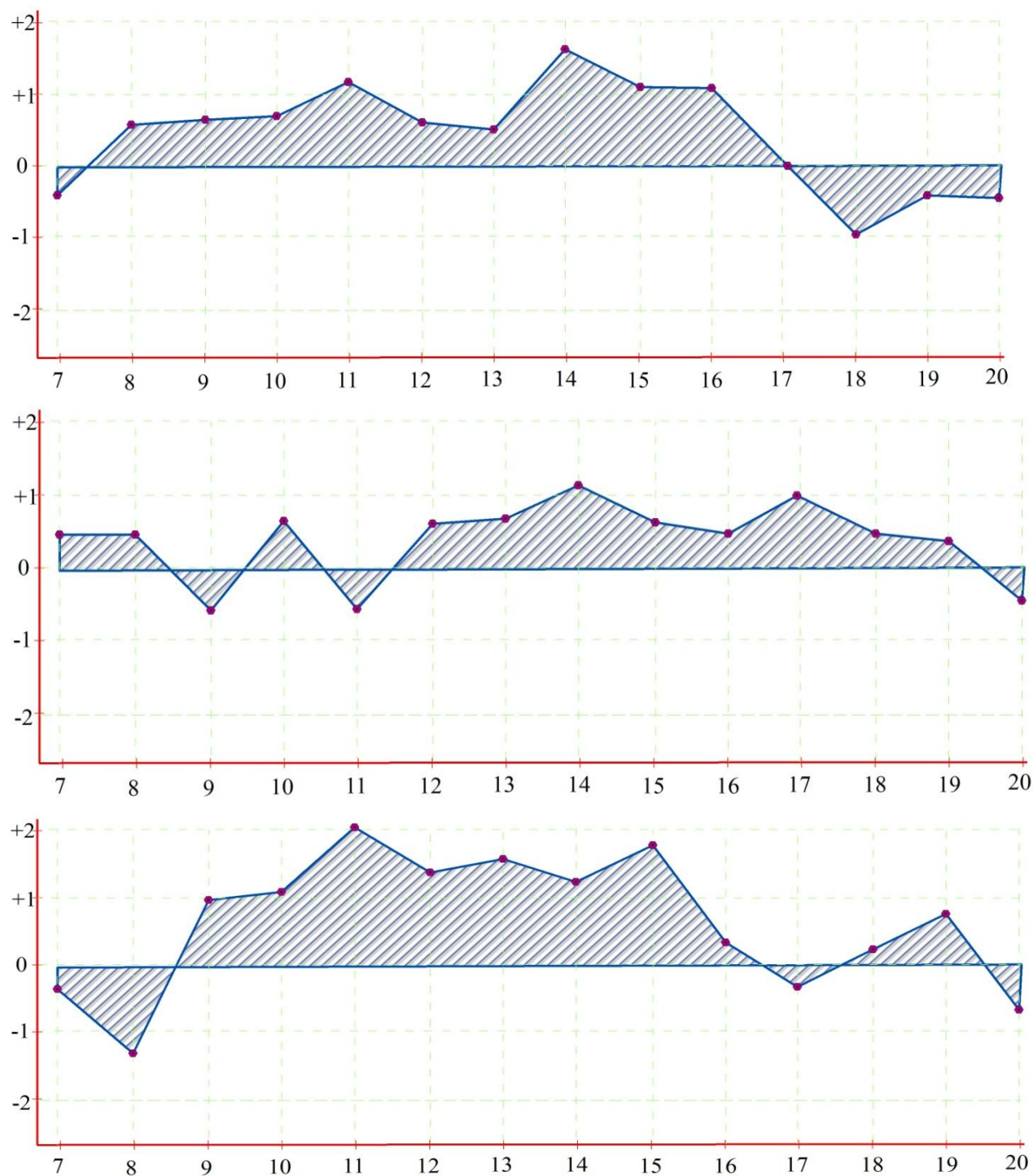
All of the above observations were carried out in the cloud, olabulate (variable) and in the open sky (sunny weather) at a wind speed of 0.5 m / s in the direction of river flow. During the day, wind power increased in this direction and reached 4-5 m / s. [7]

The temperature difference shown in the graphs is determined by the following formula. [8]

$$\Delta T = T_k - T_c \quad (2)$$

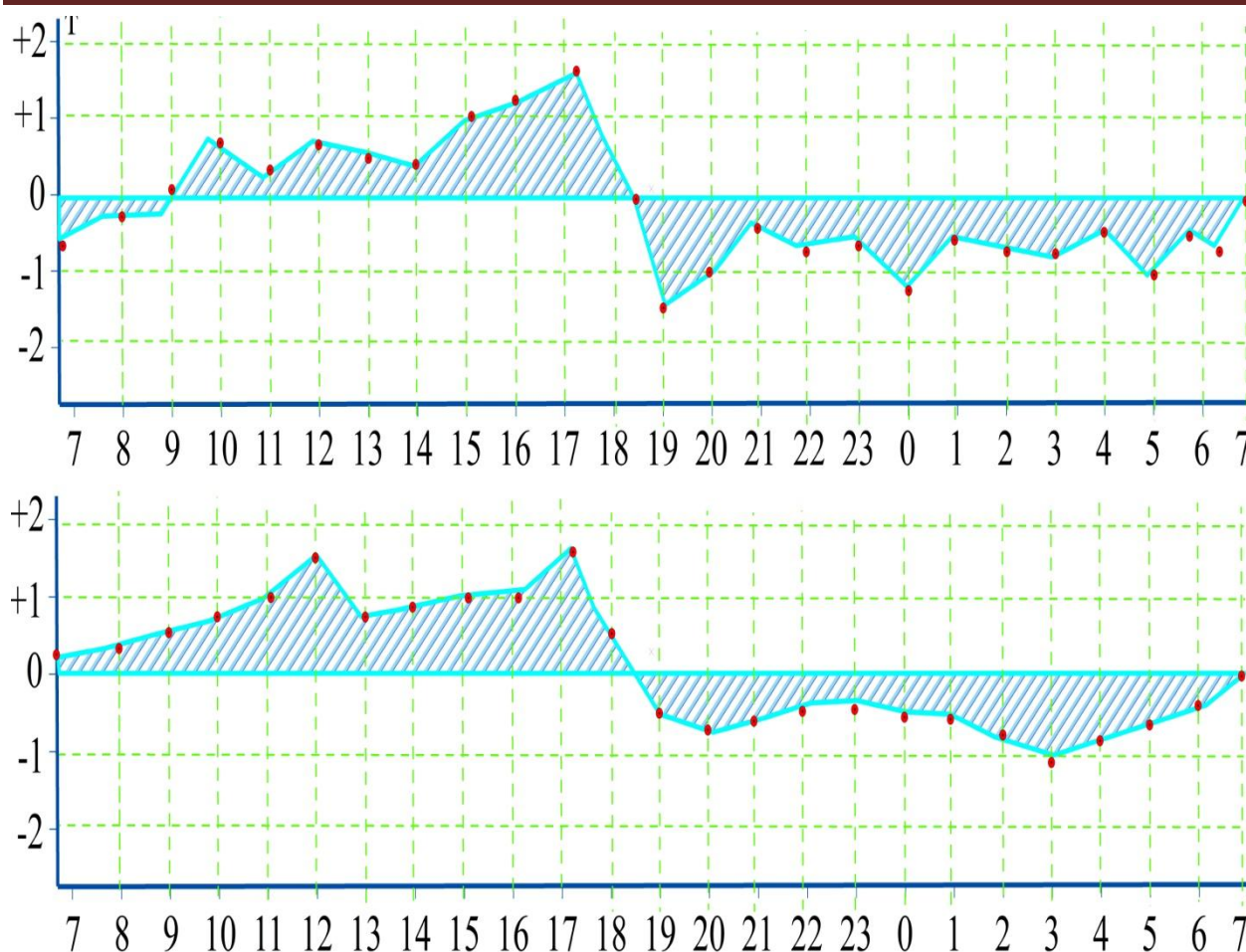
Formula  $T_k$  - temperature on the river bank;  $T_c$  - water surface temperature. These values are significantly reduced in the south of the Republic of Uzbekistan on sunny days when very large (up to  $2\text{ }^{\circ}\text{C}$ ) cloudy cool cloudy days ( $0\text{ }^{\circ}$ ,  $3\text{--}0\text{ }^{\circ}$ ,  $5\text{ }^{\circ}\text{C}$ ). The differences in  $\Delta T$  are positive for morning, evening, and nightly values, between  $7^{30}$  and  $8^{30}$  after sunrise and between  $19^{00}$  and  $20^{00}$  before sunset. (During field experiments, the sun rose to  $6^{30}$ , and the sunset to  $20^{40}$ ).





2- Fig. According to the results of daytime observation





**3-Fig. Daily Monitoring Results**

It is also important to note that at night the temperature is much lower due to a decrease in solar radiation, which significantly changes the horizontal temperature gradients.

The irregular distribution of true moisture in the atmosphere is very interesting. In the daytime, at an altitude of 1.5 m above the river, 15 m from the bank of the river, humidity is higher than 5 m above the surface of the river when the wind blows in any direction. In the morning, evening and night, on the contrary, on the surface of the water surface the moisture content is stable and very high.

All scientific activity is used by GIS.

GIS is a multidisciplinary environmental database created on the basis of electronic computing technologies [2]. GIS is designed to provide easy-to-use data from various levels of human activity. The main stage of GIS development is the last 7-8 years. This is due to the technological and ideological organization of the automated design of all processes based on geographical data.

The main goal of GIS development is to create systems that meet modern requirements. GIS technologies for surveying are an excellent guide. This increases work efficiency several times. GIS is a product of new ideas that can give a clearer picture in the mind, reflecting current events

and events.

GIS combines various types of content and information into one system, creating a coordinated system for analyzing geographic data. Regardless of how important the understanding and management of various activities and resources is, and if there is no interaction between the GIS, the problem remains unresolved.

The Panorama program that we use in our research is a universal geographic information system that can be used to create and edit electronic computational experimental space plans. He helped build three-dimensional models, measure and calculate, perform various operations, process raster data and assemble database tools.

This software helped solve the problems that organizations face when constructing polygonometric tracks in the geodetic block and river banks.

With their help, we came to the following conclusions in the experiment:

- Studied the patterns of distribution of atmospheric air based on measured meteorological data and the microclimate of the refraction field:
- We showed that during the day in hot and dry climatic conditions, the influence of lateral refraction on the results of measurements of horizontal angles and lines can be established on the banks of the republic in river conditions with an interval of two hours a day and in various climatic conditions:
- Using the meteorological elements found in the field, corrections were made using geodetic measurements made on the polygonometry of the river bank to refract the side effect, which led to an increase in accuracy:

This is a new GAT solution used to combat environmental impact in order to improve the accuracy of polygon networks.

#### LITERATURE:

1. Uzbekistan Republic Presidential 2017 July 7 February PF- 4947 - dream "Uzbekistan Republic Sini Yanada rivozhlantirish beyicha Harakatlar strategansi tʻyrisida" gi Farmoni.
2. Suyunov A.S., Suyunov Sh.A. On the accuracy of geodetic measurements in the conditions of the Republic of Uzbekistan // Monograph. Uzbek Agency for Printing and Information Printing House LLC "ILM NUR - FAYZ". 2017.-- 160 s.
3. Abdullaev T. M. The study of patterns of action and the search for methods of accounting for lateral refraction when measuring horizontal angles // Abstract. diss. for the competition. scientist step. Cand. tech. Sciences: TashDTU. - Tashkent, 2005. - 16 p.
4. Suyunov Sh.A., Karimova U.E., Fayziev Sh.Sh. Study of the transfer of optical images in a cloudy atmosphere along inclined paths // Collection of selected scientific papers of the International Scientific and Practical Conference on the theme: "Research work in the field of Geoinformatics: current status and prospects" under the project "DSinGIS – Doctoral program in the field of Geoinformation Sciences" in as part of the Erasmus + program. Special volume of the LIFE of the geographical society of Uzbekistan. - Tashkent, Uzbek.NU.2018. - S. 130-133.
5. Суюнов Ш.А. Атмосфернинг ерга яқин 500 метрлик қатламининг геодезик



ўлчаш ишларига таъсири ва уни ҳисобга олишнинг янги усули.// Техн. Фанл. Бўйича фалс. докт. (PhD) дисс. автореф: ТИВАҚХМИИ. –Ташкент, 2018. – 44 б.

**6.** Suyunov Sh.A., Tashpulatov S.A., Mullajanova G. Impact of atmosphere in accuracy of GPS measurements.// Modern scientific challenges and trends/ collection of scientific works of the international scientific conference/ Issue 12, Part 2 Warsaw, Poland. 20<sup>th</sup> January, 2019. Certificate №: PL300519039

**7.** Suyunov A.S., Fayziyev Sh. I. Studying the experience of full breakage on the streets of Karshi in Kashkadarya region. // International Journal of advanced Research in Science, Engineering and Technology. ISSN (online):2350-0328/ Of IJARset, Volume 6, Issue 11 November 2019. Certificate №: IJA61010040 Date: 30th November 2019. P. 11873-11875.

**8.** Suyunov A.S., Suyunov Sh.A., Mullajanova G.M. Analysis of the qualification development of natural hazards at geoeological monitoring of landslide hazardous territories.// International Journal of advanced Research in Science, Engineering and Technology. ISSN (online):2350-0328/ Of IJARset, Volume 6, Issue 11, November 2019. Certificate №: ШОФ40101001 Date: № 30th November 2019. Certificate №: IJA 61111007. P. 11534-11537

# METHODS FOR CONSTRUCTING THREE-DIMENSIONAL MODELING OF GEODETIC VALUES IN ARCGIS AND DETERMINING THE AREAS OF SOIL EROSION

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## ABSTRACT

*The main focus of this work is on the mathematical processing of geodetic measurements based on ArcGIS, as well as ways to create and manage GEODATA and the introduction of modern methods for fast and efficient mapping of eroded territories. The paper presents some problematic questions about soil erosion and research.*

**KEYWORDS:** (Water And Wind Erosion, Elements Of The Irrigation Technique Will Add This Table Of Contents Attributes From The Inscriptions Contour).

## INTRODUCTION

Currently, data processing problems are common in every area. It is difficult to imagine any business or organization without an automated information system. All automated data systems are based on DBMS. The database is formed on the basis of DBMS. The course examines the theoretical foundations and methods of creating and managing geospatial databases. It discusses the basic concepts of databases and geo-databases and their relationships, classification, data structure, and related DBMS types. Today, any GIS project is difficult to imagine without a geographical database.

Today geodesy is widely used in all sectors of the economy. Therefore, the integration of GIS and geodesy requires a large amount of written and graphical geographically related geographical data. Geographic databases are created using special GIS software. Given the fact that the ESRI ArcGIS program is currently being selected in several regions of the country, this methodology is focused on using GIS systems for mathematical processing of geodetic measurements, creating GEODATA and erosion risk categories based on ArcGIS.

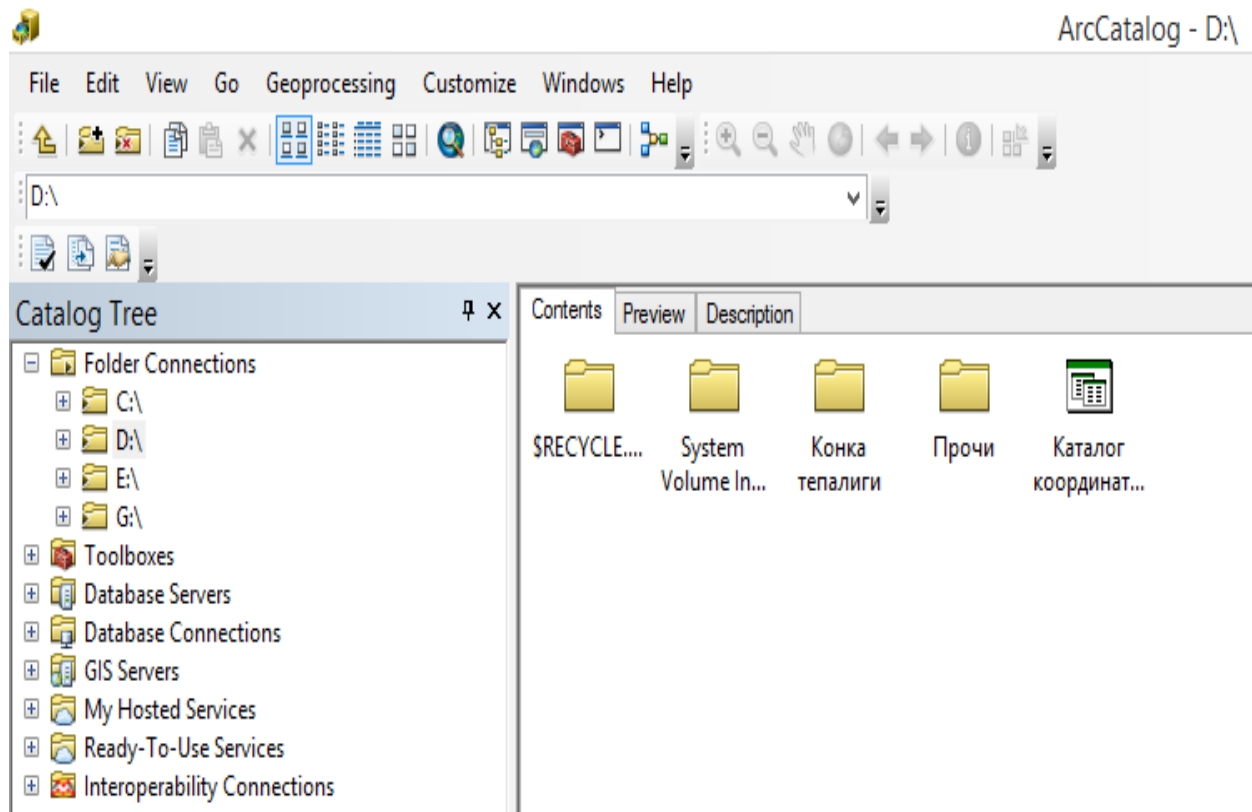
It should be noted that with this ArcGIS software, GAT projects are developed and maintained in our country, as is now the case in many developed countries. Knowledge of geospatial knowledge is required for the creation and effective use of geo-information systems projects.

ArcGIS software and its applications

ArcCatalog is an ArcGIS application that manages and manages geographic information in workspaces and geospatial databases. Business areas are folders containing disk files that are used to organize your data - card documents, images, data files, geo-referenced models, databases, and more. Workplaces are an easy way to organize and share GIS data.

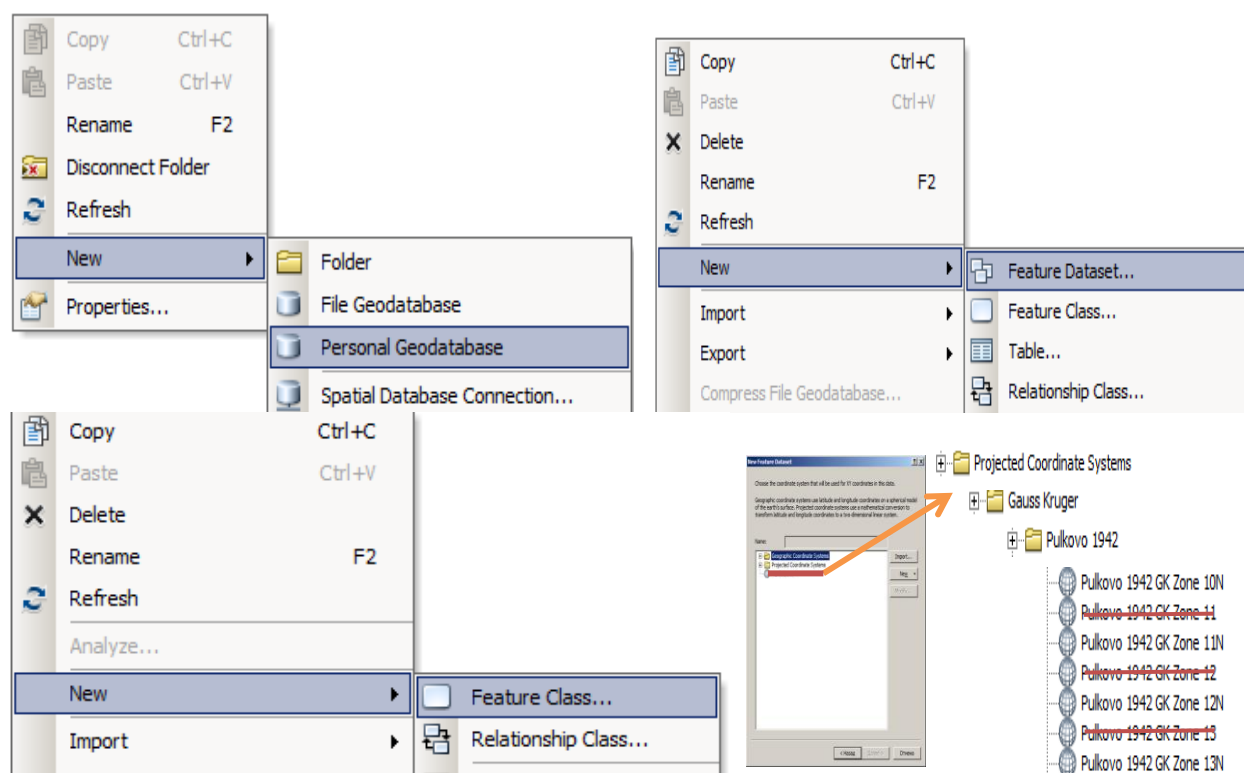
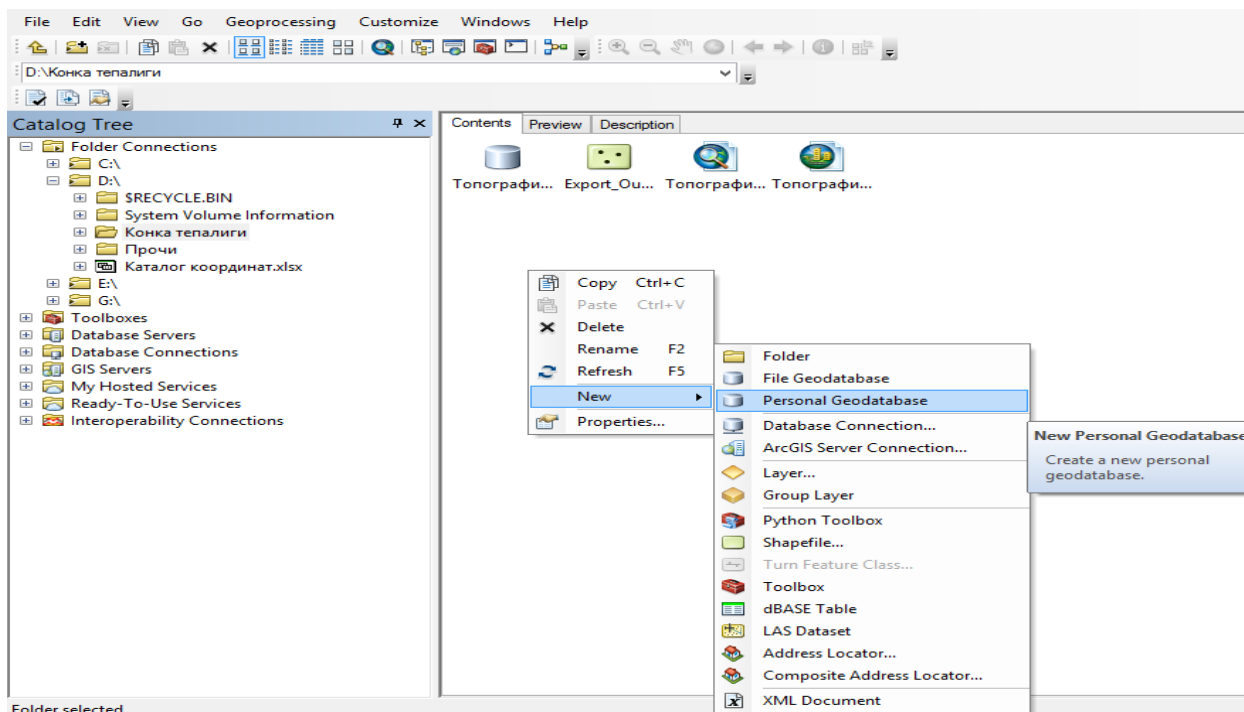
A geographic database is a collection of different geographic data sets that are used in ArcGIS. There are several ways to store information from a geodatabase:

- The database file, the folder containing the files on the disk;
- \* Personal Geoscience database-Microsoft Access database file (.mdb).

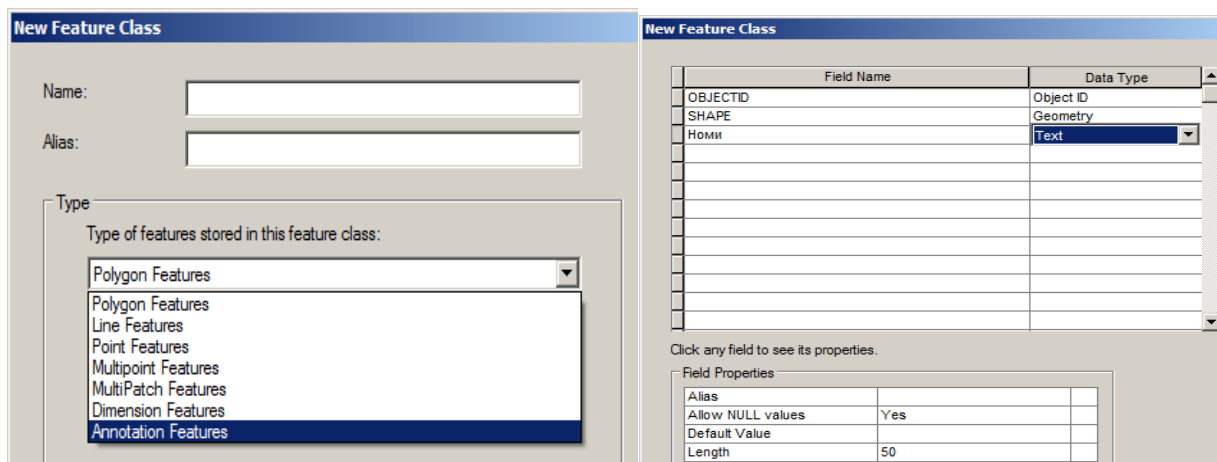


Pic. 1

ArcGis, an ESRI-based application, uses this program's ArcCatalog application to create geographic databases. When the ArcCatalog maintenance window opens, the catalytic erosion categories are selected using the region's massive GAT systems and selecting the desired disk.

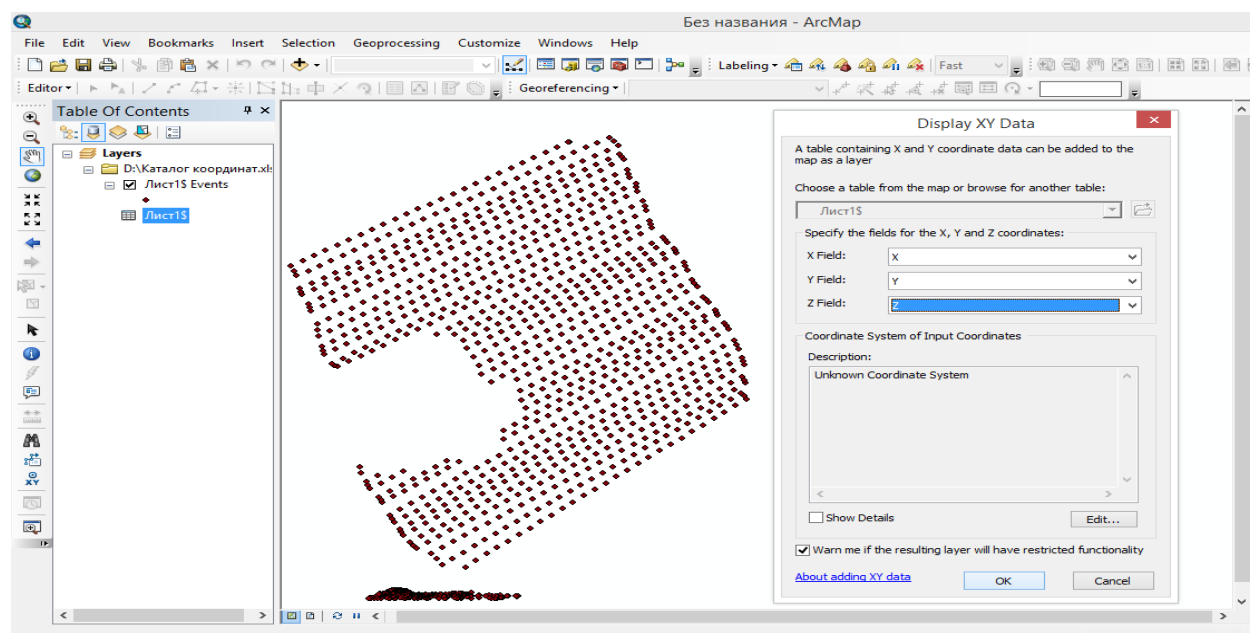


Pic 2



Pic 3. Three-dimensional modeling of the Arctic zone of the processing of geodetic values.

As soon as the ArcMap app is loaded, the "add this" button "point-to-point" will be loaded using the coordinate catalog loaded from the electronic tachometer. As a result, this table of contents file is converted to a table of contents. In the coordinate file, right-click the file and type " add x, y, x, y ". The arrows to be displayed are indicated by data, and the arrow key is a geographical representation based on the value (coordinates) of the table data.

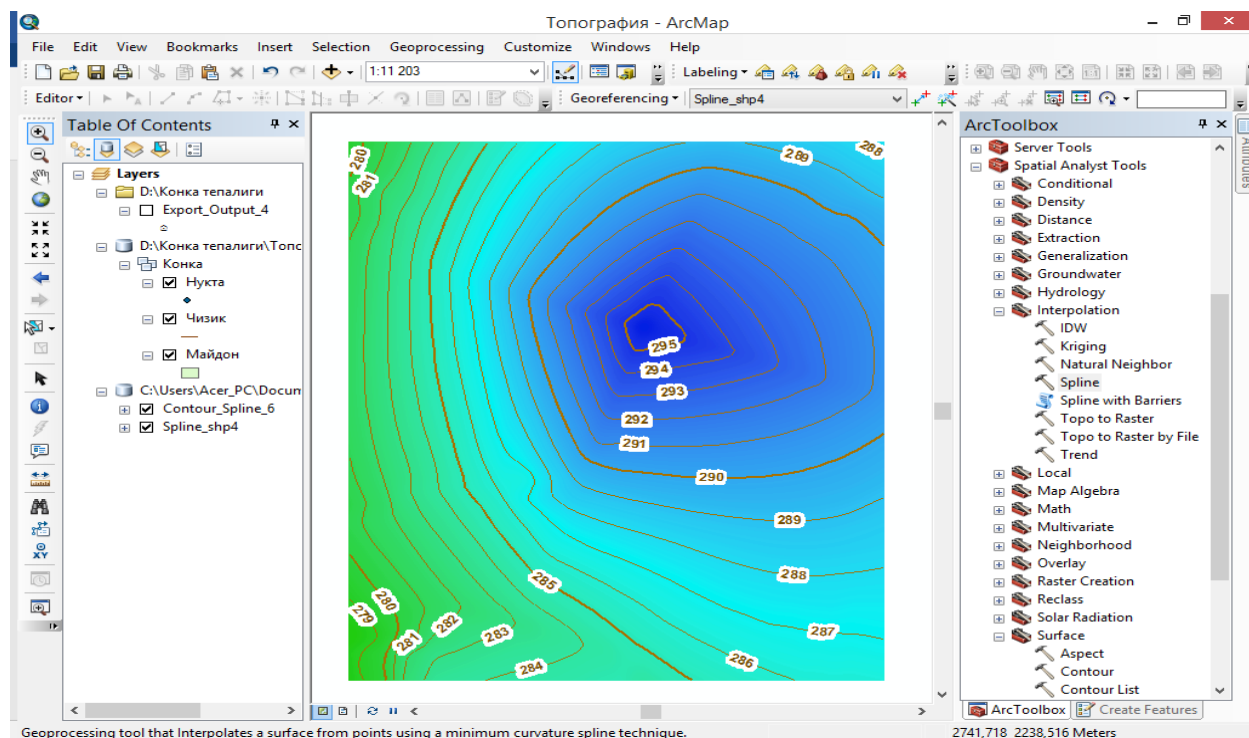


Pic 4. Converts rendered coordinate values into layers of thematic vector types.

As a result, coordinate values that have been converted to vector types are removed from the table data source. A symbolic layer will be assigned, and attribute entries from "labels" will be made.

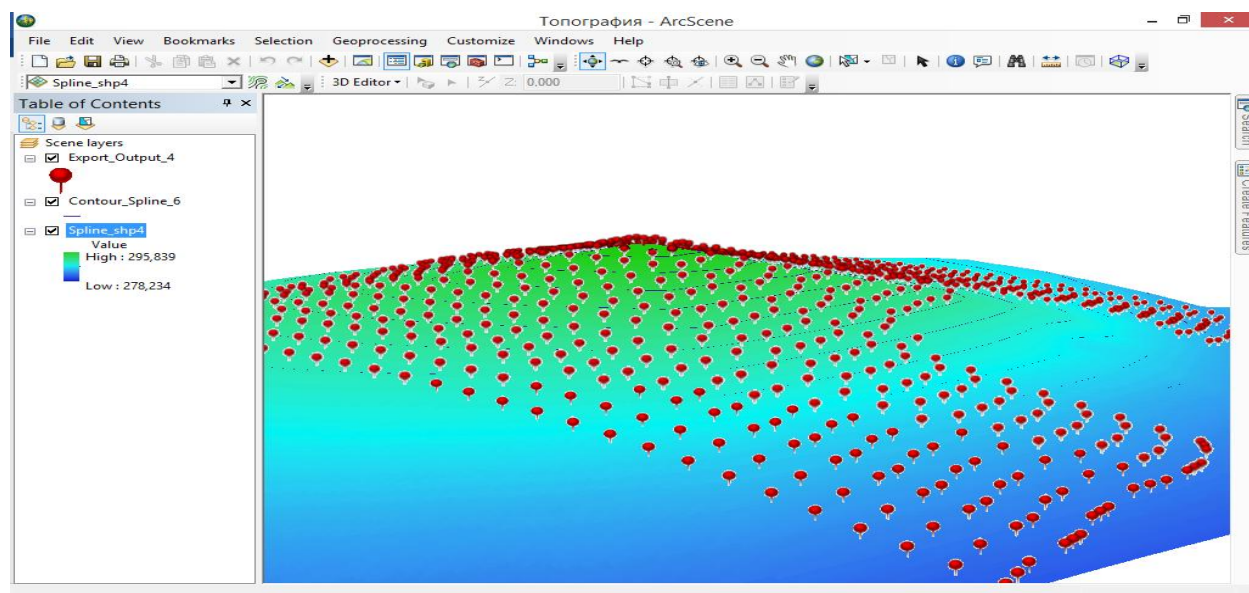
Liberation of the territory by interpolation using point thematic layers. For this. ArcToolbox will be activated. Click the SpatialAnalyst Tools section and open the Interpolation tab, then double-click the spline in the resulting Analytics row. The resulting window requirements are met, and an arrow key is created, and an external zone is created. Using the resulting surface, the Surface

element opens in the SpatialAnalystTools window, and the Contour Analytics command is selected. As a result, a window appears on the screen. The created surface is displayed in a window with the height of the relief area in the scale and by pressing the arrow key.



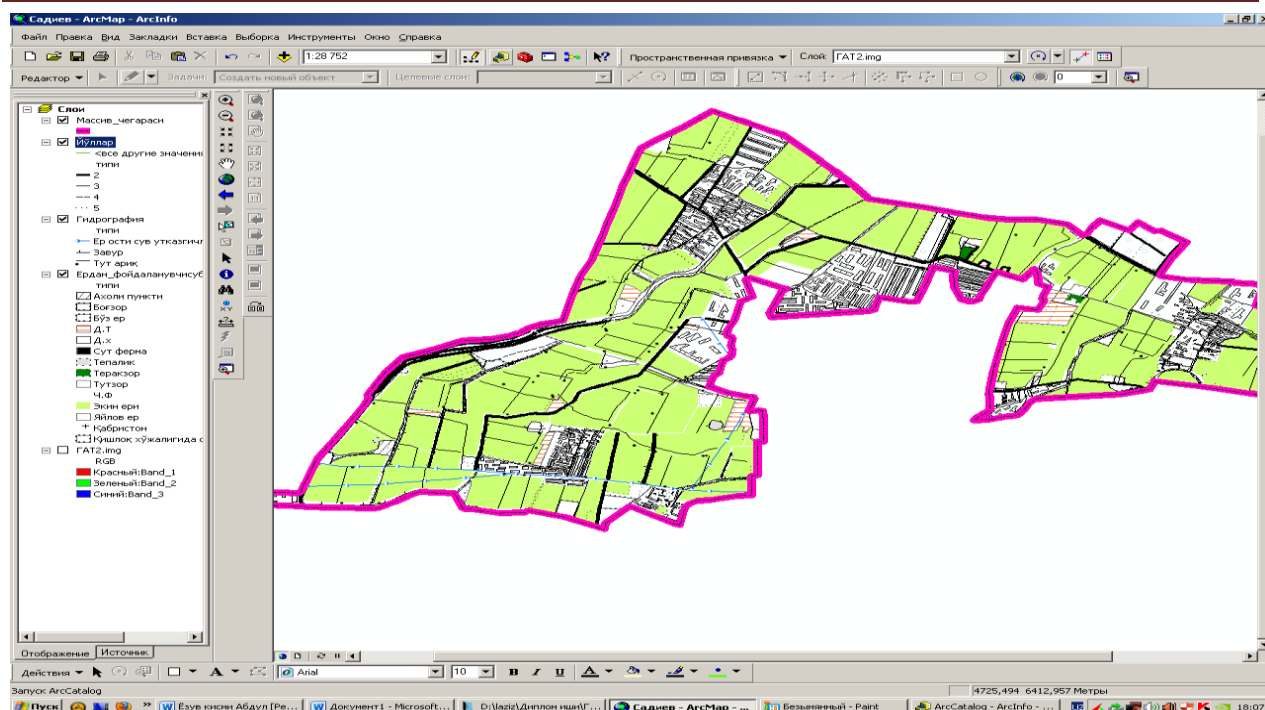
Pic 5.

Based on the above, topographic plans and maps will be created by mathematical processing of territories in modern programs to determine the values of topographic surveys during field work using an electronic total station.



Pic 6.





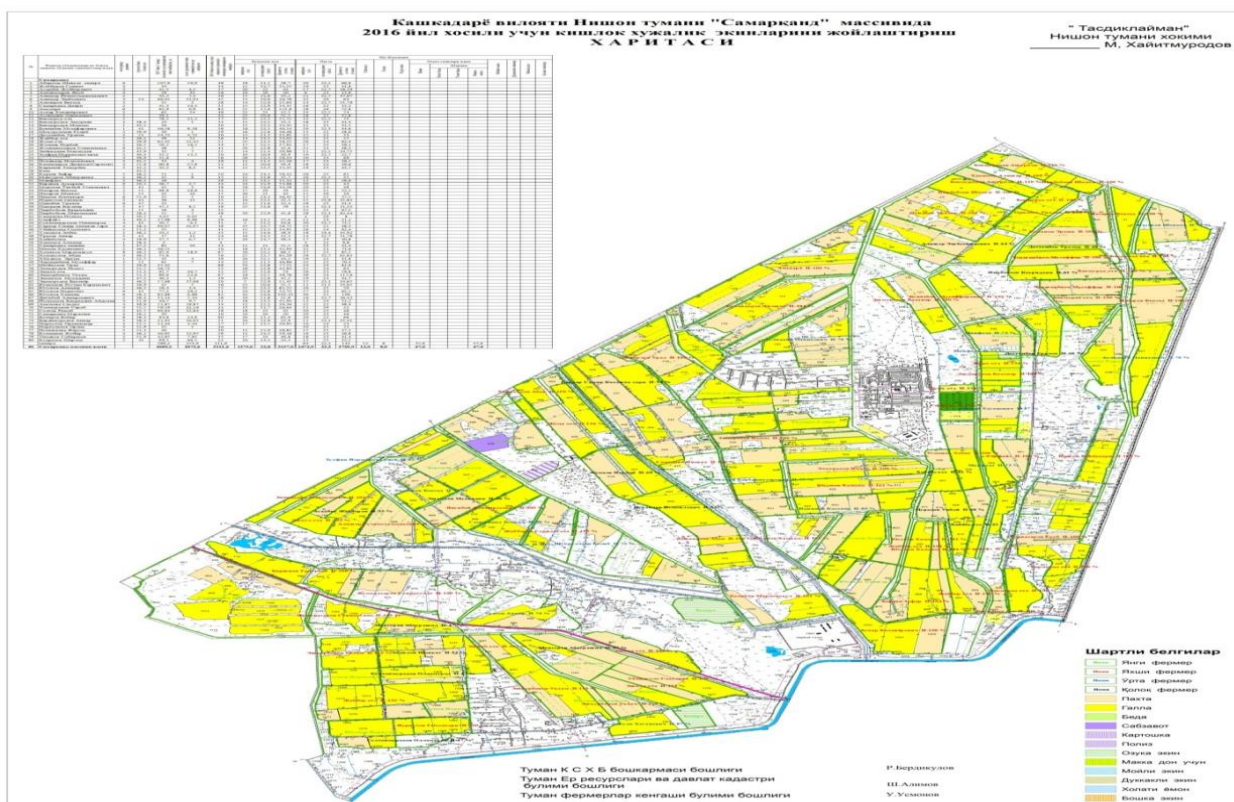
Pic 7. Prepared plan

In addition, the volume and level of data available today is so large that it is impossible to analyze and analyze them without the use of modern computing and software tools. Therefore, the creation of automated systems based on modern computer technologies that provide detailed information about natural resources and methods of soil erosion, which play an important role in the development of the national economy, is one of the most relevant.

Currently, the use of modern technologies in the field of land management, business process automation. One of them is the technology of creating electronic maps for land use and land management. Currently, geographic information systems, ArcGIS software, and computer technologies are widely used in almost all sectors of the economy. This is a very easy-to-use program.

Using space and aerospace widely used digital information maps to create geo-information systems in various sectors of the national economy, the technology for creating high-quality digital maps has been created and is being created. At the same time, digital maps created in various formats are converted to ArcGIS software formats and electronic maps are created.

With the help of the program arcgis for agricultural land on an area of 52.0 hectares against wind erosion and flooding of water bodies using a GIS system and three-dimensional data collection in the farms of Turkmenistan, Shirinobod, Samarkand and Uchmullinishansky district of Kashkadarya region and electronic maps.



Pic 8. Map of the location of crops in the farm "Samarkand" Nishansky district.

Creating digital maps in ArcGIS software for land use and state land cadastre, as well as for other purposes.

Thus the benefits of ArcGIS:

- Development of high-quality maps and plans;
- providing digital maps of different sizes;
- Speed of the map creation process compared to other programs;
- Creation of centralized databases;
- Remote editing of digital maps (Internet);
- Ability to accurately deliver maps to GPS and electronic taximeters;
- Provision of interactive geo-information services.

## CONCLUSION

ArcGIS, currently a widely used GIS system, is now very important for creating electronic maps and maps for mapping and planning agriculture. It is an automated system that allows the use of graphical and thematic databases for mapping, as well as for monitoring and application of monitoring data. This technology of making maps is one of the most popular and fast-growing industries today. ArcGIS is a powerful tool that allows companies and organizations to convert thematic maps and plans from paper to digital. When you enter digital data or map data into an electronic digital map and plan generated by ArcGIS, the program data will be automatically

downloaded, making it easier for us to prepare data about agricultural land or territories in MicrosoftExcel. In addition, a business or district diagram is added automatically if it includes a map diagram and a plan.

### LITERATURES:

1. Berlyant A. M. Geoikonika-M.: Moscow state University, Russian Federation AEN, Astreya, 1996
2. Safarov, E., Musaev I., Abdurahimov N. Geochronologically. T.: TIMI, 2008., 160 b.
3. Bulatova G. N., Trofimov A. M., Panasyuk M. V. development Trend of GIS. Journal of Geodesy and cartography, No. 9, 1997, 50-53 p.
4. Yekhlakov Yu. P., Zhukovsky O. I., Skidanov N. P. Urban cadastre and GIS-technology / / MGIS M., 1996
5. Ахборот тизимлари ва технологиялари-Т., “Шарк”, 2000.
6. Арипов М. Информатика ва ҳисоблаш техникаси асослари – Т., 2001.
7. Глушаков С.В., Кнадей Г.А. Компьютерная графика. Харьков, ФОНО, 2001.
8. Хейфец А.Л. Инженерная компьютерная графика AUTO CAD- М., 2002.
9. Ғуломова Л.Х. География ахборот тизимлари. Т. Университет, 1999.
10. Ғуломова Л.Х. География ахборот тизимлари ва технологиялар. Т. Университет, 2010.
11. Сафаров Э.Ю. Географик ахборот тизимлари. Тошкент: Университет, 2010.
12. Ғуломова Л.Х. Сафаров Э.Ю. География ахборот тизимлари ва технологиялар. (2-қисм) Т. Университет, 2013.
13. Берлянт А.М., Кошкарев А.В. “Картография и геоинформатика”. М., 1991.
14. Берлянт А.М., Геоиконика – М.: МГУ, “Астрей”, 1996.
15. Шайтура С.В. Геоинформационные системы и методы их создания. М.:1998.
16. Раклов В.П. Географические информационные системы в тематической картографии. – М.: ГУЗ, 2003.
17. Брыкин П.А., Киммельман С.А. Организация и управление топографо-геодезическим производством. М.,НЕДРА, 1978
18. Лысюк В.Н. Экономика организация и планирование картографического производства М., 1987.
19. Смирнов Л.Е. Топографо – геодезическое и картографическое производство. Учеб. Пособие., Л., Изд-во ЛГУ , 1986.
20. Багратуни А.П. Нормативная база по управлению и экономике картографических предприятий М., ЦНИИГАиК, ГУГК, 1985.

### Интернет манбалар

- 1) <http://www.solver-net.com/1251/gishp.htm>
- 2) [http://www-gis.sccc.ru/~kpa/WEBLAB/OUBOOK/web\\_serv.htm](http://www-gis.sccc.ru/~kpa/WEBLAB/OUBOOK/web_serv.htm)
- 3) [www.mapinfo.com](http://www.mapinfo.com) «MapInfo» дастури веб саҳифаси
- 4) [www.arcgis.com](http://www.arcgis.com) «ArcGIS» дастури веб саҳифаси
- 5) [www.gisinfo.ru](http://www.gisinfo.ru) «Panorama» дастури веб саҳифаси
- 6) [www.dataplus.ru](http://www.dataplus.ru) «DATA+» веб саҳифаси

## CRITERIA FOR EVALUATION OF EARLY DIAGNOSIS OF TOOTH-JAW SYSTEM ANOMALIES

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### ABSTRACT

*Tooth-jaw anomalies are the presence of abnormalities in the development of teeth, which lie in different planes relative to the tissues of the jaw. Anomalies are the third most common cause of caries and periodontal disease. The study of the prevalence of dental anomalies and deformities and the effectiveness of their treatment is a topical issue, as it determines the need of the population for therapeutic and prophylactic orthodontic measures, calculation of the required amount of orthodontic care and monitoring and prevention measures. allows you to evaluate the effectiveness.*

**KEYWORDS:** *Dental Anomalies, Deformities, Preventive Measures, Orthodontic Appliances.*

### INTRODUCTION

**Relevance of the topic:** A decrease in the prophylactic direction in the activities of dentists leads to an increase in dental pathology in children. There are abnormalities in tooth development after caries and periodontal pathology. It is known that they lead to a violation of the basic function of the teeth - chewing - and then gradually develop functional changes in the entire digestive system. In addition, disorders in the development of the dentofascial system lead to a deterioration of a person's appearance, negatively affect his psycho-emotional state and hinder social adaptation. The causes of dental anomalies are varied. Spirin V.V. (2003), Khoroshilkina F.Ya. (2000) noted that the effectiveness of treatment of dental-jaw anomalies depends on the general condition of the body, more precisely on its physical development. Here Zaripova R.T. (2007), Mejidov K.S. (2012), Rudenko H.H., Melnikov I.Yu. (2013) found a decrease in the proportion of children and adolescents with normal physical development at the population level, including locations. The need for orthodontic treatment is 36.3% of the number of children examined. According to F.Ya. Khoroshilkina (2005), 69.8% of first-graders had malocclusion [137]. According to I.M. Teperina (2004) reported that the prevalence of dentoalveolar anomalies in Tver was 74.9%, 82% in children aged 6–9 years, and 72.3% in children aged 10–12 years. THEY. Fares, A.Ch. Pashaev (2009) found that 58.3% of children in Baku had OF, while children living in the city center had anomalies of 34.1% and on the outskirts 21.1% .

**The purpose of the topic:** To study the prevalence of defects in schoolchildren with dental anomalies and to develop criteria for evaluating the early diagnosis of this pathology.

**Materials and methods:** To determine the prevalence of anomalies and deformations of the dental system among schoolchildren aged 7-13 living in Alat district of Bukhara region: 86 sick children were examined. The inspection was performed using the following methods.

Clinical examination of patients.

To study the performance of jaw models.



Study of tooth size.

Study of tooth size.

Study of the condition of the anterior tooth group according to orthopantomograms.

Study of dimensional development of temporo mandibular joints.

Study of the parameters of the telorad ograms of the head in direct projection.

Statistical return of data obtained during the study.

1. Orthodontists recommend that children from 7 months to 17 years of age be examined once every 6 months on the basis of dental departments in frequency schools. Instruct dispensary orthodontic registration of patients with dentoalveolar deformities and patients who are clearly prone to their occurrence, including those with bad habits (risk group). Such patients should be offered an examination and an orthodontic treatment plan to be discussed with their parents in the orthodontic rooms located at the regional dental clinics.

2. Orthodontists are recommended to hold regular lectures in schools for parents on the prevention and treatment of dental deformities; production of sanitary bulletins, training posters and brochures for their placement in dental clinics.

3. Psychological preparation of the child, as well as motivation in the family is mandatory when prescribing orthodontic treatment to patients aged 7-12 years using removal equipment. Before starting treatment, a connection should be established between the doctor and the child with the help of the parents.

4. The level of cooperation with the patient should be taken into account when choosing equipment. Non-removable devices that do not require the active participation of patients with a low level of collaboration are preferred. With moderate to high levels of collaboration, removable mechanical and functional devices, including orthodontic simulators, can be used.

5. It is recommended to bite the orthodontic treatment process temporarily or intermittently in the removable equipment, taking into account all the therapeutic and prophylactic effects in the dental system; and in the continuous teething phase (if necessary) using fixed equipment, then holding until puberty and monitoring at least 1 time per year after removal of the holding device.

## REFERENCES

1. Alabin I.V. Anatomy, physiology and biomechanics of the dentofacial system: Textbook for student medical colleges and schools / I.V. Alabin, V.P. Mitrofanenko. M.: ANMI, 2002. -- 293 p.
2. Kozlov D.S. Violation of teething of permanent teeth of the anterior maxilla with congenital cleft of the upper lip and palate / D.S. Kozlov, E.Yu. Zolotareva, M.M. with international participation "Modern areas of theoretical and practical medicine." - Voronezh, 2005. -- S. 125-127.
3. Kozlov D.S. Odontomas in children / D.S. Kozlov, A.G. Vorobevskaya, L.K. Gubina, E.S. Mikhailova // Materials of the II All-Russian University Scientific and Practical Conference of Young Scientists and Students in Medicine. - Tula, 2003.-S. 80-84.

4. Khabilov NL, Nurova Sh.N., Nurov NB THE PREVALENCE OF DENTAL JAW ANOMALIES IN CHILDREN OF SCHOOL AGE OF THE BUKHARA REGION // International Journal of Applied and Fundamental Research. - 2015. - No. 12-9. - S. 1633-1634;  
URL: <http://www.applied-research.ru/ru/article/view?id=8208> (accessed: 10/30/2019)
5. Gubina L.K. Study of the prevalence of dentoalveolar anomalies and deformities among school children. Identification of the percentage of orthodontic treatment and evaluation of its effectiveness / L.K. Gubina, D.S. Kozlov // Abstracts for the IV scientific-practical conference with international participation "Actual issues of pediatric dentistry and prevention of dental diseases." - St. Petersburg, 2008.-- S.27-28.
6. Kozlov D.S. The effectiveness of the use of the orthodontic apparatus LM activator in patients with various dentoalveolar deformations / DSKozlov, LKGubina // Russian Dental Journal, 2008. - No. 5. -C. 36-38.
7. Abdullah M.S. Assessment of orthodontic treatment need in 5,112 Malaysian children using the IOTN and DAI indices / Abdullah M.S. // Community Dent Health. 2001. - Vol. 18. - pp. 242-248.
8. Abdullah M.S. Perception of dental appearance using Index of Treatment Need (Aesthetic Component) assessments. / Abdullah M.S., W. P. Rock W.P. // Community Dent Health. 2002. - Vol.19. - pp. 161-165.
- 9 Akkaya S.S. A comparison of sagittal and vertical effects between bonded rapid and slow maxillary expansion procedures / Akkaya S.S., U9em T.T. // Eur J Orthod. 1999.-- Vol.21. - pp. 175-180.
10. Al Nimri, K. Interceptive orthodontics in the real world of community dentistry / Al Nimri K., Richardson A. // Int J Pediatr Dent. 2000. - Vol. 10. -pp.99-108.



## MODERN TREATMENT OF PRIMARY WHITE SPOT CARIES METHODS OF APPLICATION "ICON"

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### ABSTRACT

*Frequent and excessive consumption of carbohydrates, poor oral hygiene binds cariesogenic microorganisms firmly to the dental pelvis and creates tooth decay. Adhesives accumulate at the retention points of the teeth when consumed, (fissures, cavities, contact surfaces, fillings, dentures), resulting in the process of decay and decay. As a result, caries develops on the tooth enamel surface.*

**KEYWORDS:** *Orthodontic Appliances, Tooth Enamel Surface, Caries, Demineralization Foci, ICON-0.4 Tool.*

### INTRODUCTION

**Relevance of the topic:** One of the current problems of dentistry is the application of preventive measures in the practice of dentistry, early detection, diagnosis and prevention of complications. The development of excellent treatments for the prevention of caries is one of the achievements of dentistry. He considered dental caries as a disease of polyetiological origin. AI Rybakov fully describes the endogenous and exogenous factors that contribute to the development of caries during the development of each person. Hereditary factors are of great importance. Diseases experienced by the mother in the formation of organs and systems of the fetus; In diseases of the thyroid gland, metabolic disorders, pregnancy toxicosis and drug overdose, chronic maternal infections and allergic diseases, mental trauma and extreme conditions have a significant impact on the fetus. All these diseases affect the dental system and hard tooth tissue. This period is of great importance for natural nutrition, chronic and infectious diseases. The exogenous factors are non-compliance with the rules of oral hygiene, deformation and trauma of the pricus, impaired salivation, changes in intraoral pH. Childhood and adolescence are the period from 6 to -20 years. Distinguishes between exogenous and endogenous factors that cause dental caries. Endogenous factors include diseases (somatic), excessive consumption of carbohydrates, puberty, high levels of metabolism, micronutrient deficiencies, liver dysfunction, malnutrition. Decreased dental tissue immunity, fluoride deficiency, changes in tooth pulp. Exogenous factors include poor oral hygiene, pricus deformity, injury, impaired salivation, impaired oral pH, difficulty in extracting some teeth, dental depulpation, diseases of the dental jaw system. 20 years to 40 years. Endogenous factors that cause caries, at this age are diseases of the gastrointestinal tract, liver, endocrine system disorders, diseases of the cardiovascular system. Exogenous factors are diseases of the dental system, oral hygiene. absence is a violation of salivary secretion. 40 postoperative period. According to the author, it represents the interrelationship between the presence of plaque and diseases of internal organs and systems. The correlation of these factors is the initial mechanism in the caries process. Since the 2000s, microinvasive treatment of proximal surface caries has been achieved. This method was

developed by Professor H. Meyer-Luckell and Dr. S. Paris. The method of treatment is carried out by demineralization at the level of tooth enamel using a deep fluoridation tool ICON 0.4.

**The purpose of the topic:** Improving the effectiveness of the use of ICON 0.4 in the elimination of foci of demineralization on the damaged surfaces of the tooth enamel surface when using orthodontic appliances.

**Materials and methods:** The Bukhara Children's Dental Clinic received 44 orthodontic devices for 11-14-year-old children with primary white spot caries.

**Results and analysis:** Forty-four children were studied in two groups using ICON 0.4 in patients with orthodontic appliances and primary white spot caries.

A first group of 28 patients was administered to children with primary white spot caries before using ICON 40.0. When applied, the surface of the tooth is removed from the saliva of the oral fluid. It is then dried and the ICON 40.0 tool is applied. Sick children are advised not to eat for 2 hours, not to chew solid foods for 2-3 days, and to pay attention to the effectiveness of chewing. The course of treatment is prescribed once a month. This treatment condition is repeated for 3 months. When the analysis and results were examined, foci of demineralization were eliminated and treatment of moderate to deep caries was achieved. Patient children were given the opportunity to treat dental-jaw system abnormalities using orthodontic devices after treatment with ICON 0.4.

The second group B was performed by deep fluoridation using ICON 0.4 in the treatment of primary white spot caries that occurred after the use of orthodontic appliances in 16 patients. Examination of the results revealed that secondary dentin was formed instead of demineralization foci and that there were no complaints after treatment in sick children and no inconvenience in the use of orthodontic appliances.

**Conclusion.** Deep fluoridation of foci of demineralization using the tool ICON 0.4 has shown good results in the treatment of primary white spot, moderate, deep caries in both groups of sick children. In our scientific studies, it was found that the use of ICON 0.4 in deep caries forms secondary dentin and protects the pulp roof from exogenous and endogenous influences. In the treatment of primary white spot caries, elimination of foci of demineralization at the tooth enamel level was achieved.

#### LIST OF REFERENCES

1. Abdulkhakov, R. A. Epidemiology of Helicobacter pylori / R. A. Abdulkhakov, S. R. Abdulkhakov // Practical medicine. - 2006. - No. 4. - S. 2-3.
2. Avdeeva, E. A. Diseases of teething: classification, clinic, diagnosis, treatment: teaching aid / E. A. Avdeeva, V. L. Evtukhov. - Minsk: BSMU, 2013. -- 24 p.
3. Avunduk, A. Gastroenterology / A. Avunduk; per. from English - Moscow: Publishing house "PRACTICE", 2013. - 752 p.
4. Agapov, N. I. Clinical dentistry of childhood / N. I. Agapov. -Moscow: Medgiz, 1953.- 348 p.
5. Agapov, N. I. Symptomatic value of anomalies of the dental system / N. I. Agapov; edited by P. Dauge, M. Kovarsky, A. Evdokimov. - Moscow: State Medical Publishing House, 1926. - 139 p.

## LOSHLI-YUSHENKO-KRASNAGORSKIY METHOD OF LEAVE IN CHILDREN WITH BRAIN PALACY

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### ABSTRACT

*Cerebral palsy in children is determined by a disability of 3-5 patients per 1000 live births. According to the results of dental examinations, the prevalence of caries and its complications in children with cerebral palsy ranges from 80% to 85%.*

**KEYWORDS:** *Cerebral Palsy, Saliva, Oral Cavity, Morphological Structure.*

### INTRODUCTION

It is important to develop specific treatment measures in children with this pathology. Despite the active work of various specialists, medical professionals and parents, unfortunately, the number of patients diagnosed with cerebral palsy is increasing year by year.

The prevalence of dental disease among children with brain pathology has been observed in Solyanin (2005), the average age of a child diagnosed with cerebral palsy is 11.5 years. Permanent biting starts at the age of 12 in them, and given the low level of oral hygiene in these children, it is very important to take measures to prevent and treat their oral diseases.

Children cannot feed the oral cavity rationally, and some children do not have the ability to take care of themselves. All of this comes with a lack of parental attention. The dental condition of such children is often aggravated. This means that children with acute need dental care and prevention and treatment of dental diseases in these children. The help of dental specialists is mandatory in the lives of children with brain pathology. The development and application of therapeutic and prophylactic measures should be aimed at improving the hygienic condition of the oral cavity, the treatment of caries, diseases of the oral mucosa, periodontal diseases and other diseases of the oral cavity. Because it is easily seen in children with cerebral palsy, dental procedures should be performed taking into account the characteristics of neuromuscular pathology. It is important to work as actively as possible with children with disabilities and to organize activities with parents and various professionals in the field of oral care for children. Prevention of dental diseases and clinical examination of children at the dentist should be of high quality and effective.

Due to the existing somatic pathology in patients with cerebral palsy, it is difficult to use the traditional treatment regimen in certain oral diseases, which necessitates the search for new approaches to address this problem.

Although salivary enzymes are highly active, starch is not completely broken down under their influence because food does not stay in the oral cavity for long. Ptialin and maltase have an optimal effect under alkaline conditions. A 0.01% concentration of hydrochloric acid attenuates the action of salivary enzymes, while a high concentration slows down the action of salivary enzymes and breaks them down, so that gastric juice stops the action of salivary enzymes. Because food does not absorb gastric juice all at once, the effect of salivary enzymes on

carbohydrates can last for some time in the stomach. The secretion of salivary glands is stimulated reflexively. Foods or rejected substances that affect receptors in the oral cavity cause unconditional salivary secretion reflexes.

**The purpose of the topic:** To determine the chemical composition of saliva in oral fluid in children with cerebral palsy and prevention of dental diseases.

**Materials and methods:** The composition and environment of the saliva of 67 boys and girls aged 11-14 studying in the special boarding school No. 27 in Bukhara were determined.

**Conclusions and analyzes:** In conducting scientific studies, hypersalivation was studied in two groups depending on the amount. The first group of 46 sick children was divided according to the spontaneous course of salivation. The remaining second group was identified in 21 sick children based on the movement of the oral cavity organs. In addition to mucin, saliva contains a small amount of protein - globulin, amino acids, creatinine, uric acid, urea, as well as inorganic salts. All of these substances form a solid residue of saliva (0.5-1.5%). 2/3 of it is organic matter and the rest is mineral salts.

The first group consisted of 46 patients with 3.4% solid saliva residue when examined for salivary fluid component, which is a 98.7% developmental marker in the occurrence of tooth enamel erosion and caries complications.

In the second group of 21 patient children, when the saliva fluid component was examined, the solid residue of saliva was 2.2%, indicating a 68.7% development in the occurrence of tooth enamel erosion and caries complications.

## CONCLUSION

In children with cerebral palsy, salivation is consistently high. This appearance of hypersalivation leads to tooth enamel erosion and the development of caries complications. In addition, an increase in solid residue in saliva (protein - globulin, amino acids, creatinine, uric acid, urea, inorganic salts) causes gingivitis of the upper and lower gums. As a result, the development of a tumor form of hypertrophic gingivitis can be observed in sick children of this age.

## REFERENCES:

1. Prevention and treatment of caries in children with cerebral palsy 2019. Mirsalixova F.A., Eronov Yo.K.
2. Development and evaluation of the effectiveness of the program of dental observation of children with diabetes mellitus in unfavorable conditions of the environment in 2020, Kamalova F.R.
3. Izucheniye anomalyiy chelyustno-litsevoy sistemy detskogo vozrasta v Buxarskoy oblasti 2019 g., Kamalova F.R. G.T. Eshonkulov., A.A.Radjabov., M.A.Saidova.
4. Frequency of distribution of short uzdechki yazyka i verxney guby v doshkolnyx uchrejdeniyax 2019 g., F.R. Kamalova A.A. Radjabov, F.A.Turaeva, M.Sh.Afakova
5. Gafforov S.A.O.O.Yarieva. / Stepen povrejdeniya tverdyx tkaney zubov karioznymi i nekarioznymi u detey i podrostkov goroda Buxary / Evraziyskiyurnal pediatrii 3 (3) 2019-Uzbekistan / S.111-117

## OF COMPREHENSIVE TREATMENT OF GENERALIZED PERIODONTITIS USING AUTOTROMBOCYTIC MASS

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### ABSTRACT

*Currently, researchers are focusing on the use of a mass of autothrombocytes for the effective treatment of periodontal disease. The article notes the effectiveness and advantages of treatment when using this method.*

**KEYWORDS:** *Chronic Periodontitis, Autoimmune Mass, Periodontal Index, Hygienic Effectiveness, Tissues, Men, Women.*

### INTRODUCTION

**Relevance of the topic:** The problem of the prevalence of inflammatory periodontal diseases in the world is still very acute. Chronic inflammatory periodontal disease (CVD) has been known for centuries. HVZP is promoted by various factors of local and general character which cause and support inflammatory processes in periodontal tissues for a long time. The first place in the structure of CVI belongs to generalized periodontitis (GP) [2,6]. According to the World Health Organization (WHO, 2010), the incidence rates among the population of the globe of CVI are still at a high level (90%), with the leading place among nosologies in the field of GP. Based on various epidemiological studies and their data, it can be said that in recent years there has been a sharp increase in the number of chronic inflammatory periodontal diseases in the structure of the dental morbidity of the population of the Republic of Uzbekistan and many other countries. An increase in the prevalence of GP occurs mainly at the age of 35 to 55 years, and by the age of 40-45 it reaches the figure of 96%. At a young age from 16 to 25 years, GP is determined in 55-75% of patients. [14]. Given the widespread prevalence of CVD and the adverse effect on the body as a whole, there is a need to develop new diagnostic and therapeutic algorithms that could facilitate the work of a doctor to recognize the etiological and pathogenetic factors of the disease, and also to correct them at the initial stage of the onset of the disease. According to WHO experts, based on the latest results of epidemiological studies, intact periodontium was found in only 2-10% of cases, periodontal disease was observed in 90-95% of the adult population.

**OWN RESEARCH DATA.** In connection with the foregoing, we conducted a clinical study to study the results of conservative treatment using autothrombocyte mass, the purpose of which was to choose the treatment tactics for patients with various forms of generalized periodontitis.

To study the prevalence of chronic generalized periodontitis of varying severity, 240 people were examined in the period from 2017 to 2019. A clinical study was conducted in the dentistry office of the Bukhara regional multidisciplinary medical center. Bukhara city.

At the initial examination of patients, the following complaints prevailed:

- The presence of unpleasant odor isort,



- bleeding gums when brushing your teeth and eating solid food,
- Color change
- Presence of plaque (dental calculus),
- exposing of sheeksubs,
- The presence of periodontal pockets and detachable removable products.

On the basis of clinical data was diagnosed with chronic generalized periodontitis.

**Research results and discussion.** At the initial stage of treatment, all patients of the two study groups underwent an index assessment, which was carried out before treatment, on the 3rd day, 7 days, 1 month, 6 months and one year after treatment, which is presented in the tables below.

On the day of treatment, patients complained of bleeding gums when brushing their teeth, swelling of the gums, aching pain in the gums, pain when chewing, bad breath, tooth mobility, and mastication. Some patients complained of a general condition disorder: weakness, malaise, irritability, loss of appetite. Objectively: on the first visit, hyperemia, swelling, loose gingival consistency were clinically observed, the depth of the PC was on average  $5.8 \pm 1.2$  mm, of the PC serous-purulent exudate, of some pockets - the growth of granulations.

Developed on the basis of clinical studies and observations, the scheme for practical use, which gave positive results in patients with generalized periodontitis: the 1st procedure of subgingival destruction of the biofilm after professional hygiene during the anti-inflammatory course (on days 3-7), the 2nd procedure - after 5- 6 weeks, the 3rd procedure - after 2.5-3 months, then after 4-5 months. Achieving lasting remission - supportive subgingival therapy once every 5-6 months. Autothrombocyte mass is used after basic therapy, then after 6 months and then 1-2 times a year, depending on the individual clinical case.

#### LIST OF USED LITERATURE

1. Akhmerov P.P., Zarudy R.F., Collection of guidelines for the use of platelet autoplasm. Technology Plazmolifting, Plazmolifting TM. Moscow 2018 p.41.
2. Bulyakov R.T. Experience in conservative treatment of severe periodontitis using modern biofilm destruction methods and Plazmolifting / P.T. Bulyakov, R.I. Sabitova, O.A. Gulyaev // Problems of dentistry. - 2014. - No. 1. - S. 54-58.
3. Kostrigina E.D. A modern view of the etiopathogenesis of periodontitis / E.D. Kostrigina, L.A. Zyulkina, P.V. Ivanov // News of higher educational institutions. Volga region. Medical sciences. Literature review. - 2017. - No. 3 (43). - S. 118-128.
4. The use of autoplasm containing platelets in dermatocosmetology and dentistry. Plazmolifting R.R. Technology Akhmerov et al. // Plastic Surgery and Cosmetology. 2013. - No. 1. - C.1.
5. Plazmolifting technology - an injection form of platelet autoplasm for the treatment of chronic catarrhal gingivitis / P.R. Akhmerov [et al.] // Periodontology. - 2012. - No. 4. - S. 80-84.
6. Cho Y.D., Kim K.H., Ryoo H.M., Lee Y.M., Ku Y., Seol Y.J. Recent advances of useful cell sources in the periodontal regeneration. -Curr Stem Cell Res Ther. 2018 Aug 15.



## DETERMINATION OF THE LEVEL OF RISKS IN INVESTMENT PROJECTS USING ECONOMETRIC MODEL

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### ABSTRACT

*Particular study of the effective use of investments, including foreign investments, on technical and technological modernization of enterprises and diversification of products in the conditions of modernization of the economy, ensuring the competitiveness of manufactured products and services in the world market is one of the most important tasks of today. Today, further reforming and liberalizing the Uzbek economy should accelerate the improvement of the investment climate in the industrial sector, especially with the development of the private sector.*

**KEYWORDS:** *Investment, Investment Project, Degree Of Uncertainty, Risk Analysis Of Topical Literatures*

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### I. INTRODUCTION

In the investment process, investors try to anticipate the returns on their investment and create the necessary methods. The emphasis is on the impact of internal and external risks. Because there is a big risk in the face of big profits. Therefore, a number of mathematical expressions are used in the assessment and prevention of potential risk factors. Dispersion and mean squared deviation values are an important factor in risk assessment.

When calculating the risks of investing in the selected project, the dispersion and standard deviation formula for each production can be written as follows:

$$\sigma_i^2 = \sum_{i=1}^m (q_{ij} - q_i)^2 \cdot P_j, \quad (1)$$

$$\sigma_i = \sqrt{\sum_{i=1}^m (q_{ij} - q_i)^2 \cdot P_j}, \quad (2)$$

in this  $\sigma_i^2$  - risk levels or dispersion of the investment efficiency of each production,  $\sigma_i$  -  $i$  the level of risk or the standard deviation of the future efficiency of investments in the production,  $P_j$  - in the future  $j$  - likelihood.  $q_i$  and From the found values, only one type of

production investment plan can be substantiated. The efficiency dispersion of the total investment fund can be found in the following relation:

$$\sigma_p = \sqrt{\sum_{j=1}^m P_j (q_{pj} - q_p)^2}, \quad (3)$$

In addition, the investor will invest his or her own costs, either at higher risk, or at less risky production. In this regard, let us consider the terms of the relationship between dispersion, half-dispersion and expected income.

If the dispersion is equal to half the dispersion and the condition  $<q$  is met, the income distribution is symmetric and the gain is () less than the expected return (). This is half the total risk. At the same time, the dispersion and the mean squared deviation allow estimation of the degree of risk. If the dispersion is greater than half the dispersion, the distribution of income is left asymmetric if the condition is met, and its dispersion risk is reduced.

If the dispersion is less than half the dispersion and the condition is met, then the income distribution is asymmetric to the right, and the risk of dispersion increases.

Generally, as an investor prepares to quit a particular type of production or replenish his investment fund, he or she can use the risk selection function to justify spending on its most productive option. In addition, although the above formulas allow for the prediction of the effect of the risk on the basis of the data, they are not sufficient to accurately estimate the risk. In order to be more precise, we need to find the mathematical expression-variance coefficient. The variance coefficient is expressed by the ratio of the mean squared deviation to the expected

return value: 
$$\omega = \frac{X_i}{q}$$

Under this formula, the investor will have a clear idea of which financial transaction is less risky.

It should be noted that if a total investment fund invested in an enterprise has two or more productions, a standard deviation of its future effectiveness is used to estimate the total investment fund's risk. In this  $q_{ij} = \left( \frac{Y_{ij}}{P_{ij}} - 1 \right) \cdot 100$  The formula for taking into account the formula is the risk of a common investment fund with n type of production, which can be calculated as follows:

$$\sigma_p = \sqrt{\sum_{j=1}^m P_j (q_{pj} - q_p)^2} \quad (4)$$

Suppose there are two types and productions in the general investment fund of a selected project. Then, using the above formula, one can estimate the total investment fund risk as follows:

$$\sigma_p = \sqrt{\sum_{j=1}^m P_j [ (\nu_1 q_{1j} + \nu_2 q_{2j}) - (\nu_1 q_1 + \nu_2 q_2) ]^2}$$

By changing the expression below the root, we get:

$$\sigma_p = \sum_j P_j \left[ (v_1 q_{1j} + v_2 q_{2j}) - (v_1 q_1 + v_2 q_2) \right]^2 =$$

$$= v_1^2 \sum_j P_j (q_{1j} - q_1)^2 + v_2^2 \sum_j P_j (q_{2j} - q_2)^2 + 2v_1 v_2 \sum_j P_j (q_{1j} - q_1)(q_{2j} - q_2) \quad (5)$$

It can be seen that the dispersions of productive capacities of 1, -2,-type:

$$\sigma_1^2 = \sum_j P_j (q_{1j} - q_1)^2; \quad \sigma_2^2 = \sum_j P_j (q_{2j} - q_2)^2 \quad (6)$$

appears.

The mathematical expectation of the expected increase in expected return on investment in two types of production, along with the expected future return on investment, is

$$\sigma_{12} = \sum_j P_j (q_{1j} - q_1)(q_{2j} - q_2) \quad (7)$$

can be found in the formula. This magnitude represents the closeness of the links between the efficiency of investment in both types of production. In terms of (6) - (7), the risk of a common investment fund in which there are two types of investment is:

$$\sigma_p = \sqrt{v_1^2 \sigma_1^2 + v_2^2 \sigma_2^2 + 2v_1 v_2 \sigma_{12}} \quad (8)$$

This formula not only identifies the risks of investing in two types of industries, but also determines the effectiveness and covariance of each type of production. Because the covariance assumes both negative and positive values, it is more convenient to use correlation coefficients to estimate the intensity of productive relationships. By definition, the correlation coefficients of the two random magnitudes are expressed as the ratio of the standard deviation of these magnitudes,

$$\rho = \frac{\sigma_{12}}{\sigma_1 \sigma_2} \quad \text{бунда} \quad -1 \leq \rho \leq 1 \quad (9)$$

The closer the correlation coefficient is, the more efficiently the two industries are connected, and the closer the value is to zero, the less the bond. If the correlation coefficient is negative, the increase in the efficiency of the first product results in the reduction of the efficiency of the latter. Taking into account the correlation coefficient, the risk of investment in two types of production is as follows.

$$\sigma_p^2 = v_1^2 \sigma_1^2 + v_2^2 \sigma_2^2 + 2v_1 v_2 \sigma_1 \sigma_2 \rho_{12} \quad (10)$$

For example, it is possible to show that the risk of type 1 production is less than the risk of type 2 production, that is,  $<$ , in this case the investment risk is not less than the risk of each type of production. We check this conclusion for the 1st production. Using the correlation coefficient not more than 1, based on formula (9):

$$\sigma_p^2 = \nu_1^2 \sigma_1^2 + \nu_2^2 \sigma_2^2 + 2\nu_1 \nu_2 \sigma_1 \sigma_2 \rho_{12} \nu_1^2 \sigma_1^2 + \nu_2^2 \sigma_2^2 + 2\nu_1 \nu_2 \sigma_1 \sigma_2 \langle$$

$$\langle \nu_1^2 \sigma_1^2 + \nu_2^2 \sigma_2^2 + 2\nu_1 \nu_2 \sigma_1^2 = (\nu_1 + \nu_2)^2 \cdot \sigma_1^2 = \sigma_1^2$$

from this  $\sigma_p < \sigma_1$  The  $(\nu_1 \neq 1 \text{ or } \nu_2 \neq 1)$

Therefore, the investment risk for two types of productions is smaller than the investment risk for large-scale production for profit.

Based on the above results, there is such orderly investment that its risk may be smaller than that of type 2 production.

$$\nu_2 = 1 - \nu_1$$

(10) The investment risk to production from the relation given in the expression may be as follows:

$$\sigma_p^2 = \nu_1^2 \sigma_1^2 + (1 - \nu_1)^2 \sigma_2^2 + 2\nu_1(1 - \nu_1)\sigma_{12} \quad (11)$$

Using this expression, we find that there is an investment that is less than the risk of type 2 production:

$$\sigma_p^2 = \nu_1^2 \sigma_1^2 + (1 - \nu_1)^2 \sigma_2^2 + 2\nu_1(1 - \nu_1)\sigma_{12} < \sigma_2^2 \text{ from this}$$

$$\nu_1^2 \sigma_1^2 + \sigma_2^2 - 2\nu_1 \sigma_2^2 + \nu_1^2 \sigma_2^2 + 2\nu_1 \sigma_{12} - 2\nu_1^2 < \sigma_2^2 \quad (12)$$

From both sides of the inequality  $X_2^2$  Drop off and  $\nu_1 < 0$  As for

$$\nu_1(\sigma_1^2 + \sigma_2^2 - 2\sigma_{12}) < 2\sigma_2^2 - 2\sigma_{12} \text{ from this } \nu_1 < \frac{2\sigma_2^2 - 2\sigma_{12}}{\sigma_1^2 + \sigma_2^2 - 2\sigma_{12}} \quad (13)$$

$$\text{As a result } \nu_2 = 1 - \nu_1 > 1 - \frac{2\sigma_2^2 - 2\sigma_{12}}{\sigma_1^2 + \sigma_2^2 - 2\sigma_{12}} = \frac{\sigma_1^2 - \sigma_2^2}{\sigma_1^2 + \sigma_2^2 - 2\sigma_{12}} > 0 \quad (14)$$

The formulas (13) and (14) show that there are areas for changes in the investment structure, which may be smaller than the risks of each producer.

If there is a correlation coefficient, the investment risk is zero. Investments made by the investor will definitely work. To find the condition of such an effective investment, we equate the risk of expression (14) with:  $\sigma_p^2 = \nu_1^2 \sigma_1^2 + (1 - \nu_1)^2 \sigma_2^2 - 2\nu_1(1 - \nu_1)\sigma_1 \sigma_2 = 0$

From this, the form is replaced by:

$$\nu_1^2 (\sigma_1^2 + \sigma_2^2 + 2\sigma_1 \sigma_2) - 2\nu_1 (\sigma_2^2 + \sigma_1 \sigma_2) + \sigma_2^2 = 0 \quad (15)$$

This equation has only one solution.

$$\nu_1 = \frac{\sigma_2^2 + \sigma_1 \sigma_2}{\sigma_1^2 + \sigma_2^2 + 2\sigma_1 \sigma_2} \quad (16)$$

Now the structure of investments in the second production can be found as follows:

$$\nu_2 = 1 - \nu_1 = 1 - \frac{\sigma_2^2 + \sigma_1\sigma_2}{\sigma_1^2 + \sigma_2^2 + 2\sigma_1\sigma_2} = \frac{\sigma_1^2 + \sigma_1\sigma_2}{\sigma_1^2 + \sigma_2^2 + 2\sigma_1\sigma_2} \quad (17)$$

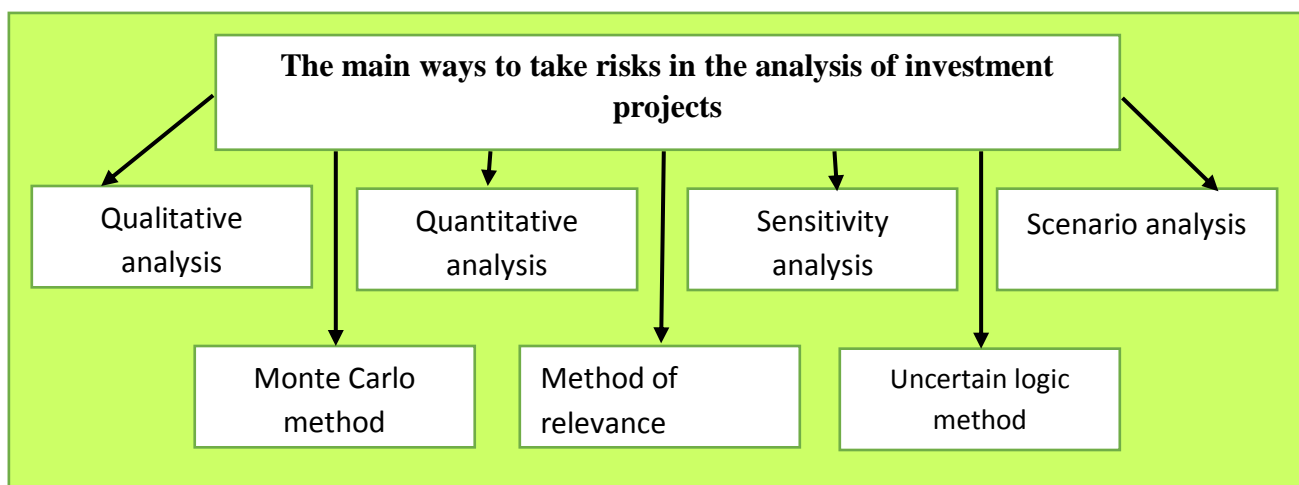
The investment risk of a particular project depends on the correlation of the efficiency of each type of production, which is expressed in (6.12) the value of the correlation coefficient and the diversification of the investor capital, taking into account the various investment opportunities that are expressed. The same conclusion applies to investment in n-type production.

Generally, the effect of diversification is a measure of the diversification of investments. Risk reduction through the choice of investment direction, that is, justification of the effect of diversification, is a classic summary of the theory of finding the most favorable investment climate, both scientific and practical.

### III. RESULTS

Thus, in summarizing the above considerations, it is best to describe "Risk is a subjective assessment of objective uncertainty" and, if uncertainty is an irreversible quality of the market environment, "Risk is a quantitative characteristic of the possibility of loss."

In this case, the investment project risk is a possible deviation of future cash flows from the project, mainly due to external (legislation, market reaction to the product, competitors' behavior) and internal factors (competence of the enterprise employees, errors in determining the project characteristics). as a result of lack of information and asymmetry of information. Using these definitions, it is possible to list a number of ways to take risks in the analysis of investment projects (Figure 1).



**Fig 1. The main ways to take risks in the analysis of investment projects**

According to the data presented in Figure 1, it is advisable to comment on each of the methods used to take risks in the analysis of investment projects.

Qualitative analysis.

The aim of the methods:

Topish Identifying specific types of project risks that affect the cash flow and possible causes of their occurrence.

These include expert evaluation and analogy techniques.

The advantages of these methods are:

- ◆ obvious results;

Langan identified risks can be used to develop recommendations to minimize them;

The downside of these methods is:

Miqd There is no quantitative assessment of risk.

Quantitative analysis.

The aim of the methods:

Belgilash Define a quantitative characteristic of the risks, and show the consequences for any investment project.

Risk scale:

- ◆ Dispersion, standard deviation, coefficient of variation in annual cash flow of the investment project, etc.

Sensitivity analysis.

The purpose is to determine the sensitivity of the criteria to the “consecutive - single” change of each variable.

Pros:

Sod ease of use;

- ◆ Visibility of results.

Disadvantages: the hypothesis that one factor may be altered, while other factors are considered invariant.

Scenario analysis.

Objective: To assess the ineffectiveness of the project as a sum of negative NPV probabilities.

Pros:

Sod ease of use;

- ◆ Visibility of results.

Disadvantages:

Sub subjectiveism in determining probability for each scenario under consideration;

- ◆ Does not cover all possible development scenarios and scenarios.

Simulation Modeling (Monte Carlo Method)

Objective: Provides the distribution of project profitability using iterations, which is the average value and the amount of risk for a set of NPV values.

Pros:

- ◆ Conducts accurate and quantitative assessment of project risks;



Muvaffaqiyatli successfully combines other economic and mathematical methods and other methods of game theory and operation research.

The disadvantages are based on the following serious assumptions:

Bo'lmas irreplacability of variables (their non-correlation);

♦ normal distribution.

Murakkab The complexity and the complexity of the calculations.

In the current globalization, development of the country's economy, ensuring continuity and continuity of production is the creation of competitive production. This is important in improving the quality, cost and competitiveness of the product and service industries.

According to the results of the study, increase of competitiveness of production and service is caused by its quality, high quality and low cost. In order to integrate these features into products and services, the economy must be equipped with new technology. This requires investment in economic sectors and their effective use. Effective use of investments in uncertainty conditions depends, first and foremost, on the correct allocation and direction of the economy.

Increasing the return on investment is based on probabilities. However, given that the theory of probability includes the interval  $[0; 1]$  and the coverage threshold, this reduces the degree of accuracy. In order to be clear in this regard, it would be advisable to introduce a theory of uncertain aggregation into the process, which in turn will allow us to achieve a certain reduction in inefficiency or deficit due to excessive investment in the sectors. Because the theory of indeterminate sets extends the interval (classical understanding)  $[0; 1]$  presented in the theory of probabilities. Also, intermediate values are not allowed in the normal set, except for the ambiguous set.

Since 1965, the theory of vague collections has been used in many fields and in many disciplines, including artificial intelligence, computer science, medicine, control technologies, decision-making, logic, management science, operations research, sample detection, robotics, and so on. The theory of this vague set can also be applied to the distribution and effective use of investments in economic sectors. In this regard, it is desirable to have a complete picture of the theory of vague collections. For this purpose, it is necessary to note the following as the basic concepts of the theory of vague collections.

Ноаниқ тўпламлар назариясидалингвистик кўрсаткичларни баҳолашда экспертлардан фойдаланиш тавсия этилади. “Лингвистик кўрсаткичларни биз табиий ёки сунъий тилнинг сўзлари ёки жумлаларидир”-деб атаймиз<sup>1</sup>. Ушбу таърифдан келиб чиққан ҳолда, математик тил ёрдамида ифодалаб бўлмайдиган ўзгарувчилар, яъни уларга аниқ объектив микдорий баҳо бериш мураккаб бўлган кўрсаткичлар деб ҳам айтиш мумкин

#### IV. DISCUSSION & CONCLUSION

Based on the aforementioned uncertainty theory, it is necessary to distinguish between allocation of investments on the basis of specific conditions, based on the methods of intersectoral distribution of investments. It is noteworthy that expert evaluation of investment processes based on uncertain collections is recommended by experts. However, based on the results of the research, it is possible to express linguistic variables in quantitative values using statistical data on the existing sectoral distribution of investments.

To evaluate the distribution of investments in the economy, it is necessary first of all to determine the trend equation for changes in the volume of investment in the economy and GDP.

Dynamic alignment of their value is carried out in order to determine the average annual incremental increase in their value in terms of the dynamics of changes in investment and GDP. The most common methods of statistical study of trend in practice are: expansion of interval (period); sliding average; analytical smoothing.

## REFERENCES

1. Chui, Y.C. and Chan, S.P. (1994) Fuzzy cash flow analysis using present worth criterion, *Engineering economist*, 39, pp. 113-138.
2. Kuchta, D. (2000) Fuzzy capital budgeting. *fuzzy sets and systems*, 111, pp. 367-385.
3. Suxarev O.S., Shmanev.S.B., Kuryanov.A.M., *Economic valuation of investments M.:INFRA-M, 2006. - 243p.*
4. Mishenko .V.V., *Management of investment. – M.: Finance and statistics, 2003. – 416 p.*
5. Gulyamov S.S., Abdullayev A.M. and others. *Predicting and modeling national economy. / under the publication of S.S.Gulyamova. – T.: Science and technology, 2007.*
6. Shodiev T.Sh. *Problems of modeling agricultural development (on the example of Uzbekistan) : dissertation of economy science doctor. – T.: TSUE. 1988 – 380 p.*
7. Xodiyev B.Y., Berkinov B.B., Kravchenko A.N. *Assessment of business value. Study Guide. / Under the edition of E.S.D., professor B.Y.Xodiev. – Tashkent: Science, 2006. – 228 p.*
8. N.Maxmudov. *Doing prognosis of Social-Economic processes. Study Guide. – T.: “Economy”, 2012*
9. Rasulev D.M. *Introduction to dynamics of general economic equilibrium. Study Guide. - Tashkent, TSUE, 2006. – S – 88.*
10. Bayxonov B.T *Improving methodology of econometric modeling distribution of investments through sectors in Uzbekistan’s economy. Monograph. – T.: “ECONOMY”, 2017. – 203 p.*
11. Bustonov M., Irmatov M. *economic growth quality – condition of improving populations’ living standards. //collection of lecture thesis of the republic academic-practical meeting namely “Perspectives of improving well-being of the people and progress of Uzbekistan in the condition of the world financial-economic crisis”. – Tashkent, 2011. – P. 180/*
12. Bustonov M. *theories and conditions of providing economic growth quality // collection of lecture thesis of the republic academic-practical meeting namely “main directions of providing macroeconomic proportionality and stable growth rates in economy”. – Tashkent, 2011. – P. 144.*
13. Bustonov M. *innovations are as economic growth quality// collection of lecture thesis of the republic academic-practical meeting namely “Strategy of modernizing economy: problems and passing ways to innovative development”. Tashkent, 2011. – P. 38.*
14. Bustonov M., Irmatov M. *Conditions and ways of stable growth// collection of lecture thesis of the republic academic-practical meeting namely “Strategy of modernizing economy: problems and passing ways to innovative development”. – Tashkent, 2011. – P. 222.*

15. Bustonov M., Makhmudov N. perspectives of developing micro business and providing its stable development//”Ideas for business” – cooperation between Tashkent State Economy University and BAT University in the sphere of “INSPIRE” scheme of the Britain consultation. Collection of lecture thesis of the international academic-practical meeting. – Tashkent, 2011. – P. 14.
16. Bustonov M. Conditions and perspectives of economic growth quality Ideas for business” – cooperation between Tashkent State Economy University and BAT University in the sphere of “INSPIRE” scheme of the Britain consultation. Collection of lecture thesis of the international academic-practical meeting. – Tashkent, 2011. – P. 103.
17. Bustonov M., Irmatov M. Main ways of increasing economic growth quality in Uzbekistan.// twenty fourth international Plexanov conference: collection of theses of Russian Economy Academy named after G.V. Plexanov. – Moscow, 2011. – P. 153.
18. Bustonov M., Djumaniyazov Sh., Akhmedov J. Macroeconomic analysis of indicators of economic growth.// Exchange Expert. – Tashkent, 2010. – № 11-12, – P. 52.
19. Bustonov M. Prediction indicators of economic growth quality//market, money, credit. – Tashkent, 2010. – № 06, [ 157 ] – P. 34
20. Bustonov M. Macroeconomic analyses of tendencies and legalities of stable economic growth// Taxpayer magazine. – Tashkent, 2010. – № 1 (11) – P. 19.
21. Bustonov M., Berkinov B. reform processes and deepening them in economic fields// economy and education. – Tashkent, 2008. – P. 28.
22. Baykhonov B. T, Bustonov M.M., Econometric models of sectoral distribution of investments in the economy of uzbekistan // South Asian Academic Research Journals Vol. 9, Issue 8, August 2019
23. Bustonov M.M., The Firm Aspects and Conditions Providing the Qualities of Economic Growth in Uzbekistan // International Journal of Economic Theory and Application 2017; 4(4): 32-39 <http://www.aascit.org/journal/ijeta>

## THEORETICAL ISSUES OF HISTORY IN BERUNI'S WORK "MONUMENTS OF ANCIENT PEOPLES"

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### ABSTRACT

*This article deals with the views of the great scholar of the East Abu Rayhan Beruni on the theoretical issues of history in the work "Monuments of ancient peoples." It is analyzed that Beruni's views on the science of history in the XI century are still of scientific importance in modern history..*

**KEYWORDS:** *Beruni, Method Of Historical Comparison, Historical Process, Source, Information, Experience, Historical Science, Theoretical Issues.*

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### INTRODUCTION

Abu Rayhan Muhammad ibn Ahmad al-Beruni (973-1048) is one of the great figures who made an important contribution to the development of world science and culture. He inherited the legacy of ancient Greek scholars, studied language, philosophy, astronomy, mathematics, and was interested in many disciplines such as botany, mineralogy, geography, and history.

Beruni left a great scientific legacy for generations. We know that Beruni has more than 160 translations, works of various volumes, correspondence in various fields of science of his time. Of particular importance is the work "Monuments of ancient peoples" on the science of history and its theoretical issues. Beruni began to write *Osar al-Baqiya an al-Qur'an al-Khaliya* (Monuments of Ancient Peoples) in Jurjan during the period of emigration and completed it in 1000.

The work was first known to Europeans through a publication in Leipzig in 1876-1878 by the German orientalist and Beruni scholar Edward Zachau, and was translated into Russian in 1957 by M.A. Sale.

In *Monuments of Ancient Peoples*, the theoretical views of historical science on the concepts of historical comparison, comparative style, diachronic style, text analysis, evidence and information, and a number of research methods that still exist today are wonderfully expressed in oriental expressions.

In writing his work, Beruni takes a critical approach to the sources, boldly and fearlessly criticizing the historical works of his predecessors. SP Tolstov speculates that Beruni's such authenticity may have led to the disappearance of many of his historical works.

In many parts of Beruni's work, a number of views have been expressed on the impossibility of having clear and convincing evidence in the study of historical processes and events, the need to study other additional sources on the historical process under study, and to identify convincing evidence using historical comparison.

"At the same time, the path I have taken and the method I have chosen is not an easy one, but a long and difficult one," he said. Not all of the lies that have become so ingrained in the news and narrations are obvious. "Without other evidence, it would not be possible to know that some of them are lies."

In today's concepts, the method of historical comparison allows to reveal its essence when the details of the historical process are not clear and obvious, as well as to identify and generalize generality, regularity, recurrence, and to reveal historical proportionality. In Beruni's work one can read a number of ideas of this content.

- It is clear from the words "not all the lies contained in the news and narrations are clear ..." that all the information provided by Beruni in history books and historians may not be clear, unambiguous and convincing, "... in the absence of other evidence it was impossible to know whether some of them were false," he said, referring to several sources close to each other in order to clarify a historical situation and extract the most reliable information, otherwise it would be impossible to determine whether the available information in the source is false or true.

The phrase "one could not have known that some were false without other evidence" requires a broad interpretation, firstly, if any source information is interpreted by the author as a leading factor in the description of historical processes in the description of historical processes, then all available information in the sources nor does it make it possible to conceive of the same historical event or process in an exact and perfect way, which requires a comparative analysis with information from other sources or with other evidence in general. The identified and comparative analysis of the same process will be the basis for the formation of an idea of historical reality.

In the process of gathering evidence, data collection, systematization and analysis of evidence, the historian can see similarities in the content of many processes, but also the diversity of processes in time and space, the differences due to factors, and the commonality of form. The essence of this method in the process of cognition lies in its ability to direct the explanation of the essence of historical processes. To understand and comprehend the essence of a process, it is necessary to understand its similarities and differences.

Beruni is skeptical of what seems to be true at first, but has not been proven by experience, and will not believe such narrations until he has verified them in practice. "How can one believe in something whose contradictions are so obvious?"

It should be noted that in modern history, historical knowledge is doubly subjective, firstly, the historian works with historical sources of a subjective nature, and secondly, in the process of interpreting the facts in the sources, descriptions of historical events and historical processes. will be forced to give subjective opinions.

The uniqueness and proof of this is that the works of all great historians since Herodotus and their historical data have not lost their relevance today and are valuable sources for all historians, while they still serve for the development and advancement of the science of history. The following words of Beruni are also noteworthy here, namely, "... everything known through the

beginning of creation and the state of past centuries is mixed with myths and legends, because these things are so far away that a long time has passed between us and them; he who seeks to pay attention to it is incapable of remembering and identifying those [events]. ”

That is, if we take a deeper look at the meaning of Beruni’s words, the more any created source moves away from reality in terms of time, its lesser perfection and reliability at the same time, leading to confusion of information in the source with additional information.

In conclusion, many of the ideas expressed by Abu Rayhan Beruni on the science of history and its theoretical issues in oriental terms are still scientifically relevant today as the most basic research methods and the most effective approaches to research in modern historical science.

## REFERENCES

1. Abu Rayhan Beruni. Selected works. Monuments of ancient peoples. T.Fan. 1968.
2. Abu Reyhan Biruni. Favorite production. T.I. "Pamyatniki minuvshix pokoleniy." T. 1957.
3. Ilhomov Z.A. Beruni's historical diachronological theory. Current issues in history education and research. Collection of scientific articles. T.TDPU. 2016. pp. 35-38
4. Kovalchenko D. Methods of historical research. M.2003.



## EFFECTS OF INTROVIT A + WS ON THE PREVENTION OF FERTILITY COWS FROM INFERTILITY

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### ABSTRACT

*This article describes the diagnosis and diagnosis of alimentary infertility in the dairy cows, clinical signs, and blood. The economic losses of the cows in farms of the Republic are caused by increased nutritional losses due to diseases of vitamins and minerals metabolism, loss of productivity and nutritional value of livestock products, infertility of maternal animals, and birth of children with poor and vitality. In particular, the strategy of development of Uzbekistan for 2017-2021 aims to increase the number of cattle by 3165 thousand heads by 2021, the number of sheep and goats by 4281 thousand heads and the number of poultry by 31,200,000.*

**KEYWORDS:** *Cervical Alimentary Infertility Examination, Ovarian, Yellow Body, Clinical Signs, Morphobiochemical Indicators Of Blood*

### INTRODUCTION

A number of decrees and resolutions of our President outline important tasks aimed at further improving the availability of cheap and high-quality livestock products based on intensive development of livestock in the Republic. In particular, the strategy of development of Uzbekistan for 2017-2021 aims to increase the number of cattle by 3165 thousand heads by 2021, the number of sheep and goats by 4281 thousand heads and the number of poultry by 31,200,000. As a result, milk production is expected to reach 4177,000 tonnes, meat production - 519,000, fish - 90,000, honey - 13.7,000 tonnes and eggs - 4,100,000 tonnes. Micronutrients play a major role in non-communicable diseases of animals that hinder the effective solution of these problems.

The economic losses of the cows in farms of the Republic are caused by increased nutritional losses due to diseases of vitamins and minerals metabolism, loss of productivity and nutritional value of livestock products, infertility of maternal animals, and birth of children with poor and vitality. Therefore, the study of the causes of the disease, the importance of alimentary factors at its origin, the development and implementation of effective methods of preventing early detection of mechanisms of disease development is one of the most urgent problems in the field of veterinary science and practice today.

Insufficient nutrition of animals leads to disturbance of metabolism, functional and morphological changes in cows' genes and shortening (alimeter infertility). Inadequate nutrition has a negative effect, especially in the last two months of milking. Also, 50% of cows that are not fully nourished in winter and spring do not recover in summer. Therefore, calcium, phosphorus, carotene, protein and reserve alkalinity in cows and heifers should be monitored periodically, especially in winter and spring, to control the metabolism and regulation of nutrition in each household [1].

Avoid prolonged silage or silage-concentrate feeding to prevent alimentary infertility, ensure that hay and concentrate are sufficient in the diet, the fiber in the diet is 18% of its dry matter, and the phosphorus-calcium ratio is 1.5: 2. Required.

**Purpose of the study:** To study the effect of the drug Introvit A + WS on the prevention of infertility in productive cows.

**The objectives of the study.** To study the effect of Introvit A + WS, take into account peculiarities of infertility in productive cows, morphobiochemical indications of blood and fertilization of cows.

**Object and subject of research.** The studies were conducted on productive cows in cattle farms and analyzed the hemoglobin and erythrocyte content in their blood, and the basic nutritional patterns and ration structure were studied.

### **Methods and materials of investigation.**

In order to investigate the prevalence and causes of infertility in dairy cows in the farm "The Mustafakul polvon field" in Bulungir district, Samarkand region, organized the 1st experimental and 2 control groups of 5, in each of the five identified infertility cows. They are pre-trial and clinical trials every 10 days. Laboratory tests on blood samples and vaginal fluid were performed.

Clinical studies revealed the general condition of the cow, obesity, appetite, mucous membrane, skin and skin cover, position of the limbs, genital lips, vagina and cervix, uterine horns and ovaries.

The storage conditions and feeding of cows were analyzed, including microclimate in cows, floor condition, composition and nutritional status of the cows, laboratory analysis of the content of cows' nutrients.

Dairy cows were given 50 g of monoculture phosphorus and 5 g of Introvit A + WS supplement feed in addition to the main diet within 30 days after the cow's birth to supplement the diet with vitamins, macro- and micronutrients. Milk cows in the second (control) group were fed only in the ration (HR).

Cows in the experimental and control groups were tested once every 20 days prior to the start of the experiment and blood samples from them were analyzed for morphobiochemical performance and microelements content (copper, cobalt, manganese and zinc).

By the end of the experiments, the clinical and physiological characteristics of milk cows in the experimental group did not differ significantly from the norm. In cows in the control group, they were unresponsive to external influences, decreased appetite and fluctuations, decreased rheumatism and contraction of the stomach, mucous membranes, anemia, thinning of skin coat around the eyes and lips, collars, and lasting pigmentation. Clinical signs of mineral and vitamin metabolism, such as swelling of the teeth, reduction of skin coating, reduction of horns and hooves i [4].

### **RESULTS AND DISCUSSION**

In dairy cows in the experimental group, the mean heart rate was  $74.5 \pm 2.5$  times per minute before starting the experiments, and at the end of the experiments it was  $65.4 \pm 2.4$  times, respiratory rate  $27.6 \pm 2.3$  times. ,  $3 \pm 2.5$  times thinning and an increase in 5-min movement of

the abdominal wall from  $5.5 \pm 0.5$  times to  $10.4 \pm 0.8$  times (8–12 times within 5 minutes). This suggests that the cows have normalized digestive processes.

In the cows in the control group, the clinical performance was worsened by the end of the experiment, ie,  $77.5 \pm 3.2$  minutes per minute, respiratory rate increase by  $27.6 \pm 3.2$  times, and 5.6 minutes for the large abdominal wall movement. Reduction of  $\pm 0.5$ -fold, as well as clinical signs for myeloidosis was characteristic.

While some morphobiochemical indicators of milk in the experimental cows were similar in all groups prior to initiation of the experiments, it was noted that in the control group, the cows in the control group worsened by the end of the experiments and in the cows in the experimental group.

By the end of the experiment, the average number of red blood cells in the control cows was 0.51 million /  $\mu\text{L}$ , hemoglobin - 3.2 g / l, glucose - 0.19 mmol / l, total protein - 2.4 g / l, alkaline reserve. A decrease of 1.6% was reported in the S02%. This may be explained by the fact that the morphobiochemical performance of blood in the cows in this group worsens until the end of lactation.

Examining cows every 20 days, the experiments finally showed that 2 of the 5 cows were fertilized - 100: 5X2 = 40%.

Cows in the cows in the experimental group improved compared with baseline values, ranging from  $4.9 \pm 1.5$  million /  $\mu\text{L}$  in blood to  $5.64 \pm 1.3$  million /  $\mu\text{g}$ , and  $88.5 \pm 1.17$  g / mL. l to  $1,06,8 \pm 2,15$  g / l, glucose -  $1,77 \pm 0.08$  mmol / l to  $2,54 \pm 0,08$  mmol / l, total protein -  $68,4 \pm 1$ , From 32 g / l to  $74.1 \pm 0.86$  g / l, an increase in alkaline reserves was  $46.3 \pm 1.18\%$  and from S02 to  $48.9 \pm 1.18\%$  S02. Improvement of some morphobiochemical parameters of blood within physiological norms can be explained by the fact that the drugs used have a positive effect on metabolism in cows.

Every 20 days, cows insemination was tested by two groups of 100 cows, 100: 5X2 = 40%.

Testing the insemination of cows every 20 days, the end of the experiments was 4 out of 5 cows that were 100: 5X4 = 80%.

Keeping dairy cows all year-round and lacking to feed them can lead to increased vitamin and mineral metabolic disorders and infertility.

## CONCLUSIONS:

Improvement of clinical-physiological status and morphobiochemical indicators of blood within 30 days of intravenous administration of intravenous A + WS in combination with intravenous feeds for 30 days in order to prevent infertility caused by metabolic disorders in dairy cows. provides. It also helps prevent infertility in cows and increase the percentage of breeding by 40%.

## REFERENCES:

1. Kondrachin IP, Levchenko VI Diagnostics and therapy vnutrennix bolezneyivotnyx. M.: OOO "Aquarium-Print", 2005. S-652-653.
2. Studentsov AP, Shipilov VS, Nikitin V.Ya. i dr. Veterinary obstetrics, gynecology and biotechnology. Moscow, Kolos, 2000.

3. Urazaev NA, Nikitin VY, Kabysh AA i dr. Endemic boots selskoxozyaystvenny jivotnyx. M.: Agropromizdat, 1990.
4. Shipilov VS, Kopytin V.K. Regulation of podsos and invasion polovyx organs u telok // Veterinary. 1986. No. 2 S. 41-42.
5. Eshboev B.M. Endemic microelementosis in animals. Monograph. «N.Doba» HT. Samarkand 2009.
6. Baymatov VN, Adamushkin VE, Hannanova AF Changes in the clinical-biochemical methods J Vet. No. 8. 2006. st 45-47.

**FIRE RESISTANT PROPERTIES OF CONSTRUCTION STRUCTURE****Kxusniddin Muxitdinovich Akramov\*; Shokhrukh Bakhodir jonovich Mamadboev\*\***

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**ABSTRACT**

*This article discusses the fire resistance problems of building structures, their criteria for use, the temporal limits of the spread of fire in buildings and building structures, and their classification. A calculation method is proposed for determining the properties of heat-resistant concrete and building materials, the grouping of building materials by fire resistance, the level of fire resistance of buildings and structures, as well as the determination of the fire-resistant properties of buildings by a fire test. The question of the use of heat-resistant heavy concrete with their properties is considered.*

**KEYWORDS:** *Fire Resistance, Fire Resistance Limit Of Building Structures, Heat-Resistant Concrete, Heavy Concrete, Slag Portland Cement, Fire Resistance Of Buildings.*

**INTRODUCTION**

Fire resistance is the ability of building structures to limit the spread of fire, as well as maintain the necessary performance at high temperatures in a fire. It is characterized by the limits of fire resistance and the spread of fire.

The fire resistance limits of building structures (Fig. 1) are determined by their fire tests according to the standard method and are expressed by the time (h or min) of the action on the structure of the temperature of a standard fire until it reaches the limit state; [1]

The limits of fire propagation are determined by the size (cm) of their damage due to burning or carbonization outside the zone of influence of a standard fire. These limits are found through fire tests of structures using a special technique.

### Criteria for the limiting state of structures:

- 1) Loss of bearing capacity (collapse or deflection) during the design of the bearing and the normative load - constant from the dead weight of the structure and temporary, long-term, from the weight, for example, stationary equipment (machine tools, apparatus and machines, electric motors, etc.);
- 2) An increase in the temperature of the unheated surface by an average of more than +1600 C or at any point by more than +1900 C in comparison with the initial temperature or more than +2200 C, regardless of the temperature of the structure before testing;
- 3) Formations in the structure of through cracks or holes through which combustion products or flame penetrate;
- 4) Achievements during testing of an unloaded construction of a critical temperature (i.e., the temperature at which irreversible changes in the physicommechanical properties occur) of its supporting elements or parts protected by fire retardant coatings and claddings; characterizes the loss of bearing capacity.

**Fig. 1 Criteria of the limiting state of structures**

A standard fire is reproduced in furnaces lined with refractory bricks (bulk density 1500-1600 kg / m<sup>3</sup>), by burning kerosene using special nozzles. In this case, the temperature in the furnaces is controlled by thermocouples, the hot junctions of which are 100 mm from the surfaces of the tested structures. Karaush at work The theory of combustion and explosion represents the operation of the nozzles regulated so that their flame does not have contact with the control thermocouples and the surface of each structure. The temperature in the furnace (°C) during testing rises in accordance with the dependence: [2]

$$T - T_0 = 3451_g(8\tau + 1)$$

**Where:  $\tau$  - time from the start of the test, min;  $T$  - temperature in the furnace over time  $\tau$ ;  $T_0$  - initial temperature.**

The fire resistance limit of a structure according to the limiting states 1,2 and 4 can be determined by calculation if the schemes for its destruction under fire are known, as well as the thermophysical, strength and deformation characteristics of building materials of this structure at high temperatures.



Heat-resistant concrete is a special type of material that, under the influence of high temperatures (up to 18000 °C), is able to maintain its own physical and mechanical characteristics within the established boundaries.

Heat-resistant mixtures are successfully used in all areas of industrial construction, in no way inferior to small-sized refractory materials. For example, heat-resistant concrete GOST 20910-90, in comparison with conventional refractory materials, do not need special preliminary firing. Heat treatment (firing), heat-resistant concrete, takes place during the first heating of the finished structure, at the time of the start-up of the thermal unit.

Dense heavy heat-resistant concretes are used for the manufacture of fire-resistant building structures, and as heat-resistant lining in thermal units: blast furnace recuperators, in the chemical industry, in brick kilns, in the construction of chimneys, etc. The use of heavy heat-resistant solutions can significantly reduce terms of repair and construction of thermal units, and at the same time reduce the cost and complexity of the processes.

1. Portland cement with the presence of finely ground additives (micro filler).
2. Micro slag cement.
3. Alumina and high alumina cement.
4. On liquid glass.

In an alkaline and neutral environment, we recommend the use of concrete on slag Portland cement and Portland cement; in an acidic gas environment - liquid glass mixtures; carbon, phosphorus and hydrogen media require the use of solutions on aluminous and high alumina cements.

In the general case, the calculation of the fire resistance limit for the loss of bearing capacity, used for any design, is reduced to the solution of heat engineering and statistical problems. [3] Thermotechnical calculation consists in determining the temperature over the cross section of a structure when exposed to fire. However, the solution to this problem is limited if the fire resistance of the structure is found by the limiting state. The static problem is solved on the basis of the structural destruction scheme revealed during the fire tests and the use of the equations of its equilibrium and deformations, as well as data on changes in the strength and deformation properties of materials at high temperatures. Static calculation allows you to find the dependence of the reduction of bearing capacity (strength) or growth of structural deformation on the time of fire exposure. According to these dependences, the fire resistance limit is defined as the time after which the bearing capacity of the structure decreases to the value of the work load or its deformation reaches a maximum. In some cases, you can immediately calculate the critical temperature that causes the collapse of the structure.

Then, solving the inverse heat engineering problem, consider the time of heating the structure to a critical temperature; this time is taken as the limit of fire resistance.

Building materials and structures for fire resistance are divided into three groups:

- 1- Fireproof materials and structures;
- 2- Fireproof materials and structures;
- 3- Combustible materials and structures.

Data on the limit of fire resistance and spread of fire is used in the design of buildings and structures. According to regulatory documents, the building and structures are divided into five

categories according to the degree of fire resistance. For them, the required limits of fire resistance (minimum) and the spread of fire (maximum) of the main building structures are established. [4]

**The fire resistance category** of a building is when all the elements are made of fireproof materials and structures. Fire resistance of the building up to 2.5 hours;

**II category** of fire resistance of a building is when the internal load-bearing walls are made of nonflammable materials and structures. Fire resistance of the building up to 2.0 hours;

**III category** of fire resistance of a building is when all the elements are made of non-combustible materials and structures. Fire resistance of the building up to 1.5 hours;

**IV category** of fire resistance of a building is when the main elements are made of hardly combustible materials and structures. Internal structures used combustible materials. Fire resistance of the building up to 1.0 hours;

**V category** of fire resistance of the building all structures are made of combustible materials. Fire resistance of the building up to 0.5 hours;

Depending on their type, the indicated limits of fire resistance vary from 0.5 to 2.5 hours, the limits of the spread of fire from 0 to 40 cm. An increase in fire resistance is achieved by fire protection methods. Criteria for determining the spread of fire:

The fire resistance of buildings is determined by the time from the moment of the fire to a decrease in payload or the beginning of the destruction of the structure of the building and is called the fire resistance threshold.

Tests of buildings are erupted in time from the start of the test to the appearance of one of the following symptoms:

- Formation of cracks capable of passing smoke or flame
- the temperature on the surface of the structure reaches 1600 ° C or at any point on the structure the temperature rises above 2200 ° C;
- Destruction of the structure entailing a decrease in lifting capacity, etc. [4]

To improve the structure of the cement composition and increase the strength of structures, mineral components are added to the binder (batt of magnesite or fireclay bricks, andesite, blast furnace granulated slag, loesslike loam, etc.), which have the necessary refractoriness.

When heating reinforced concrete structures, destructive processes occur not only in cement cements, but also in the used aggregates. The occurrence of these reactions is explained by the uneven thermal expansion of the mineral aggregates. Therefore, you need to carefully approach the issue of choice of aggregates for a particular brand of heat-resistant concrete.

## USED LITERATURE

1. Акрамов Х.М., Масалиев Ш.Д., Показатели пожаро-взрывоопасности веществ и материалов «Молодежь и XXI век» Cours: 2018 г. 8-11р.
2. Карауш С. А. Теория горения и взрыва. - М., «Академия», 2013у. 208 р.
3. Халилова П. Ю. Пожаробезопасность. Teaching Aid. -Т., ТГТУ-2013, 120 р.
4. Юсупов А. некоторые особенности определения предела огнестойкости строительных конструкций, журнал-«Пожарная безопасность», Tashkent, 2019у. №7.

## RELATIONSHIP OF MYOCARDIAL INFARCTION WITH METABOLIC SYNDROME

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### ABSTRACT

*In patients with metabolic syndrome, the synergism of the pathogenetic mechanisms of the metabolic syndrome, coronary heart disease and arterial hypertension determines the high prevalence and severity of acute coronary pathology. For patients with myocardial infarction on the background of the metabolic syndrome, severe coronary lesion and poor prognosis are characteristic. The article discusses the factors influencing the course and outcome of myocardial infarction in patients with metabolic syndrome.*

**KEYWORDS:** *Myocardial Infarction, Diabetic Mellitus, Arterial Hypertension, Dyslipidemia Obesity*

### INTRODUCTION

In a number of developed countries, diseases of the cardiovascular system are leading among the causes of morbidity, disability and mortality, although their occurrence in different regions is subject to variability. According to the WHO, approximately 3.8 million men and 3.4 million women die from cardiovascular causes every year, with 1/4 of the deaths being people under the age of 65 [2,7]. To date, several clinical studies have been carried out demonstrating the widespread prevalence of metabolic syndrome (MS) among patients with myocardial infarction. Metabolic syndrome is a complex of metabolic, hormonal and clinical disorders, which are based on insulin resistance (IR) and compensatory hyperinsulinemia (GI), abdominal obesity, impaired lipid, purine metabolism and arterial hypertension (AH). Clinicians of various specialties pay close attention to MS due to the high prevalence, multicomponent nature of this syndrome, and a high risk of developing cardiovascular complications.

The prevalence of MS among the population in various regions is quite high (10-24%), and in economically developed countries the frequency of MS among the population reaches 35-40% - [1]. To date, the number of patients with MS is 2 times greater than the number of patients with diabetes, and in the next 20 years it is expected to increase by 50%. The presence of MS increases the risk of developing cardiovascular events by 2-4 times, even with the exception of diabetes patients from the analysis [7,8]. MS is detected in approximately 20% of adults and 45% of individuals older than 50 years. The prevalence of MS in myocardial infarction (MI) varies from 37% (Japan) to 50% (USA, France) [7,10,12,13]. It should be noted that the incidence of MS in patients with myocardial infarction younger than 45 years increases and is about 60% [3,4]. When analyzing the individual effect of each of the components of MS on the

risk of developing complications of myocardial infarction, it was found that hyperglycemia is an independent predictor of the development of cardiogenic shock, and hyperglycemia and low values of high density lipoprotein cholesterol (HDL cholesterol) - acute heart failure [19]. When studying the effect of MS on the prognosis of myocardial infarction, it was found that the presence of MS significantly increases the risk of death in the next 3 years by 29%, and cardiovascular events, including fatal arrhythmic complications, by 23%. [11].

The mortality rate in the acute period of myocardial infarction (MI) in the group of patients with MS is 2 times higher than in the group of patients who do not have a combination of risk factors for the diagnosis of MS [10].

Regarding the influence of MS on the risk of developing recurrent MI, there are somewhat conflicting data. According to some authors, MS does not cause an increase in the incidence of recurrent MI and fatal ventricular arrhythmias [10].

On the other hand, the presence of MS in patients with acute coronary syndrome (ACS) leads to an increase in the relative and absolute risk of developing sudden cardiac death, recurrent MI, recurrent myocardial ischemia by 34 and 5%, respectively [13].

Improving diagnostic capabilities at the present stage has led to the introduction in clinical practice of new methods that allow not only to diagnose myocardial infarction, but also to judge the degree of cardiac muscle necrosis - the size of myocardial infarction. In order to determine the magnitude of myocardial necrosis, a quantitative determination of cardioselective enzymes (CPK-MV, troponin), myocardial scintigraphy with Tc99, computed tomography are used. Using the above methods, it was established that the presence of MS in patients with MI is associated with an increase in the size of MI and is accompanied by a regular decrease in the ejection fraction of the left ventricle [16,17]. The causes and mechanisms underlying the predisposition of MI patients with MS to a larger myocardial damage have not been sufficiently studied, but it is obvious that the basis of these processes is a complex of metabolic, hormonal and clinical disorders linked to the pathobiochemical and pathophysiological level that are characteristic of MS.

At present, IR is considered as a key etiological category in the pathogenesis of MS. [4, 5, 6]. According to the article "Analysis of the condition and treatment of the metabolic syndrome at the primary health care level", excess insulin production increases the activity of the SNA, causes vasoconstriction and increases the minute volume of blood circulation, increases the synthesis of VLDL, forms atherogenic dyslipidemia and obesity [1]. And also, plays a fundamental role in the formation of arterial hypertension (AH). In addition, it is known that insulin resistance is interrelated with the nature of the distribution of adipose tissue in the body and contributes to the accumulation of fat deposits mainly in the abdomen: in the omentum and around the internal organs, i.e., leads to the formation of visceral obesity [6, 8, 9, 14]. It has been established that adipose tissue of the visceral region is an active endocrine organ and secretes more than 90 biologically active substances, including adipokines, anti-inflammatory cytokines, angiotensinogen, plasminogen activator inhibitor 1 (PAI-1), etc. [7,16,19]. The pathogenetic and prognostic role in MS of some of these substances has been established, but their additional significance is possible under conditions of MI development. Adiponectin regulates food intake and body weight, glucose and lipid metabolism, has anti-inflammatory and anti-atherosclerotic properties, positively affects lipid metabolism and blood coagulation properties [27,28]. It realizes its effects by binding to specific adiponectin receptors. Adiponectin levels are lower in

women than in men, with obesity and diabetes. A strong negative correlation between the level of adiponectin and the amount of visceral fatty tissue, body mass index (BMI) was revealed. Low values of adiponectin in blood serum are associated with an increased risk of IR, diabetes mellitus, and cardiovascular diseases [31,32]. There is evidence that in patients with MI, the level of adiponectin is associated with the degree of necrosis of the heart muscle; it is assumed that adiponectin has a positive effect on the ischemic myocardium during revascularization and subsequent remodeling processes [33,34]. Adiponectin has protective properties in relation to the development of systolic dysfunction of the left ventricle, and inhibits the processes of apoptosacardiomyocytes in MI [33].

In 1994, a new adipocyte hormone, leptin, was discovered, which is secreted by white adipose tissue in amounts proportional to body weight. Leptin is an adipocytokine that is involved in the regulation of saturation and energy consumption [28.]. Plasma leptin levels increase during the development of obesity and decrease with weight loss. The leading function of leptin is to protect peripheral tissues from the accumulation of fat - the regulation of adipose tissue homeostasis.

The level of leptin directly correlates with BMI, blood pressure and heart rate (HR), affects the aggregation properties of platelets. The level of leptin is associated with the severity of outcomes of cardiovascular diseases, its high values are associated with the development of MI and stroke, regardless of other cardiovascular risk factors and the degree of obesity [29]. In the case of developing MI, high serum leptin values during the first 6 hours from the onset of pain in the chest are predictive in terms of the inefficiency of subsequent thrombolytic therapy [20].

An important place in the modern neuroendocrine theory of the development of MS and diseases of the cardiovascular system is given to the tumor necrosis factor (TNF- $\alpha$ ), which normally plays a fundamental physiological role in immunoregulation, but in some cases it can have a pathological effect, taking part in the development and progression of inflammation, microvascular hypercoagulation, hemodynamic disturbances and metabolic depletion in various human diseases of both infectious and non-infectious nature. Values of TNF- $\alpha$  positively correlate with IR, which determines the ability of this cytokine to be an early marker of the development of diabetes mellitus. It was shown that TNF- $\alpha$  disrupts insulin signals in muscle and adipose tissue and thereby contributes to the development and progression of IR [21, 22, 23, 24]. It is suggested that in patients with MI, TNF- $\alpha$  triggers a cascade of pathological biochemical reactions, leading ultimately to the induction of cellular apoptosacardiomyocytes [21]. An increase in serum levels of TNF- $\alpha$  in MI has been established, and its potential role in the development of restenoses after coronary stenting is considered [22]. Studies have shown a relationship between the level of TNF- $\alpha$  in the blood and the incidence of cardiogenic shock in MI [25]. Of undoubted interest are the data demonstrating the effect of TNF- $\alpha$  on the frequency of development of ventricular rhythm disturbances in the acute period of MI in laboratory animals. It is believed that TNF- $\alpha$  increases the level of intracellular calcium in cardiomyocytes and thereby provokes the development of arrhythmias [24]. In patients with MS, the synergism of the pathogenetic mechanisms of MS, IHD and AH determines the accelerated development and severity of acute forms of IHD. For the majority of patients with myocardial infarction on the background of MS, severe coronary lesion and poor prognosis are characteristic. It seems necessary to timely detect MS, determine the degree of cardiovascular risk and indications for myocardial revascularization, as well as the development of algorithms for the diagnosis, treatment and prevention of ACS in patients with MS. Treatment of MI in patients with MS should be carried out in accordance with modern approaches to the treatment of MI: when



determining a high risk, an early invasive strategy is justified, in other cases, conservative therapy, including thrombolytics, if indicated, anticoagulants, antiplatelet agents,  $\beta$ -blockers, statins, inhibitors ACE, if necessary - nitrates [10, 12, 14, 26,].

## REFERENCES

1. Analysis of the condition and treatment of the metabolic syndrome at the primary health care level - Badritdinova M.N., Badridinova B.K. Electronic scientific journal "Biology and Integrative Medicine" No. 3 - March (31) 2019. p. 18-28
2. Preconditioning and postconditioning: new strategies for cardioprotection / D. J. Hausenloy, D. M. Yellon // Diabetes, Obesity and Metabolism. 2008. Vol. 10. P. 451–459.
3. A comparison of coronary angioplasty with fibrinolytic therapy in acute myocardial infarction / H. R. Andersen [et al.] // N Engl. J. Med. 2003. Vol. 349. P. 733–742.
4. The Metabolic Syndrome: A Global Public Health Problem and A New Definition / P. Zimmet [et al.] // Journal of Atherosclerosis and Thrombosis. 2005. Vol. 12. P. 295–300. 6
5. Prognostic Impact of Metabolic Syndrome by Different Definitions in a Population With High Prevalence of Obesity and Diabetes / G. D. Simone [et al.] // Diabetes Care. 2007. Vol. 30. P. 1851–1856.
6. Prevalence of the metabolic syndrome among US adults: findings from the third National Health and Nutrition Examination Survey / E. S. Ford, W. H. Giles, W. H. Dietz // JAMA. 2002. Vol. 287. P. 356–359.
7. Prevalence of metabolic syndrome in young patients with acute MI: does the Framingham Risk Score underestimate cardiovascular risk in this population / S. Zarich [et al.] // Diabetes and Vascular Disease Research. 2006. Vol. 3. P. 103–106.
8. NCEP-defined metabolic syndrome, diabetes, and prevalence of coronary heart disease among NHANES III participants age 50 years and older / C. M. Alexander [et al.] // Diabetes. 2003. Vol. 52. P. 1210–1214.
9. The metabolic syndrome and cardiovascular risk in the British Regional Heart Study / S. G. Wannamethee. // Int. J. Obes. (Lond.). 2008. Vol. 32. P. 25–29.
10. Prevalence and Impact of Metabolic Syndrome on Hospital Outcomes in Acute Myocardial Infarction / M. Zeller [et al.] // Arch. Intern. Med. 2005. Vol. 165. P. 1192–1198.
11. Metabolic Syndrome and Risk of Cardiovascular Events After Myocardial Infarction / G. Levantesi [et al.] // Journal of the American College of Cardiology. 2005. Vol. 46. P. 277–283.
12. Impact of Metabolic Syndrome on the Long-Term Survival of Patients With Acute Myocardial Infarction / M. Takeno [et al.] // Circulation Journal. 2008. Vol. 72. P. 415–419.
13. Poor in-hospital outcome in young women with acute myocardial infarction. Does metabolic syndrome play a role / H. Turhan, E. Yetkin // International Journal of Cardiology. 2006. Vol. 112. P. 257–258.
14. Relation of Characteristics of Metabolic Syndrome to Short-Term Prognosis and Effects of Intensive Statin Therapy After Acute Coronary Syndrome / G. G. Schwartz [et al.] // Diabetes Care. 2005. Vol. 28. P. 2508–2513.



15. Relation of C-reactive protein to obesity, adipose tissue hormones and cardiovascular risk factors in men treated with early percutaneous intervention in course of acute myocardial infarction / K. Piestrzeniewicz [et al.] // *Neuro Endocrinol Lett.* 2007. Vol. 11. P. 28–34.
16. Metabolic syndrome in patients with acute myocardial infarction is associated with increased infarct size and in-hospital complications / L. C. Clavijo [et al.] // *Cardiovascular Revascularization Medicine.* 2006. Vol. 7. P. 7–11.
17. Size of myocardial infarction induced by ischaemia/reperfusion is unaltered in rats with metabolic syndrome / T. Thim [et al.] // *Clinical Science.* 2006. Vol. 110. P. 665–671.
18. The metabolic syndrome and the risk of thrombosis / F. Dentali, E. Romualdi, W. Ageno // *Hematology journal.* 2007. Vol. 92. P. 297–299.
19. What glucose target should we aim for in myocardial infarction / N.W. Cheung, V.W. Wong, M. McLean // *Diabetes research and clinical practice.* – 2008. – Vol. 80. – P. 411–415
20. Admission plasma leptin level strongly correlates with the success of thrombolytic therapy in patients with acute myocardial infarction / B. Amasyali [et al.] // *Angiology.* 2006. Vol. 57. P. 671–680.
21. Myocardial apoptosis associated with the expression of proinflammatory cytokines during the course of myocardial infarction / Y. Akasaka [et al.] // *Modern Pathology.* 2006. Vol. 19. P. 588–598.
22. Inflammatory Response to Acute Myocardial Infarction Augments Neointimal Hyperplasia After Vascular Injury in a Remote Artery / M. Takaoka, S. Uemura, H. Kawata // *Arterioscler. Thromb. Vasc. Biol.* 2006. Vol. 26. P. 2083–2089.
23. Increased levels of tumour necrosis factor- $\alpha$  (TNF- $\alpha$ ) in patients with Type II diabetes mellitus after myocardial infarction are related to endothelial dysfunction / T. Nyström, A. Nygren, A. Sjöholm // *Clinical Science.* 2006. Vol. 110. P. 673–681.
24. Positive Correlation of Tumor Necrosis Factor- $\alpha$  Early Expression in Myocardium and Ventricular Arrhythmias in Rats with Acute Myocardial Infarction / H. Xiao, Z. Chen, Y. Liao // *Archives of Medical Research.* 2008. Vol. 39. P. 285–291.
25. Proinflammatory cytokines in acute myocardial infarction with and without cardiogenic shock / M. Debrunner [et al.] // *Clin. Res. Cardiol.* 2008. Vol. 97. P. 298–305.
26. The Japanese National Health Screening and Intervention Program Aimed at Preventing Worsening of the Metabolic Syndrome / T. Kohro, Y. Furui, N. Mitsutake // *Int. Heart J.* 2008. Vol. 49. P. 193–203. 9
27. Jaspinder K. A Comprehensive Review on Metabolic Syndrome. *Cardiology Research and Practice* Volume 2014, Article ID 943162, 21 pages;
28. Nashar K., Egan M B., Relationship between chronic kidney disease and metabolic syndrome: current perspectives. *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy* 2014;71,94
29. Lau D.C.W., Dhillon B., Yan H., Szmitko P.E., and Verma S., “Adipokines: molecular links between obesity and atherosclerosis,” *The American Journal of Physiology—Heart and Circulatory Physiology*, vol. 288, no. 5, pp. H2031–H2041, 2005

- 30.** Relation of Increased Leptin Concentrations to History of Myocardial Infarction and Stroke in the United States Population / J. Sierra-Johnson [et al.] // Am. J. Cardiol. 2007. Vol. 100. P. 234–239.
- 31.** Adiponectin and myocardial infarction: a paradox or a paradigm / H. Teoh [et al.] // European Heart Journal. 2006. Vol. 27. P. 2266–2268.
- 32.** Association between plasma adiponectin levels and unstable coronary syndromes / R. Wolk [et al.] // European Heart Journal. 2007. Vol. 28. P. 292–298.
- 33.** Usefulness of Adiponectin to Predict Myocardial Salvage Following Successful Reperfusion in Patients With Acute Myocardial Infarction / R. Shibata [et al.] // Am. J. Cardiol. 2008. Vol. 101. P. 1712–1715.
- 34.** Adiponectin protects against the development of systolic dysfunction following myocardial infarction / R. Shibata, Y. Izumiya, K. Sato // Journal of Molecular and Cellular Cardiology. 2007. Vol. 42. P. 1065–1074.

## IMMUNOCORRECTION OF POST-TRAUMATIC INFLAMMATORY COMPLICATIONS IN PATIENTS WITH FRACTURES OF THE LOWER JAW

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### ABSTRACT

*Purulent-inflammatory complications of fractures of the lower jaw are among the most common pathologies of surgical dentistry and are distinguished by such clinical features as an inclination to chronicity, development of the spastic process, and the formation of purulent formations. Numerous studies conducted over the past decades have clearly shown that the clinical course of inflammatory disease and the state of reparative processes are significantly influenced by such mechanisms of regulation of immune reactions as the function of immune-competent cells, the production of certain cytokines, the level of production of pathogenic immune complexes and adhesive molecules. The author conducted a study to study the effect of local immunocorrective therapy on some indicators of the immune status in patients with fractures of the lower jaw (FLJ). In case of fractures of the lower jaw (FLJ), the frequency of postoperative complications, despite the use of modern preventive measures, does not decrease, amounting to 5.5-14.1% of all complications in this disease. It has been shown that traumatic osteomyelitis of the lower jaw develops with low immunological reactivity of the body. The task of developing new effective ways to influence the infectious process, in particular, methods of stimulating local and general immunity, remains urgent.*

**KEYWORDS:** *Mandible Fractures, Traumatic Osteomyelitis, Investigation, Stimulation Of Local And General Immunity, Therapy, Imudon.*

### INTRODUCTION

In recent years, there has been an increase in public injuries, including fractures of the bones of the facial skeleton, 75-87% of fractures of the lower jaw. Fractures of the lower jaw in 10-37% of cases are complicated by inflammatory phenomena, the cause of which are odontogenic foci located in the plane of the fracture, as well as other endoepidemic endogenous factors. One of the pathogenic mechanisms of the development of purulent-inflammatory complications is a violation of the body's immune status. Recent studies have shown that trophic disturbances in the area of bone damage play an important role in the pathogenesis of purulent-inflammatory complications of mandibular fractures.

Moreover, some researchers note a direct relationship between the severity of endogenous intoxication, lipid peroxidation, and the number of circulating immune complexes formed during the death of cells and microorganisms. Treatment of patients with fractures of the lower jaw remains one of the urgent problems of modern dentistry. In different age groups, the course and treatment of fractures of the lower jaw has its own peculiarities, therefore, improving the quality

of treatment for victims largely depends on a differentiated approach to each specific case of injury, taking into account certain patterns characteristic of each patient. [7]. In case of fractures of the lower jaw, the frequency of postoperative complications, despite the use of modern preventive measures, does not decrease, amounting to 5.5-14.1% of all complications in this disease [5]. It has been shown that traumatic osteomyelitis of the lower jaw develops with low immunological reactivity of the body [1, 2, 5, 6, 9, 10]. Despite the successes achieved in the treatment of periodontal diseases, the improvement of these issues is still of great relevance and practical dependence [3], since the effectiveness of the treatment of this pathology still does not satisfy practitioners [4, 8]. The task of developing new effective ways to influence the infectious process, in particular, methods of stimulating local and general immunity, remains urgent.

**Purpose of the study.** Study of the effect of local immunocorrective therapy on some indicators of the immune status in patients with fractures of the lower jaw.

**Materials and research methods.** The study was conducted on the basis of the Department of Oral and Maxillofacial Surgery of the Bukhara Regional Multidisciplinary Medical Center. Inpatient treatment was 93 patients with a fracture of the lower jaw (from 17 to 62 years old), 57 patients with a diagnosis of a unilateral fracture, 36 - a bilateral fracture of the lower jaw. The age of the subjects ranged from 17 to 62 years. Most of them were represented by men - 61 people (65%), women - 32 (35.0%). Patients were divided into 2 groups: group 1 - 42 people who underwent traditional therapy, group 2 - 51 patients who were additionally given the immunocorrective drug Imudon.

Non-specific resistance indices (complement components C3 and ceruloplasmin) were evaluated by the immunochemical method, the level of circulating immune complexes, medium molecular weight peptides in the blood, complement C3, phagocytic activity of neutrophils, and ceruloplasmin concentration.

**Results and their surveys.** Complex treatment with the use of the local immunocorrecting drug Imudon reduced the concentration of medium molecular peptides (from  $0.58 \pm 0.06$  conventional units to  $0.28 \pm 0.02$  conventional units,  $p < 0.05$ ), the level of circulating immune complexes (from  $78.1 \pm 5.12$  conventional units to  $34.8 \pm 3.12$  conventional units,  $p < 0.05$ ), ceruloplasmin concentration (from  $39.6 \pm 0.52$  mg / dL to  $25.2 \pm 0.22$  mg / dl). The level of complement C3 after treatment significantly increased compared to the initial one (from  $68.8 \pm 2.15$  mg / dl -  $101.6 \pm 5.62$  mg / dl,  $p < 0.05$ ).

For 5 years, 93 patients with fractures of the lower jaw aged 17 to 62 years, 67 men and 26 women, were hospitalized. Persons of a young age prevailed, only 8 men were over the age of 50. 57 patients had a unilateral lower jaw fracture, 36 had a bilateral fracture. Контрольную группу составил 31 практически здоровый человек.

Among the observed patients, 68.3% of patients were admitted to the hospital on the first day of the disease, up to three days - 24.5%, the rest - later than 3 days. Due to the late immobilization of fragments of the lower jaw, a purulent-inflammatory process developed in the fracture gap. The source of purulent infection was a tooth with necrotic pulp or a pathological process in the periapical tissues. In cases of rapid elimination of the focus of infection, adequate antimicrobial therapy and reliable fixation of fragments, the inflammatory process was stopped. With a delay in tooth extraction and the absence of reliable immobilization of bone fragments, the transition of acute traumatic osteomyelitis into a purulent-destructive process was noted.

Traditionally, orthopedic immobilization was carried out using various modifications, individually curved wire or standard tape tires with hook loops. Drug therapy included antibacterial (ceftriaxone, sulfa drugs), desensitizing, painkillers.

All patients were divided into 2 groups: group 1 - 42 patients who underwent traditional therapy, group 2 – 51 patients who were additionally given the immunocorrective drug Imudon (before surgery).

Non-specific resistance indices (complement components C3 and ceruloplasmin) were evaluated by the immunochemical method, the level of circulating immune complexes, and medium molecular peptides in the blood according to the method of A. Gabrielyan. (1981), phagocytic activity of neutrophils.

The results are presented in table 1.

**TABLE 1 DYNAMICS OF NON-SPECIFIC RESISTANCE INDICES IN PATIENTS WITH MANDIBULAR PEARL**

Index	Control	1 group		2 group	
		initial	14 days	initial	14 days
medium molecular peptides (conventional unit)	0,28±0,06	0,58±0,06*	0,58±0,06*	0,58±0,06*	0,28±0,02**
circulating immune complexes (conventional unit)	39,2±2,4	78,1±5,11*	78,1±5,12*	78,1±5,12*	34,8±3,12**
Complement C3 (mg / dl)	124,7±8,9	68,9±2,13*	68,8±2,15*	68,8±2,15*	101,9±5,64*
Ceruloplasmin (mg / dl)	24,6±0,41	39,6±0,51*	39,6±0,52*	39,6±0,52*	25,2±0,22
phagocytic activity of neutrophils (%)	27,7±0,61	38,4±1,38*	38,6±1,37*	38,6±1,37*	28,8±0,52

\* - significance of differences compared with control,  $p < 0.05$

\*\* - significance of differences compared with the initial value in the same group,  $p < 0.05$

Initially, all the studied parameters in both groups significantly differed from the control. High values of the level of medium molecular peptides in patients with fractures of the lower jaw indicated an unfavorable clinical course of the inflammatory process, since they have toxicity and thereby reduce local resistance. The phagocytic activity of neutrophils in the observed patients was statistically significantly (1.4 times) higher than in healthy individuals and practically did not change in dynamics in the 1st group. The level of circulating immune complexes was initially more than 2 times higher, under their influence, the release of lysosomal enzymes from neutrophils occurs, mediator carrier cells are activated, inducing an acute inflammatory process.

A decrease in the level of complement C3 was observed in patients with fractures of the lower jaw by almost 2 times compared with the control, which, apparently, was due to their "increased consumption" of circulating immune complexes against a purulent-inflammatory process. Low values of complement C3, which is responsible for the immune adhesion of circulating immune complexes and chemotaxis, contribute to exocytosis of neutrophil granules and secretion of lysosomal hydrolases. Alteration of tissues with cell breakdown during inflammation leads to an increase in ceruloplasmin, which enhances the activation of the lysosomal neutrophil complex.

After a course of therapy for 14 days, the level of all the studied parameters in the 1st group did not change compared to the initial one and significantly exceeded the similar indicators in the control group.

In group 2, complex treatment with the use of the immunocorrecting drug Imudon significantly and significantly reduced the concentration of medium molecular peptides (2 times), the level of circulating immune complexes - by 2.3 times. After the therapy, these indicators approached the values in the control group. The level of complement C3 increased after treatment, however, it remained below the control values ( $101.6 \pm 5.62$  mg / dl, in the control  $124.7 \pm 8.9$  mg / dl,  $p < 0.05$ ).

The concentration of ceruloplasmin after treatment decreased by 64%. Both indicators - ceruloplasmin and phagocytic activity of neutrophils - after treatment in the 2nd group did not differ from the control.

## CONCLUSION

Thus, the data obtained indicate the possibility of immunocorrection of post-traumatic inflammatory complications in patients with fractures of the lower jaw using Imudon, which enhances immune defense factors, in the treatment of patients.

## BIBLIOGRAPHY:

1. Agarkov N.M., Gontarev S.N., Zelensky V.A., Domenyuk D.A., Makkonen K.F., Afanasova E.P., Ivanov A.V., Subbotina T.I. Mathematical prediction of the development of phlegmon in acute odontogenic osteomyelitis of the jaw in terms of blood and systemic immunity / Medical Bulletin of the North Caucasus, 2018.- No. 1.- P.62-65.
2. Belovolova R.A., Novosyadlaya N.V., Novgorodsky S.V. Features of the immune status and the possibility of immunocorrection in post-traumatic inflammatory complications in patients with open fractures of the lower jaw // Immunology. - 2002.- No. 5. - S.287-293.
3. Ivanushko T. P., Gankovskaya L. V., Shamanaev S. V., Svich O. A., Kartashov D. D., Grechenko V. V., Balykin R. A. Study of the content of defensins in patients with purulent - inflammatory diseases of the maxillofacial region // Dentistry. 2014.V. 93. No. 2. - S. 23-26.
4. Matrosov V. I. EHF-therapy in the complex treatment of acute purulent-inflammatory diseases of the maxillofacial region // dissertation for the degree of candidate of medical sciences / Vladivostok State Medical University. Vladivostok, 2002
5. Nikitin A.A., Lapshin V.P., Kosyakov M.N., Stuchilov V.A., Malychenko N.V. Modern methods of diagnosis and treatment of odontogenic mediastinitis / Russian otorhinolaryngology, 2004. - No. 5. - S. 15-18.
6. Robustova T.G. New trends during odontogenic osteomyelitis of the jaw / Russian Dental Journal, 2006. - N 5. - P. 32-34.
7. Rakhimov ZK "Purulent - inflammatory complications of lower jaw fractures" monograph



2019

**8.** Salieva Z. The use of the drug "traumeel-s" in the complex treatment of patients with purulent-inflammatory diseases of the maxillofacial region // In the collection: The quality of medical dental care: methods of achievement, criteria and evaluation methods collection of articles of international scientific practical conference. 2016.-- S. 165-170.9.

**9.** Olawale O. Adamson, Olalekan M. Gbotolorun, OlalekanOdeniyi, Oyinlola O. Oduyebo, Wasiu L. Adeyemo. Assessment of predictors of treatment outcome among patients with bacterial odontogenic infection / Saudi Dent J. 2018 Oct; 30(4): 337–341.

**10.** Rishi Kumar Bali, Parveen Sharma, ShivaniGaba, Avneet Kaur, PriyaGhanghas. A review of complications of odontogenic infections / Natl J Maxillofac Surg. 2015 Jul-Dec; 6(2): 136–143.

## METHODS OF USING “MAGIC SQUARES” PROBLEMS IN PRIMARY SCHOOL MATHEMATICS

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### ABSTRACT

*This article discusses the problem of developing skills for primary school pupils to use "magic squares" in math lessons. The student must think at the world level, face different views and opinions, and gain a deeper understanding himself. Today, instead of traditional methods in education, the use of more communication-based methods, methods that encourage the exchange of ideas are more effective. If we look at the history of mathematics, magic squares are one of the "magic puzzles" that have played an important role in the development of the science of mathematics, the expansion of the world of thinking of intellectual youth.*

**KEYWORDS:** Magic Squares, "2x2" Magic Squares, "3x3" Magic Squares, "4x4" Magic Squares, Rebus

### INTRODUCTION

The ongoing reforms in the country, the huge creative work, have led to an increase the power of our country. We are going through a period of complete renewal in education, a real transition to a new process and adaptation to it.

Today's process requires teachers to take a new approach to educational work, to improve their professional skills, to improve their methodological skills, knowledge and application of innovative methods of introduction of modern technologies in the educational process. The main task for the development of today's youth is a new approach to teaching, the replacement of outdated methods in the pedagogical process, a modern approach to modern school, the introduction of new methods of teaching. Today, developed countries are moving from education based on the world news of XIX century to education based on the achievements of the information revolution. In this direction, children should learn and discover for themselves, to see unique ideas in practice, to think independently based on their abilities. The student must think at the world level, face different views and opinions, and gain a deeper understanding himself. Today, instead of traditional methods in education, the use of more communication-based methods, methods that encourage the exchange of ideas are more effective. Through the study of the "charm of magic squares" we are convinced that the application of new technologies in education, the constant work on arousing interest in knowledge, developing and strengthening this interest is an important tool for improving the quality of teaching.

Pupils study the history of magic squares and look for new variants of them. In the creation of new ideas, interesting facts from the lives of great mathematicians M. Khorezmi, Abu Rayhan Beruni, Abu Ali Ibn Sino, Mirzo Ulugbek, Sofia Kavalevskaya, and Maria Curie created a "motive" in pupils. They created new versions of "magic squares" in a new way by studying the

innovations of talented Uzbek mathematicians S.H. Sirojiddinov, T.N. Sarimsakov, Shavkat Alimov, Shavkat Ayupov, Abdulla Azamov in the field of mathematics and the work of A.Dyurer, M.Mersen, P.Ferma, L.Eyler, L. Shtifelt, D.S.Lyaluber, R.Stregi, U.U. Rose Ball and etc.

Basically, they followed the rules of adding "Substitution" and "Grouping". If we look at the history of mathematics, magic squares are one of the "magic puzzles" that have played an important role in the development of the science of mathematics, the expansion of the world of thinking of intellectual youth. The great mathematicians of the world also studied the "Magic Squares" with interest, and then began a journey to study.

"Magic squares" appeared in China in 400-300 BC. Later it appeared in India in the first century AD. The Magic Squares entered Europe in the early 15th century. So far, not all possible Magic Squares have been fully described. "2x2" -Magic squares are not available.

I. The oldest "3x3" Magic Square was in the form below.

Figure 1

4	9	2
3	5	7
8	1	6

4	3	8
9	5	1
2	7	6

2	9	4
7	5	3
6	1	8

a) the sum of the numbers in the line b) The sum of the numbers in the column c) The sum of the numbers on the diagonal

$$4+9+2=15$$

$$4+3+8=15$$

$$8+5+2=15$$

$$3+5+7=15$$

$$9+5+1=15$$

$$4+5+6=15$$

$$8+1+6=15$$

$$2+7+6=15$$

To make it easier to read magic squares in math, we decided to define them as follows. The magic square in Figure 1 looks like a 3x3 (4 → 2,6,8). There are 8 variants of this magic square.

(4→2,6,8), (4→8,6,2), (2→4,8,6), (2→6,8,4), (6→2,4,8), (6→8,4,2), (8→4,2,6), (8→6,2,4)

There are given 3 of the magic squares above. The remaining 5 are listed below.

2	7	6
9	5	1
4	3	8

8	1	6
3	5	7
4	9	2

8	3	4
1	5	9
6	7	2

6	1	8
7	5	3
2	9	4

6	7	2
1	5	9
8	3	4

All of these options were discovered in late 2007 by members of the Mathematical Circle and documented in the Eureka Club News.

1. Rebuses. Read the words in the four corners.

**"Interesting squares"**


Arrange the numbers 1, 4, 6, 7, 8, 9 in such a way that the sum of the numbers in any direction will be equal to 15. Or arrange the numbers 3, 4, 5, 6, 8, 9 so that they will be equal to the sum 21 in any direction.

**"Find the number you think of."**

Think of a number. Add two to it, multiply the sum by 4, subtract 8 from the multiplication. As a result, I will find the number you think of (for example, if the answer is 32, the number is 8). Because the conceivable number is  $x$ .  $(x+2) \cdot 4 - 8 = 4x + 8 - 8 = 4x$ . So the result is that the number is multiplied by 4. To find the thought number, we always divide the result by 4, and so on.

Using the above, you can create magic squares by adding a constant number to each term of the magic square.

Now let's get acquainted with the 4x4 Magic Square.

13	3	2	16
12	6	7	9
8	10	11	5
1	15	14	4

Figure 2

1). the sum of the numbers at the ends of the square is 34.

$$13+16+4+1=34$$

2). the sum of the small squares at the ends of the square and the numbers in the small square in the middle is also 34.

$$13+3+6+12= 2+16+9+7= 6+7+11+10= 8+10+15+1=34=11+5+4+14$$

3). the sum of the squares of the numbers in the two extreme rows (columns) and in the two middle rows (columns) is equal to each other.

$$132+32+22 \ 462= 12+152+142+42=438 \ 122+62+72+92=82+102+112+52 =310$$

4). the sum of numbers on the diagonal

$$13+6+11+4 = 1+10+7+16 = 34$$

In conclusion, the introduction of a system of problems based on magic squares in the learning process leads to the development of creative abilities of pupils, independent work in extracurricular activities allows improving the quality of mathematics education of pupils in schools.

The use of creative approaches to problems in the process of using magic squares is effective in developing pupils' creative abilities, forming in them a strong interest in knowledge, and the ability to gradually analyze, relate, and use such skills and abilities, skills such as generalization and clarification are needed.

#### REFERENCES

1. M. E. Jumaev. Practicum in Mathematics Teaching Methodology. T., "Teacher" 2004
2. N. U. Bikbaeva and etc. Methods of teaching mathematics in primary school. T., "Teacher" 1996.
3. The development of education. Bulletin of the Ministry of Public Education of the Republic of Uzbekistan.7 - Special issue T., Sharq, 1999
4. K.Tulaboyev. The charm of magic squares. Namangan, 2010.

## THE IMPORTANCE OF OBTAINING NATURAL DYES

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### ABSTRACT

*The article describes the process of obtaining dyes from various plants for textile fibers. For example, the article gives examples of obtaining dyes from vegetation of blue and red. The article discusses anthocyanins, the color of which depends on the medium - acidic, alkaline or neutral. It has been proven that the combination of anthocyanins with acid has a red or pink color, violet neutral in a neutral environment and blue in an alkaline environment. Natural dyes are found not only in flowers, but also in other parts of the plant and stained in different ways. Autumn leaves are colored red, black-red and carrot colors, which cause anthocyanins on the cell surface. Anthocyanins, like in spring at low temperatures or, as their own "solar" coating in autumn, give filtering properties to leaves and stems. This article presents the experimental results of dyes. Pomegranate fruits, plants with green leaves, foliage, young shoots and other parts of the plant were selected. The effect of various extracts on the dyeing of wool yarn is shown in tables 1-10.*

**KEYWORDS:** Anthocyanins, Dyes, Plants, Textile Yarns, Leaves, Fruits And Parts Of The Plants, Carotenoids, Chlorophyl, Delphinidine, Wool Dyeing With Extracts

### INTRODUCTION

The most common compounds in the plant world used as dyes are called anthocyanin. Unlike chlorophyll, they are not associated with the plastid part of the cell, they dissolve more in the cell sap, and some are divided into small crystals. Anthocyanes can be isolated from any blue or red vegetation. For example, grinding red beet kitchen slices or boiling red cabbage leaves in a little water, under the influence of anthocyanins the water turns purple or red. But when a solution is poured into a drop of vinegar, citric, sorgo or any other acid the solution turns red. [1]

Anthocyanins come in different colors depending on the environment in which they are (acidic, alkaline or neutral). The combination of anthocyanins with acid is red or pink, violet neutral in a neutral environment and blue in an alkaline environment. In the Meduniza flower collection at the same time there are half-bloomed flowers - pink, the ones with purpurs and the blossoms - blue. This is due to the acid reaction of the cell sap in the buds; when the flower opens, the cell becomes a neutral and alkaline environment.[2]

When viewed from the Lungworms, pollinating insects flock to pink and purple flowers, which are fully open. The more hydroxide groups in the anthocyanin molecule, the darker the color (due to dilphinidine), when the alkali is methylated, the malvidin pigment is formed, then the leaves turn red. The color of the ends of the flower is also associated with salts of various metals in antitsan. The Mg and Ca salts cause a blue color, and the potassium salts cause a violet. Various color options are also caused by yellow pigments. (Khalconies, flavanols, auronos, etc.).[3]



Natural dyes are found not only in flowers, but also in other parts of the plant and play different roles. For example, potatoes, peel, eyes, tumors and soft flesh, phenolic compounds stain under the influence of bioflavonoids: there are also white, yellow, pink, red, blue, dark, purple and black. The native land of black bean potatoes is Chile and it mainly grows here. The white color is formed by the alkylantosian or catechins, the yellow - the flavons and the flavonoids, the red and the purple - the anthocyanins. The anthocyanins group is large and nowadays consists of 10 types. Pionidine, pelargonidine and malvidin, blue cyanide and delphinidine, and colorless pigment petunidine are found in them. As a result of the tests, the root of the potato confirms that our body is rich in nutrients. For example, in the yellow flesh the complex contains large amounts of oils, carotinoids, riboflavin and flavonoids.[4]

Due to weather changes, we can see that the dramatic changes in potato tubers are due to anthocyanins, which also contribute to light intensity, soil reaction, mineral fertilizers and nucleochemicals. If potatoes are grown in peat areas, potatoes become more greenish, and when exposed to phosphorus, they become white and pink in the effect of potassium sulfate. Potatoes are often found to be irritated even if the nucleochemicals contain copper, iron, sulfur, phosphorus and other elements.

The autumn leaves are colored carrots, red-black and red, because they contain anthocyanins in the cell surface. These colors are caused by the active reproduction of colors, changes in the temperature of the air, intense light and weak vegetation, especially sugars. The following methods are proposed for this process: anthocyanin formation using a simple broadleaved, plain sandstone, white poplar, normus or plane tree. [5]

In the spring a round circle is cut from one of the branches with a medium length and 2-2.5 cm wide. This enhances the accumulation of carbohydrates on the upper surface of the isolated horn, and the leaves at the top will turn red earlier than at the bottom of the round, or compared with leaves on adjacent branches. Anthocyanins, like in spring at low temperatures or as their own "sunny" coating in autumn, give filtering properties to leaves and stems. Trees with a red trunk, shrubs, autumn rye, ferns and some other types of young grasses and leaves in spring turn the energy of light into heat, preventing them from freezing.

Studies have shown that the color of seeds, leaves, and stems in plants has easy fermenting carbohydrates, sucrose, fructose and glucose, which cause them to be frost-resistant. Cultivating plants with these characteristics can produce long-term frost-resistant, sugar-resistant grasses.[6]

Carotenoids (carotene and xanthophylls) are usually found on the leaves of large, hanging birch, and sometimes on the leaves. In this case, when the leaves become pale, the chlorophyll in them becomes golden-yellow. Therefore, the emergence of dark red leaves in the autumn leaves indicates that the plant is slow to fall into photosynthesis without any physiological effects, and that the plant may go to sleep during the winter.

Research has revealed that chlorophyll and anthocyanin (or xanthophyll) are present at the beginning of life on the green leaves of plants.

Anthocyanes and xanthophiles are of lesser color, and they become visible after the chlorophyll particles are decomposed into the environment. In November-December, when chlorophyll production is slow due to lack of sunlight and the spectrum is incomplete, the roses and leaves of the house are purple in color. If the sunlight was right, they should be green right away.

Indoor Aloyni has green leaves in the winter and early spring when the sun's rays are still weak. If it is exposed to bright sunlight in June or July, they are reddish and if they are brought into a darker house the leaves will turn green. The yellow color of the flowers can be turned from light gray to light yellow with alkaline flavonoids (carotene, xanthophyll and antichlorine).[7]

The air between Nivyanka obiknovennaya, white water lily completely reflects the illumination and the plant becomes white and discolored. In the same way alpine edelweiss, poplar dry, field jungle are white. In the dead plant tissues, the air is also white because the light returns. The birch white color is beautiful at any time of year due to the fact that the snow-white hairy crystals in the cells are due to betulin (birch camphor).

The juice of the plant cells contains brightly colored flavonoids, which are pH-dependent, which determine the color of fruits and flowers. Anthocyanins attract pollinators, remove pests from the leaf color, filter the fungal radiation and protect the plants. There are many anthocyanins in the black currant. 250 mg of anthocyanin contains 100 grams of fresh fruit, most of them in fruit pods.

Due to the positively charged molecule, it is well soluble in water, especially in acidic environments, and the presence of glycoside in plant tissues also increases water solubility. In nature, there are 30 monomeric anthocyanins, which are mainly 6 aglycone derivatives: pelargonidine, cyanide, peonidine, delphinidine, petunidine and malvidin. Till today about 500 anthosian pigments have been found. Cyanidin is acid in acid, blue in delphinidine, pelargonidine orange, petunidine brown in red, or peonidine purpur-red in color.[8]

Anthocyanins have partly shown anti-cancer properties. Anthocyanins have been shown to have partial anti-cancer properties. Mulberry fruit (*Morus atropurpurea*) slows down aging and weakens Alzheimer's disease. Anthocyanins reduce arterial pressure and increase blood vessel elasticity in the arterial system, reducing blood clot formation.

Experiments have shown that anthocyanins prevent the accumulation of fat in tissues. Anthocyanes determine the diversity of flowers, and the main component of anthocyanins are antocyanides. Pelargonidine - Glucosyl is present in red pelargine, vilka, georgin. Cyanide is present in pot, rose, tulip, berry berries. In complex form it can be found in tulips, currants, raspberries, rhubarb.

Delphinidine - Delphinium Consolia, with a monomethyl ether, in the fruit of the cherry, in the flower of the petunia, the black mulberry, in the flower of the wild malvae in the dimethyl ether. These anthocyanidins and their methyl ether give different colors to acids. Anthocyanes are well soluble in acids, alcohol, water, ether and other solvents.

It is extracted by anthocyanins with alcohol; (cleansed from oil and grease). The aqueous solution is precipitated with lead acetate, and hydrogen is extracted by antisyan-cyanide (blue color).

According to Wiltsetter, flowers are often extracted with alcohol, with a mixture of acetic acid, then the solution is immersed in ether, the crystallized crystalline HCl, and the chlorides of anthocyanidins are prismatic or needle-separated.

They are insoluble in cold water and are slowly dissolved in alcohol. Antonyms are more common in cultural plants than wild species. In plants, the amount of anthocyanins is 7% of the horns and stems. (pelargonium and mountain males).[9]

Anthocyanes are glucosides, which when decomposed with acids are separated into sugar and anthocyanin. Close to catechins and flavonoids by structure. The presence of anthocyanidins in the pyryl salts gives the purple color, with alkaline salt, acid salts. There is also a colorless form of leucoform. When pH is less than 6, the anthocyanins are carmine red, pH = 6 is purple, pH= 8 is blue, pH=10 is green. When pH= 8-10, the color is unstable and stays the same for a few minutes, while the color is stable at pH=1,5-2.

Anthocyanins enter into condensation reactions by removing compounds that are difficult to dissolve and do not dye.[10]

The presence of anthocyanins and adjacent polyphenols gives the color and taste of plants. Leukoantocyanes, catechins give the fruit quality, some phenol bitterness. Anthocyanins, flavones together with chlorophyll and carotenoids form the natural color of fruits. The content of polyphenols in fruits is different. There are many flavors in most fruit-bearing fruits (apples, pears), citrus fruits.

Experimental results of obtaining dyes and dyeing yarns. A scientific research on the production of natural dyes was led by the Azerbaijani scientist MA Kasymov. They have selected pomegranate fruit, green leafy greens, young shoots' bark and other plants. The dyeing feature was tested by the method learned in the textile research institute's textile lab at the Azerkhalcha carpet factory in Baku. Pomegranate fruit paint is known from ancient times. Pomegranate foam can be used in a wide range of colors such as wool, silk, cotton fabrics beige, green, whitish, sand and other colors.[11] The results of dyeing the wool yarn with aqueous extract from the pomegranate fruit peel when the fruit is ripe are presented in Table1

**TABLE-1 THE EFFECTS OF VARIOUS EXTRACTS ON DYEING WOOL YARN WITH LIQUID EXTRACT OF PUNICA GRANATUM FRUIT POLISH ARE AS FOLLOWS:**

№	Softening substance	The amount of chemical %	Color of dyed yarn
1.	Neutral Bath	-	the funeral color
2.	Potassium Sodium	5,0	-
3.	Acetic acid	5,0	the funeral color
4.	Alumocalyan growers	8,0	-
5.	Iron Cuisine	-	Dark black
6.	Copper Cube	4,0	Green
7.	Red blood salt	4,0	Black
8.	Yellow blood salt	4,0	oq –olarang
9.	Chromic	2,5	so'lg'in—sariq
10.	Cobalt acetate	4,0	Funeral
11.	Acetate of lead	1,44	Dark green-yellow
12.	Tin chloride	3,0	Black-red-yellow
13.	Tin chloride + acetic acid	3,0+4,0	Yellow

According to A. Grossheim's (1946) walnut fruit fly contains 15-25% gluten containing gall and ellagic acids. According to Brigl (1926), Fedorov and Rosen have painted on it. MA Kasymov studied the branches, leaves and young branches of fruit during ripening.[11]

Table 2 presents the results of wool dyeing with extracts from various parts of walnut. Different colors can be obtained using different vacuum cleaners. In the tested sections of walnuts the coloring is high: 1 kg crushed bark or leaf 15-20 kg of wool.

**TABLE-2 GLYCYRRHIZA GLABRA L IN THE PRESENCE OF DIFFERENT FLAVORINGS. THE RESULTS OF THE EXPERIMENT ON WOOL DYEING WITH AQUEOUS EXTRACT OF THE GROWTH VESSELS:**

№	Sodium substances	Quantity of chemicals in%	Colored yarn color
1.	Neutral Bath	—	dark red
2.	Potassium Sodium	5,0	-
3.	Acetic acid	5,0	-
4.	Alumocalyan growers	10,0	yellow
5.	Iron Cuisine	3,5	black- multi-colored
6.	Iron (II) Chloride	3,5	multi-colored
7.	Copper Cube	4,0	green-yellow-dark red
8.	Chromic	2,5	Light yellow
9.	Vinegar cobalt	4,0	red-dark red
10.	Red blood salt	4,0	whitish-multi-colored
11.	Yellow blood salt	4,0	black –multi-colored
12.	Red blood salt + acetic acid	4,0-5,0	Light blue
13.	Sorrel acid	4,0	green-yellow
14.	Alkaline potassium with manganese	1, 4	red-dark red

Several colors are taken from different parts of the colony. These colors are milky, yellow and violet. (Table 3). Water extract of steam vessel is high color: 1 kg crushed root dye 15 kg of wool.

**TABLE-3 THE RESULTS OF THE EXPERIMENT ON DYEING WOOL WITH AQUEOUS EXTRACT OF DIFFERENT PARTS OF THE JUGLANS REGIA L GREEK BODY UNDER THE INFLUENCE OF DIFFERENT STAINS:**

№	Sodium substances	quantity of chemicals in%	The color of the yarn stained with the extract		Fruit bark
			Shell of young horns	Leaves	
1	Neutral bath	-	mustard color	mustard color	tobacco color
2	Sodium player	5,0	whitish- tobacco color	whitish-multi colored	dark- tobacco color
3	Acetic acid	5,0	mustard color	black- multi colored	multi colored - tobacco color
4	Alvumokiliv additive	10.0	-	Whitish	multi colored
5	Iron Cuisine	4:0	blood-multi colored	black- multi colored	tobacco color
6	Terair (II) Chloride	4,0	-	multi colored	Dark red- multi colored
7	Chromic	2,5	black-blue	whitish-multi	whitish-dark blue

				colored	
8	Kobaliet acetate	4,0	whitish-tobacco color	Multi colored	whitish-multi colored
9	The red cone	4,0	whitish-dark blue	Multi colored	Oqish-olarang
10	Copper Cube	4,0	black- multi colored	-	-
11	Red blood salt + formic acid	4,0-5,0	-	-	Tobacco color
12	Red blood salt + CH <sub>3</sub> COOH	4,0-5,0	green-dark blue	Multi colored	-
13	Yellow blood salt	4,0	Black	black-multi colored	black-multi colored
14	Potassium permanganate	1,4	whitish-multi colored	black-multi colored	
15	potassium (II) chloride + oxalic acid	3,0+4,0		whitish-multi colored	whitish-multi colored
16	potassium (II) chloride + alumokalium additive + formic acid	3,0+4,0 +5,0	black-multi colored	black-multi colored	
17	Sorrel acid	4,0	green		black-multi colored

M. Kosimov studied 5 types of dyes for the carpet industry: Sotinus coggygia, Datisca cannabina, Nurricum perferatum, Peganum harmala, Rubica iberica. Cotinus coggygia. Scumpia, a jellyfish belonging to the Anacardiaceae family. There is a substance on the leaves. Scumpium is used to paint the wooden packages in red, light red and black.[12] The coloring feature of Scumpium oils and fruits is shown in Table 4 and 5.

**TABLE-4 RESULTS OF EXPERIMENTATION ON WOOL DYEING WITH AQUEOUS EXTRACT OF WOOD AND COTINUS COGGYRIA PLANT WITH DIFFERENT SPICES:**

t/r	Softening substance	The uantity of chemical, %	Color of dyed yarn
1.	Neutral Bath	—	Yellow – multi colored
2.	Ammonia	0,4	Blonde-lemon-yellow
3.	Acetic acid	4,0	Yellow with lemon
4.	Alumocalyan growers	10,0	Yellow-orange, yellow-multi colored
5.	Iron Cuisine	5,0	red-multi colored, black –red
6.	Copper Cube	5,0	reddish-black
7.	Yellow blood salt	5,0	Light - greenish-yellow
8.	Chromic	2,0	Reddish-yellow

9.	Alkaline cobalt	6,0	Black-orange
10.	Alkaline potassium with manganese	1,3	Light yellow
11.	Red blood salt	5,0	Bluish-yellow
12.	Tin (II) Chloride + Sorrel acid	3,0-4,0	Yellow-orange

**TABLE-5 TURLI XIL XURISHLAGICHLAR TA'SIRIDA COTINUS COGGYGRIA O'SIMLIGI YAPROQLARINING SUVLI EKSTRSKTI BILAN JUN IPLARNI BO'YASH TAJRIBA NATIJALIRI:**

t/r	Softening substance	The quantity of chemical %	Color of dyed yarn
1.	Neutral Bath	-	Color blue
2.	Potassium Sodium	0,2	Take it
3.	Acetic acid	2,5	-
4.	Alumocalyan growers	8,0	Orange-yellow
5.	Iron Cuisine	2,0	Black
6.	Iron (II) Chloride	2,0	-
7.	Miss Coupe	2,0	Green
8.	Chromic	1,2	Light-yellow
9.	Red blood salt	2,0	Multi colored
10.	Yellow blood salt	2,0	Whitish
11.	Acetic acid is cobalt	2,0	Blue, multi colored - yellow
12.	Alkaline potassium with manganese	0,7	Yellow as gold
13.	Red blood salt + formic acid	2,0+2,5	Black
14.	Sorrel acid	2,0	Blue
15.	Tin (II) Chloride + Sorrel acid	1,5+2,0	-

As shown in the table, wool yarn is dyed yellow, light yellow, and brown depending on the nature of the souring. You can also get white, yellow, and green. 1 of extract of 100 g of shredded wood allows for 14-15 dye solution with 2-2.5 kg of wool.

*Datisca cannabina* Cheese *datiska*, family of *Datisceae*. It has a perennial plant, the root of the datasheet and the yellow pigment of the *datiscet* on the surface. It is isolated in the form of tetraoxiflavon (Mayer 1940). *Datiska* fruit ripens in October. Dyeing a woollen thread with aqueous extract of the surface of the earth gives a different look when applying different types of soils.[13] The color is dominated by yellow. (Table 6).

**TABLE-6 EXPERIMENTAL RESULTS OF DATISCA CANNABINA WOOL DYEING WITH AQUEOUS EXTRACT OF TOP SOIL:**

№	Softening substance	The quantity of chemical %	Color of dyed yarn
1.	Neutral Bath	-	Light yellowish yellow
2.	Potassium Sodium	0,4	A bell
3.	Acetic acid	3,0	Light yellowish white
4.	Alumocalyan growers	20,0	Yellow with lemon
5.	Iron Cuisine	20,0	Cigarette bell



6.	Iron powder + acetic acid	20,0-5,0	The whitish-tobacco color
7.	Copper Cube	20,0	Dark green
8.	Copper Cuper + Formic acid	20,0-5,0	Light-yellow gold
9.	Yellow blood salt	20,0	Bluish
10.	Chromic	4,0	-
11.	Alkaline cobalt	13,0	Green
12.	Alkaline potassium with manganese	4,0	Blonde

Nurericum pertoratum- tutsan. Its flower contains a hypericin dye, which is part of a group of flavonoids with quercetin. She wears a red yarn (Mayer, 1940). Zveroboy is used for dyeing when the flowers of the surface of the surface are completed and the fruits begin to bear fruit (Petrov, 1940). Flower alcohol extract is used for dyeing red, dung red (Grunskaya, Petrova, 1944). Flower sap gives the wool yellow and green, while the alkaline surface is red and light red (Fedorov, Rosen, 1950).[14]

In September, it was found that the extracted from the surface of the water during the harvesting period allows the dyeing of the wool to various colors. (Table 7).

**TABLE 7 THE RESULTS OF THE EXPERIMENT ON THE DYEING OF WOOL WITH AQUEOUS EXTRACT OF THE SURFACE OF THE NURERICUM PERFORATUM PLANT UNDER THE INFLUENCE OF VARIOUS POWDERS:**

t/n	Softening substance	The quantity of chemical %	Color of dyed yarn
1.	Neutral Bath	-	Brown red
2.	Potassium Sodium	0,4	White orange and brown
3.	Acetic acid	4,0	White-yellow
4.	Alumocalyan growers	20,0	-
5.	Iron Cuisine	20,0	Green
6.	Cobalt with vinegar	2,0	Whitish-yellowish
7.	Alkaline potassium with manganese	13,0	Yellow-yellowish

Harmala - a colorful plant with a distinctive mark. The paint from its seed is called "Turkish paint" (Pavlov, 1947). The slightly alkaline boiling of the Isikiq Seed gives a reddish dye for wool and silk (Pavlov, 1947). According to Enden's (1944), aqueous extract of hives yields a dark brown color with green fluorescence. Paint has been found to be the best solvent water (alkaline alkaline) to extract matter.[16] The results of using aqueous extract of sesame seeds and wool yarn using different fertilizers are shown in Table 8 (Seed collected in September).

**TABLE 8 THE RESULTS OF THE EXPERIMENT ON DYEING WOOL WITH AQUEOUS EXTRACT OF THE SURFACE OF THE PEGANIUM HARMALA UNDER THE INFLUENCE OF VARIOUS POWDERS:**

№	Softening substance	The quantity of chemical %	Color of dyed yarn
1.	Neutral Bath	-	yellow, green, brown-yellow
2.	Potassium Sodium	0, 4	yellowish
3.	Acetic acid	4,0	cream colored
4.	Alumocalyan growers	20,0	reddish-brown-green
5.	Iron Cuisine	10,0	yellowish- yellow

6.	Copper Cube	20,0	Copper colored -green
7.	Chromic	2,0	yellowish- brown
8.	Alkaline cobalt	10,0	Light yellow
9.	Alkaline potassium with manganese	1,4	brown-yellow, yellowish

Rubia iberica - Georgia marena. Red paint is taken from the root. In the fall, the plant will produce pink, red, and brown. Rope color (Table-9). You can get 11 -12 g of a solution of 100 g of crushed root with 15-25 kg of wool.

**TABLE-9 THE RESULTS OF THE EXPERIMENT ON THE DYEING OF WOOL WITH WATER EXTRACT OF THE ROOT OF THE CULTIVATION OF RUBIA IBERICA WITH VARIOUS ADDITIVES:**

№	Softening substance	The quantity of chemical %	Color of dyed yarn
1.	Neutral Bath	-	Reddish
2.	Potassium Sodium	0,4	black-reddish
3.	Acetic acid	4,0	yellowish-brown-red
4.	Alumocalyan growers	10,0	whitish-red
5.	Iron Cuisine	4,0	brown-red
6.	Copper Cube	4,0	Brown
7.	Chromic	2,0	reddish-brown
8.	Red blood salt	4,0	black-reddish
9.	Alumocalium Extract + An Acid Acid	5,0+10,0	brown –red
10.	Potassium manganese	2,0	Brown
11.	Ammonia + alkaline additive	0,4+10,0	yellowish-red
12.	Tin (II) Chloride + Sorrel Acid	4,0+3,0	reddish –yellow
13.	Tin (II) Chloride + formic acid	3,0+5,0	yellowish-red
14.	Ammonia + Tin (II) Chloride + formic Acid	0,4+3,5+5,0	Pomegranate-red color
15.	Formic acid + alumocalium additives	5,0+10,0	whitish-red
16.	Ammonia + Tin (II) Chloride + formic Acid + Alumocalium additives	0,04+3,0+5,0+10,0	reddish-yellow

Scientists from Samarkand State University have done a great deal of research on the dyes production from plants. In 1940 G.V.Lazurevsky and A.S.Sodikov were interested in the dyeing properties of Ammothamnus solder. They found that this plant had been used by people in ancient times to dye handmade fabrics.

The dyeing data shows that the dye collection, called soporeols, dye the wool yarn on yellow. If you apply artificial acid paints after the thermal treatment of dyes, you can extend the collection of dyes due to red and dark red. In 1951, the Bukhoro carpet weaving art was used to dye the wool and silk. The Tashkent leather factory has tested the best properties of these dyes.

Interestingly that soporols are soluble in alcohol, acetone, butylacetate, which allows them to be used in varnish production.[17]

Since 1974, we have sought to isolate *Ammothamnus lehman*, *Vexibia (sophora) alopecuroides*, *Vexibia (Sophora) pachycarpa*, a collection of dyes from the roots and stem of *Ammodendron conollyi*. Taken fractions were subjected to quantitative and qualitative analysis. These dyes showed that they do not dissolve well in water and dissolve well in alkali. Under the influence of salts on dyes there are formed the soluble varnishes. Wool yarn dyes range from yellow, light yellow, red, green to dark red. The results of the dyeing are shown in Table 10.

**TABLE 10 EXPERIMENTAL RESULTS OF DYEING WOOL WITH VARIOUS EXTRACTS FROM AMMOTHAMNUS SOLDERMAN ROOT:**

№	Softening substance	The quantity of chemical %	Water suspension	Color of dyed yarn		
				Acetone extract	Essential oil soluble extract	Essential insoluble extract
1	Neutral Bath	-	whitish-yellow	whitish-yellow	whitish-yellow	whitish-yellow
2	Sodium player	0,4	brown	yellowish- red	whitish-red	brown
3	Acetic acid	4,0	whitish-yellow	yellowish- red	yellowish- red	yellow
4	Iron Cuisine	4,0	Light yellow	green-red	yellowish-green	dark yellow
5	Copper Cube	4,0	green	yellowish- red	red	Green
6	Yellow blood salt	4,0	reddish-yellow	yellowish-red	green-red	Red
7	Red blood salt	4,0	reddish-green	whitish-red	green-red	whitish-red
8	Chromic	2,0	brown	brown	brown	yellow-red
9	Alumocalyan growers	10,0	Light brown yellow	reddish -yellow	Light brown yellow	whitish-yellow
10	formic acid -	4,0-8,0	green-reddish	reddish-yellow	yellowish-red	yellowish-red
11	Lead Acetate	4,0	red	whitish-red	grey-yellowish	yellow
12	Plumbic (II) Chloride-formic acid	3,0-4,0	light -red	whitish-yellow	yellowish-red	Light brown yellow
13	Ammonia- aluminum alloys	3,0-8,0	lemon yellow	-	yellow	Yellow
14	Ammonia-plumbic (II) Chloride- formic acid	3,0+3,0+4,0-1,4	whitish – lemon color	yellow	Copper color	Light brown yellow

The usual white wool yarn is dyed on yellow or red depending on the cloths. Dyeing with acetone extract using a variety of different substances gives the appearance of yellow. It gives dark orange colors when dissolved in essential oils and gives yellowish or dark red color when do not dissolved in essential oil.[18]

The results showed that the use of chromium, iron, sulfate, aluminum potassium supplements and chromium acetate-based bleaching dyes give a wide range of colors. When applying dyes viscose, natural silk and acetate, the results were found to be better than those used in the textile industry, light colors were not worse, durability of distilled water and rapid wear. Comparing our results with industrial dyes shows that our dyes have averaged results.

## REFERENCES

1. Bhattacharyya N. Natural Dyes for Textiles and Their Eco-friendly Applications. New Delhi: IAFL Publications; 2010.
2. John P, Angelini LG. Indigo-agricultural. In: Bechtold T, Mussak R, editors. Handbook of Natural Colorants. Chichester: Wiley; 2009. pp. 75–103.
3. Lucas A, Harris J. Ancient Egyptian Materials and Industries. Mineola, New York: Dover publications; 1999.
4. M.L. Gulrajani, D. Gupta (eds.), Natural Dyes and Their Application to Textiles (IIT New Delhi, New Delhi, 1992) pp. 19–45
5. Melo M.J. History of natural dyes in the ancient mediterranean world. In: Bechtold T, Mussak R, editors. Handbook of Natural Colorants. Chichester: Wiley; 2009. pp. 1–18.
6. Mohd Yu., Mohd Sh. & Fageer M. Natural Colorants: Historical, Processing and Sustainable Prospects Natural Products and Bioprospecting volume 7, pages123–145(2017)
7. Mussak RAM, Bechtold T. Natural colorants in textile dyeing. In: Bechtold T, Mussak R, editors. Handbook of Natural Colorants. Chichester: Wiley; 2009. pp. 315–338.
8. Rungruangkitkrai N., Tubtimthai N., Cholachatpinyo A., R.Mongkholrattanasit, UV protection properties of wool fabric dyed with eucalyptus leaf extract by the padding techniques, in RMUTP international conference: textiles and fashion (Bangkok, 2012)
9. Samanta AK, Konar A. Dyeing of textiles with natural dyes. In: Kumbasar EPA, editor. Natural Dyes. Rijeka Croatia: InTech Open Access Publisher; 2011. pp. 29–52.
10. Schweppe H. Practical Hints on Dyeing with Natural Dyes: Production of Comparative Dyeings for the Identification of Dyes on Historic Textile Materials. Washington, DC: Conservation Analytical Laboratory, Smithsonian Institution; 1986.
11. Vankar P.S. Natural Dyes for Industrial Applications. New Delhi: National Institute of Industrial Research; 2007
12. В.Ф.Травен “Органическая химия”. В 2-х т. Москва. 2004. Т. 1. 705 стр.
13. SH. V. Abdullayev, X. M. Shoxidoyatov, M. J. Raxmatova, N. Umarova. “Tabiiy birikmalar kimyosidan praktikum”. (uslubiy qo`llanma) 2010y. 131 bet.
14. SH. V. Abdullayev, X.M.Akramov, J.R.Muhitdinova, A.Matkarimov. O'zbekistonda mavjud o'simliklardan olingan bo'yoqlar asosida to'qimachilik tolalarni bo'yash texnologiyasi. T.2019
15. X.M.Акрамов, Ж.Р.Мухитдинова. Ознакомление студентов с историей народного промысла как фактор их профессиональной подготовки. Приволжский научный вестник. №5. Г.Ижевск. 2016. Стр.140-145

16. К. В. Вацуро, Г. Л. Мищенко. "Именные реакции в органической химии". Москва. 1976 г. 536 стр.
17. Б. Д. Березин, Д. Б. Березин. Курс современной органической химии. Москва. 2003. 768 с.
18. [www.florio-fashion.com](http://www.florio-fashion.com)

## FORMATION OF PEDAGOGICAL AND PSYCHOLOGICAL MECHANISMS OF STUDENT SELF-GOVERNMENT

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### ABSTRACT

*This article discusses the psychological mechanisms of student self-government, as well as pedagogical mechanisms. Self-government is one of the most important aspects today. It also focuses on student leadership skills.*

**KEYWORDS:** *Student, Self-Confidence, Self-Esteem, Adequacy, Liberalism, Authoritarianism, Skill, Knowledge, Skill, Qualification.*

### INTRODUCTION

Ensuring the quality of education in our country, educational institutions strengthening the material and technical base and methodological support, the work of teachers and improving living conditions, humanizing education and the democratization reforms have affected the prestige and prestige of the pedagogical profession in our society increase, the widespread introduction of person-centered learning models in the educational process creates an opportunity. Self-awareness, a sense of self-control to be able to make full and effective use of educational services, scientific and to be able to become a professional in order to achieve a thorough mastery of professional knowledge lays the foundation for.

As the President of our country Sh.M. Mirziyoyev noted, "We are education and upbringing the operation of all links of the system in accordance with modern requirements

### Main part

We see improvement as our number one priority. "education is about reforming society and making it more open and new to the outside world is a key factor in transforming it into a society focused on technology and knowledge.

Modernization of the education system, reform of its most important area, today it is necessary to take into account only the needs of the state and civil society, the expansion of social responsibilities in educational institutions, the requirements of the individual, his prioritize the creation of conditions for the most complete determination of sustainability and it is important to develop each student's potential and self-management is important.

In the organization of the teacher-student relationship in the present period, in general to the radical changes taking place in the country and the modernization of education and in response to the education system resulting from integration processes.

We can see the issues related to cooperation. The student's self-improvement of pedagogical and psychological mechanisms of preparation for management. One of the issues of the education system is the development of interaction between teachers is happening. The relationship of the subjects of the educational process in educational institutions scientific-theoretical-practical preparation for humanization and democratization required.



By a number of scholars on student self-governance recognized. (A.V. Batarshv, S.L. Bratchenko, A. Grebtsov, V.A. Kan-Kalik, N.V.Kuzmina, L.A. Petrovskaya, E.I. Rogov, R.X. Shakurov, P.M. Jacobson). These scientists developing a system of student self-management in the learning process in his works. The problem is highlighted in the organization of student self-government interpersonal relationships as an essential condition for successful activity issues of interdependence between culture and management culture are sufficient organization of student self-government system and pedagogical and psychological relations of teachers and students in development a number of theories, even if there is a certain theoretical and practical experience of the study. The issues are not sufficiently developed, including the teacher-coach what is its role in this process, what are its features in different educational institutions, basic conditions for improvement in the context of modernization of education and directions are not disclosed.

Student self-governance in higher education is education in the process their ability to think independently is the highest manifestation and in social life means to find its place. Self-expression is the foundation of self-management upbringing in civil society, social interaction throughout his life developing skills, fulfilling responsibilities and organizing them strengthen the ability to submit to collective discipline and at the same time own psychological protection of their rights, group and personal interests allows communication with the public. Student self-management meaning students' "authority", not leadership relationships, or to the personal experience of democratic relations and its implementation. It does not depend on the availability of forms, self-management of students democratic in an educational environment, not a specific "management activity" ensuring the dynamics of relationships, students' self-reliance in civil society additional and independent activities that provide opportunities for self-realization is a way of organizing. Participation in self-governing bodies, other like any activity, the student defends himself as a person, a person make their own interests and abilities one of the team teams at the same time allows you to understand as part of.

Cooperation of pedagogical staff in higher education institutions, cooperation with the family the following solution in the organization of student self-government in the practice of doing allowed to identify unresolved issues.

Students in modern pedagogical and psychological theory and practice public education despite the urgency of self-governance issues educational work in institutions is still formal, stereotypical, pedagogical and psychological impact on students, not active subjects of social life to choose, to act independently and responsibly, to take an independent position, to be free ideas about the active person who is able to manifest are the same as before student self-management so that it does not remain at the level of declarations including the extensive use of educational potential in collaboration with teachers there is a need for other training practices. In addition, teachers and the modern stage of developing student interaction complex and contradictory, mutual rudeness, intolerance in relationships, misunderstandings, pedagogical and psychological conflicts.

President of the Republic of Uzbekistan Islam Karimov signed a decree on February 7, 2017, on the Strategy of Actions for the Further Development of the Republic "No. 4947, dated October 8, 2019 "On the system of higher education of the Republic of Uzbekistan 2030 Decree No. PF-5847 "On approval of the concept of development up to April 20, 2017 "Measures for further development of the higher education system No. PQ-2909 of June 5, 2018 "On education in higher education institutions improving the quality and comprehensiveness of their implementation in the country additional measures to ensure active participation in

reforms Resolution No. PQ-3775 of Pedagogical Psychology of Preparing Students for Self-Management scientific research has been conducted by a number of scientists. In Uzbekistan, on self-government HI Ibragimov, E. Goziyev, A. Khalikov, MG Davletshin, K. Zaripov, I. Karimov, N. Komilov, N.M. Maxmudov, S. Nishanova, D. Narzikulova, M. Ochilova, M. Pirmuhamedova, N. Muslimov, K. Qodirov, A. Avazboyev, A. Ismadiyarov, E. Migranov, Sh. Pozilova conducted research. The views expressed by many of our scholars above are that young people are self-sufficient preparation for management, self-management functions, students' own in society through the urgency of finding a place and self-governance "High spirituality in the formation of personality. It turns out that S. Nishanova is one of the few studies. We can also see the results of research conducted by the use of a number of techniques in psychological self-management plays an important role. In the method of self-observation, the student observes his own mental phenomena examines, in which all cognitive processes play a role. Of this method through a series of student self-management of shortcomings and successes students can achieve success through external and internal self-governance they strengthen the willpower. Every person's will is one but it focuses on changing and managing events in the external world, and it as well as to manage their own personal subjective state and processes can direct.

- The desire of students to show a number of features in self-government, desire, purpose and most importantly inner strength of will. - Any goal in student self-government and its implementation the choice of paths sometimes results in a number of processes that have different attractions.

This process reveals the nature of the involvement and internal struggle of the matinees in this case, students have a struggle of motives in self-government.

Every person, including students, has an internal motivational struggle. Competence specific to direct pedagogy and psychology in a number of studies its peculiarities have been studied. Such research includes AK Markova we can include research conducted as a result of the research, the educator's self-confidence, as a person there was talk of self-esteem and self-control.

- important pedagogical and psychological qualities in the professional activity of teachers that is, to create compassion, love for children, and the need for self-improvement- self-development and self-development in the acquisition of pedagogical skills important. Self-development tasks include self-analysis and self-awareness is determined by the assessment itself.

Every student or teacher first and foremost works on their own knowledge and skills conduct ongoing research and development to improve their skills

It is also necessary to be self-sufficient and creative in everything approach, development of hard work, pedagogical and creative cooperation to achieve. To give up one's negative habits through self-management, one's own self-improvement is also the embodiment of the qualities embodied in it is a necessary task of pedagogue and psychologist.

## CONCLUSION

Pedagogue and psychologist increase the efficiency of the work process by increasing its business activity mastering the knowledge that is updated daily, from the means of advanced technology. It is important to be aware of this and its incarnation certainly delights the heart. Self-assessment in the teaching process- self-assessment of a person through self-analysis. Self-assessment it should help the individual to discover his or her abilities on his or her own.

**REFERENCES**

1. The Decree of the President of the Republic of Uzbekistan dated February 7, 2017 “Uzbekistan On the Strategy of Actions for the Further Development of the Republic ” Resolution No. 4947.
2. F.I.Khaydarov, N.T Khalilova. General psychology. (Textbook) Tashkent -2009.
3. Pedagogical theory / textbook for higher education. Mual .: M.X.Toxtaxodjayeva va. Others Prof. Under the general editorship of M.Kh. Tokhtakhodjayeva. - T .: «Iqtisod-moiya», 2010 ..
4. Pedagogy: 1000 answers to 1000 questions / Methodical manual.
5. Inoyatov UI, Muslimov NA, Usmonbaeva M., Inogamova D. - T .: Nizami Tashkent State Pedagogical University, 2012.
6. Turdiyeva M. Formation of pedagogical thinking in students of higher educational institutions. llation. - T .: TDPU named after Nizami, 2008.
7. Usmonbaeva, A. Turaev, Fundamentals of Creative Pedagogy. Educational-methodical complex. -.TDPU, 2016.

**PSYCHOLOGICAL ANALYSIS OF INTERCULTURAL COMPETENCE****Salomova Guli Shodimurodovna\***

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**ABSTRACT**

*The article describes the intercultural competence of students. The need for the formation of intercultural competence is a unique, interdisciplinary opportunity. It is also regarded as the necessary attributes of the competence of a culturally diverse person, understanding of the actions of the person, the ability to communicate freely in two languages, and emotional stability. Staff develops cognitive and interdepartmental intercultural relationships, professionalism and understanding of other cultures, as well as individual personality typologies and abilities. The article analyzes the intercultural competence of 322 students in higher education, as well as the stages and methods of its formulation.*

**KEYWORDS:** *Interdepartmental, Intercultural, Interdisciplinary*

**INTRODUCTION**

The need to strengthen the knowledge and skills related to competitiveness, perceptions, empathic skills, adequate cultural censorship, and interdisciplinary effective relationships are gaining momentum in the increasingly intensified integration of humanity, in the widespread expansion of international and cultural relations. The main objective of the Educational system is educating students in accordance with the new modern environment, ensuring free and informed work in all areas of social relations.

For the students, in addition to understanding the language, culture and values of nations, it is important to develop personality traits in complex cognitive processes such as high level of critical thinking, communicative skills, ability to communicate freely in foreign languages, intercultural communication, information retrieval, and the formation and improvement of emotional stability. One of the actual problems of the dissertation is the accumulation of methodological bases for complex formation of these qualities in students.

The issue of intercultural competence is in conformity with the principles of cognitive and human psychology as well as the practical analysis of the essence of socio-psychological, ethnopsychological rules. In cognitive psychology, a practical study of the tendency of the person's thinking, the ability to memorize the foreign language, and the ability to manage complex social relationships are thoroughly and practically researched. One of features of intercultural competence is the ability to communicate freely in foreign language. However, it involves complex cognitive thinking process that requires the mutual consciousness of the individual's thought process and social status. The humanistic psychological aspects of the case require the comprehensive study of the person in social relations, his motivational-beeeveristic aspect. The issue of intercultural competence is in conformity with the principles of cognitive and human psychology as well as the practical analysis of the essence of socio-psychological, ethnopsychological laws. In cognitive psychology, a practical study of the tendency of the

person's thinking, the ability to memorize the foreign language, learn and learn, and the ability to manage complex social relationships are practically investigated. One of the manifestations of intercultural competence is the ability to communicate freely in a foreign language involves complex cognitive thinking processes that require the mutual consciousness of the individual's thinking and social status. The humanistic psychological aspect requires the comprehensive study of the person in social relations, including his motivational-behavioristic style.

In the overall form of intercultural communication, we learn from the point of view of the interconnection of individuals, groups and organizations of different cultures. At the same time, the crucial task is to adequately understand the importance of the cultural difference. Because the main purpose and essence of the whole process of communication is the idea of a person's acquaintance. This requires a high degree of accurate and complete information, experience and expertise. The effectiveness of communication depends on the relationship among his/her peers. However, in order to achieve mutual harmony, there is a need for a combination of specific knowledge, experiences, skills, common to all participants of the communication, which are interpreted as intercultural competence. While each participant of the communication process is featured as a separate person, he/she is a full member of a socio-cultural group, a clear cultural representative and a representative of the whole humanity. This fact creates individual, social, collective, national and universal knowledge in his mind.

Intercultural communication, like any other social dialogue, has merits or demerits in implementing its goals and objectives. In this case, intercultural competence plays a key role. The term "intercultural competence" has been the focus of many researchers and scholars, and this issue is gradually becoming a scientific one. Because all interconfessional relations in the intercultural relationships are connected with the outside world. As a result of the adaptation process to the outside world, individuals are involved in practical activities.

If we explain the concept of ethnocultural competence from the Triandic interpretation of the 1970s, ethnocultural relations became relevant since the existence of the principal aspect of an independent subject/science. During this period foreign interest in cultural values and attitudes has begun. First of all, it was necessary to overcome the barriers of ethnocentrism. In this context, the competence and interpersonal relationships with other cultures are considered as a complex of individual's analytical and strategic opportunity.

## METHODOLOGY

In the process of studying the intercultural competence of the student, we decided to study its complexity, since we did not have universal learning method. For this purpose, an experimental program which incorporates theoretical and methodological approach to allow students to evaluate the intercultural competence was developed. The experimental program comprises methods, research, scientific and methodological recommendations.

Prior choosing the experimental test methods, the qualifications of the university student were categorized. These qualifications include:

Personal Qualifications - Empathic capabilities; tolerance (ethnic, social); ethnical identity; emotional stability; freedom in relationships; independence.

Professional Qualifications – Logical thinking; speaking skills; organizational skills; responsibility; executive discipline; knowledge of different languages.

Social Attributes - Dialogue; use of language opportunities; conflict prevention.

The diagnostics of the intercultural competence of students was aimed at solving the following issues; the development of a socio-psychological model reflecting the process of intercultural competence development; studying the social qualities of students with their ethnic identity; systematize communication skills based on a specific category;

The research hypothesis was characterized as follows: a lack of understanding of the need for the intercultural competence and the development of intercultural competences in students; the availability of opportunities for students to develop intercultural competence and lack of a program for forming and developing intercultural competences;

The methodology of the research was chosen on the basis of a general and specific methodology, and was determined by the purpose of research, objectives and subject matter. It also depends on the technical capabilities of the methodology.

The research program's objectives can be divided into two main stages:

1. The methodology was aimed at studying the peculiarities of the students' understanding of intercultural relations, researched by G.M.Manuellov, V.V.Kozlov, M.P.Fetiskin in their "The Communicative Social Competency Diagnosis" test. It consists of eight key elements that focus on explaining the students' communicative qualities. The first questionnaire will provide sufficient insight into communicative social qualities and communication methods that show freedom, openness and sincerity in interpersonal relationships.

2. The second factor is based on the questions of logical and cognitive thinking.

Logical thinking enables the individual to demonstrate the knowledge and skills of intercultural communication. The third factor is the emotional stability of the student, and in interpersonal relationships, this stability is highly appreciated and helps the individual to communicate efficiently. The fourth factor is the person's resilience, which indicates the enjoyment of life. Students will be able to demonstrate a low level of frustration and interdependence in interpersonal relationships, and this will be positively assessed by the participants in the dialogue. Fifth factor is creativity. Sixth factor refers to the individual's ability to make decisions independently. Independence is assessed as a necessary feature that a person must achieve. The seventh factor determines compliance with the rules in society, and the eighth factor is determined by the appearance of antisocial behavior. This factor explains the existence of negative attributes that are not subject to social norms.

Researchers U. Soldatova, O. Kravtsova, O.E. Khuhlyaev, L. Shaygerova conducted "Tolerance Index" Express survey.

The study demonstrates the following tolerance of the individual:

1. Social Tolerance - the appearance of tolerance towards diverse views, socially, economically vulnerable groups. Students will be able to communicate not only with partners, peers, colleagues in social relationships, but also with people who are in need of social support. The social tolerance of students is part of their personality;

2. Ethnic tolerance - the tolerance of immigrants living in the same area, homeless people, or other nationalities. In such a case, a person respects the cultural values that occur in his area, does not intensify the territory and so on. Includes This view of tolerance is comparable to those of intercultural competence. However, competence is a vast and comprehensive concept.



The third aspect of the "tolerance index" is that the tolerance is inherited. While social and ethnic tolerance is only understood in the disparities, tolerance, created as a personality, is understood in all its individual activities, such as softness, simplicity, and it can also lead to competition. It is very important to set the norm in the interpretation of tolerance. Types of ethnic identity (G. Soldatova, S. Rijova) as the methodology for studying student impact on intercultural competence. Identity and competence are interdependent, as it can be said that a person's ethnic identity is a combination of social skills, understanding other cultural values, and the role of society in understanding other languages.

One of the main aspects about interpersonal, cultural expressions and interpreting is that a person must first realize the significance of his behavior. Ethnic identity gives a sense of nationality, ethnicity, and culture, which means the person feels that he has a certain feeling in all social relationships and acts on the same sense of belonging.

The questionnaire "Perceptual non-verbal competence diagnosis", by G. Y Rosen, was used as auxiliary/assisting method for this study. Understanding the companion, supporting non-verbally, and understanding other cultures of non-verbal methods of communication is considered to be one of the social qualities. The role of perceptions in interpersonal relationships is a unique feature. The main point in this (dialogue) is that the speaker is addressed through non-verbality and taken over by perception.

Another aspect of good linguistic language - intermediary intercultural dialogue is the degree of awareness in its context.

Results. The relationship between the students' social attitudes (correlation analysis)

	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>V</i>	<i>VI</i>	<i>VII</i>	<i>VIII</i>	<i>IX</i>	<i>X</i>	<i>XI</i>	<i>XII</i>
<b>I</b>	1											
<b>II</b>	0.54	1										
<b>III</b>	0.29	0.38	1									
<b>IV</b>	0.29	0.46	0.47	1								
<b>V</b>	0.14	0.21	0.42	0.35	1							
<b>VI</b>	0.58	0.43	0.39	0.46	0.38	1						
<b>VII</b>	0.018	0.14	0.25	0.33	0.32	0.29	1					
<b>VIII</b>	0.05	0.17	0.20	0.24	0.32	0.28	0.44	1				
<b>IX</b>	0.01	0.13	0.22	0.32	0.33	0.32	0.26	0.30	1			
<b>X</b>	0.06	0.03	0.26	0.28	0.33	0.25	0.12	0.28	0.40	1		
<b>XI</b>	0.08	0.05	0.12	0.17	0.25	0.25	0.05	0.21	0.39	0.40	1	
<b>XII</b>	0	0.04	-0.12	-0.11	-0.06	-0.08	-0.03	-0.09	-0.16	-0.20	-0.40	1

I			—				Bilingualism
II		—			Ethno		identity;
III			-Nonverbal-perceptive				competence;
IV			-				Tolerance;
V			—				Communicative;
VI		-			Logical		thinking;
VII		-			Emotional		stability;
VIII	—	Less	anxiety(low	level	of		anxiety);
IX			-				Creativity;
X			-				Independence;
XI	-	Self-governance,		compliance	with		norms;
XII	- Antisocial behavior.						

As we can see, there is a significant relationship between personal and social qualities of the students. It can be interpreted as follows: There is a strong link between bilingualism and ethnic identity (54%). The ability to speak in two languages has been proven by the ability to adequately respond to national culture and identity. The relationship between the bilingualism and the non-verbal-perceptive competence showed 29%. The level of knowledge between the bilingualism and communication showed only 14%. However, the relationship between logical thinking and the bilingualism was 58%. There was no correlation between the bilingualism and emotional stability, creativity, independence, internal control, and antisocial behavior.

Ethnic identity has been identified at almost different levels, i.e., 38% in non-verbality; with tolerance 46%; 21% demonstrated correlation, 43% with logical thinking, 17% with emotional stability, 14% in low self-esteem, and creativity in 13%. There was no correlation with independence, internal control and antisocial behavior.

Correlation between non-verbal-perceptive competency and tolerance was 47%; 42% in communication; 39% with logical thinking; 24% with emotional stability; 19% with low level of anxiety; 21% with creativity; 26% of the independence factor; and with internal control at 11%. The 11% of reverse correlation was observed between antisocial behavior and nonverbal perceptive competence. As we have seen, non-verbal perceptive competence has demonstrated its relevance in all cases. Tolerance also affects all attributes. In particular, in 35% communication; 46% with logical thinking; 33% with emotional stability; 23% with low worry; 31% with creativity; 27% of independence 17% with internal control and 10% correlation with antisocial behavior. In the context of socio-communicative competence, almost all the relationships were observed: communication and logical thinking - 38%; Relativity and emotional stability 31%; communication and creativity 33%; communication and internal control correlated with 25%. No correlation was found between communication and antisocial behavior. Logical thinking and emotional stability are 29%; 27% of logical thinking and betrayal; 31% of logical thinking and creativity; logical thinking and independence, and internal control attained 25% of harmony. The relationship between emotional stability and the following characteristics can be observed: creativity 30%; independence 28%; internal control 20%. Creativity 40% independence; With 30% internal control; 15% have come into contact with antisocial behavior. Independent factor is 40% with independence control; 19% showed negative reaction with antisocial behavior. In 40% of internal control, the contact was reversed.

**DISCUSSION**

Based on this interpretation of intercultural competence, it can be divided into three parts: affective, cognitive and procedural. Empathic property and tolerance are its affective elements. They rely on specific psychological resources, in addition to mutual confidence in other cultures. Cognitive elements can include cultural-specific information, as they can be considered as the source for assessment of communication processes.

Procedural elements are the continuous process of clear communication methods used in intercultural relations. Processes such as the commonality of culture and the search for reasons for misunderstanding are part of the procedural survey of intercultural competence. One of the most relevant considerations for this research has been studied by O.A. Leontevich. The intercultural competence needs to be divided into three components: communication competence, speech competence, cultural competence. However, the main component of intercultural competence is cultural competence. It regulates the dynamics of relationships that occur under the influence of psychological and social identities.

The process of formation of students' intercultural competence relies on a program based on direct theoretical and comparative analysis. The socio-psychological aspects of the intercultural competence of students formed in the process of social relations have been shaped.

Conclusion. According to the research principle, the intercultural competence was analyzed by the interconnectedness of cultural, ethnical, psychological and social knowledge, which was the main factor determining the main directions and methods within the scope of the research and the criteria for their evaluation. Although intercultural competence is formed in intercultural communication, individual ideas need to be different from them. Therefore, one of the tasks of the program of formation of intercultural competence is to analyze all existing concepts, and the importance of research based on national models.

Throughout the entire study period, students were motivated by a positive outlook on the intellectual imagination of the world, the formation of ideas and the planning and development of their ideas. This, in turn, reflects the goals of the learning process and the development of Intercultural education. The elements, mechanisms and components of intercultural competence in the research study; the process covers students' intercultural knowledge; theoretical, experimental-comparative, correlation analysis; acoustic, sociological, pragmatic, gneseological approaches; motivation, cognitive, behavioral attitudes. The model describes all processes, traits, factors, and trends of intercultural competence.

**USED LITERATURE:**

1. Triandis H.C. Culture and Social Behavior. – N.Y., 1994. – P.111.
2. Leontevich, O.A. Introduction to the intercultural communication. – Volgograd, 2003. – C.52.
3. Ybarra, O, Stephan, W.G., Schaberg, L., & Lawrence, J. (2003). Beliefs about the disconfirmability of stereotypes: The stereotype disconfirmability effect. *Journal of Applied Social Psychology*, 33, 2630-2646.
4. Tajfel H. Social stereotypes and social groups. – Intergroup behavior / Ed. by J.C. Turner, H. Giles. Oxford, «Basil Blackwell», 1981

## TEACHING ENGLISH THROUGH LITERATURE AND INTEGRATING LITERATURE INTO FOREIGN LANGUAGE TEACHING

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### ABSTRACT

*Literature plays an important role in teaching four basic language skills like reading, writing, listening and speaking. However, when using literature in the language classroom, skills should never be taught in isolation but in an integrated way. Teachers should try to teach basic language skills as an integral part of oral and written language use, as part of the means for creating both referential and interactional meaning, not merely as an aspect of the oral and written production of words, phrases and sentences.*

**KEYWORDS:** *Imaginative Literature, Foreign Language, Integrated Language.*

### INTRODUCTION

Reasons for using literary texts in foreign language classes according to Collie and Slater, there are four main reasons which lead a language teacher to use literature in the classroom. The world of a novel, play, short story is an imaginary one, it presents a full and colorful setting in which characters from many social and regional backgrounds can be described. A reader can discover the way, the characters in such literary works see the world outside, their feelings, customs, traditions, what they do, believe in, how they speak and behave in different places, parties. The first reading can be done by the teacher and should not require students to perform a large and complex task. It is necessary that they enjoy reading, and too many tasks can deprive them of this. Let them get acquainted with the fragment and check their predictions, or answer a very general question about the text. During the early stages of literature in foreign language teaching classical works by renowned authors were integrated into the curriculum. These texts were mostly used for translation purposes and exercises on reading comprehension. This led the students to look in a dictionary for each and every foreign word they come across. Literature in FLT tends to emphasize its role in improving communicative competence and create an awareness in students on the culture and society of the relevant country. The didactics of literature in foreign language teaching suggest different strategies to familiarize students with understanding and interpreting literary texts in a foreign language. The warm-up can focus on the source of the literary fragment. You can invite students to read a short reference about this. You can discuss or briefly tell them how this work is so famous. Reading fiction in English allows you to broaden the horizons of learners, learn about various cultural and historical events, increase active and passive vocabulary, multiply both linguistic and general cultural knowledge. Reading in English contributes to the dialogue of cultures, acquaints students with the realities inherent in another culture, other peoples and nationalities.

### Methodology of research

The use of literary texts for reading in the teaching of English promotes the development of intellectual and cognitive abilities. Newly acquired linguistic and sociocultural knowledge and skills can significantly improve the level of motivation of students and help them feel more confident in using English — regardless of their level of language training. Teaching of English is very closely connected with the study of English culture and literature. The familiarity with the best examples of classical and modern literature undoubtedly takes place in the culture of the countries of the studied language. Fiction plays an important role in shaping the human personality. In fiction, the experience of many generations, basic moral and spiritual values are laid. Through reading, students absorb the norms of moral behavior and morality. During reading, both the cognitive and emotional spheres of the personality are involved.

### General analysis

We noticed that Literature plays an important role in teaching four basic language skills like reading, writing, listening and speaking. However, when using literature in the language classroom, skills should never be taught in isolation but in an integrated way. Teachers should try to teach basic language skills as an integral part of oral and written language use, as part of the means for creating both referential and interactional meaning. In reading lesson, discussion begins at the literal level with direct questions of fact regarding characters, settings, etc.

When selecting a novel to be used in the foreign language class, the language teacher should pay attention to whether the novel has an intriguing story that will be of interest to the entire class. Themes and settings captivating their imagination and exploring the human condition should be included in the nature of the selected novels. Novel should have a powerful, fast-paced plot and interesting, well delineated, memorable characters. The content of the novel should be suitable to students' cognitive and emotional levels. The study of foreign language suggests broad spectrum of methods and forms of sign language in the foreign literature. Reading literary text, creative work, the student interprets an intensive lexicon, linguistic analysis of texts, compare it with his native language.

The ideal way for many to increase understanding of verbal and nonverbal aspects of communication in the country within which that language is spoken – a visit or an extended stay – is not probable and for such learners literature is useful. It provides learners with a wide range of individual lexical and syntactic items. They become familiar with many features of the written language and reading. They learn about functions of sentences, ways of connecting ideas and by this way they develop their writing skills. They become more productive. When the learner reads a literary text, he begins to inhabit it. He becomes a part of this text. Understanding the meaning of story he becomes enthusiastic to find out what happens event unfold via the climax.

Choosing books relevant to the real-life experiences, emotions, or dreams of the learner is of great importance. Language difficulty has to be considered as well. If the language of the literary work is simple, this may facilitate the comprehensibility of the literary text but is not in itself the most crucial criterion. Interest, appeal, and relevance are also prominent. Enjoyment; a fresh insight into issues felt to be related to the heart of people's concerns; the pleasure of encountering one's own thoughts or situations exemplified clearly in a work of art; the other, equal pleasure of noticing those same thoughts, feelings, emotions, or situations presented by a completely new perspective: all these are motives helping learners to cope with the linguistic

obstacles that might be considered too great in less involving material (Collie and Slater 1990:6-7).

Literature helps students acquire a native-like competence in English, express their ideas in good English, learn the features of modern English, learn how the English linguistic system is used for communication, see how idiomatic expressions are used, speak clearly, precisely, and concisely, and become more proficient in English, as well as become creative, critical, and analytical learners. (5)

There are learners think that it is too difficult bored to learn a language by reading literal texts. But teachers' duty is to help them solve this problem. Because it gets learners closer to language, culture and customs. It helps them how to write and spell correctly.

## CONCLUSION

Literature in all forms is everywhere in today's society and with this idea it is clear just how important it is. Literature is a central part of many lives. Studying language through Literature has the opportunity to find similarities in two different cultures. It helps learners enrich their vocabulary and start speaking language better. When reading Old English Literature students learn about history, customs and see how London looked through the eyes of Dickens when reading novels, poems, stories etc.,.

## REFERENCES

1. Maley, A. 1989. "Down from the Pedestal: Literature as Resource" in Literature and the Learner: Methodological Approaches. Cambridge: Modern English Publications (1989:12)
2. Stern, S. 1991. "An Integrated Approach to Literature in ESL / EFL" in Teaching English as a Second or Foreign Language. ed. Murcia, M. Boston: Heinle&Heinle Publishers.(1991:337).
3. Collie, J. and S. Slater. 1990. Literature in the Language Classroom: A Resource Book of Ideas and Activities. Cambridge: CUP.(1990:6-7).
4. Murat Hişmanoğlu Journal of Language and Linguistic Studies Vol.1, No.1, April 2005
5. Clanfield.L. Teaching materials: using literature in the ESL/EFL classroom. <http://www.onestopenglish.com/methodology/teaching-materials-using-literature-in-the-esl-esl-classroom>. Article/application date 28.06.2018



## RHYTHMIC-STRUCTURAL DIVISION OF THE ENGLISH SPEECH (AS BASE OF THE CATEGORY OF INTRODUCTION)

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### ABSTRACT

*The rhythmic and structural division of the English language, as an expressive tool, causes genuine interest among linguists. A complete, for grammar, sentence, sounding in the process of speech, is based on a certain rhythmic component. Syntagm, being a rhythmic-semantic unit, plays a role in maintaining this rhythmic unity.*

**KEYWORDS:** *Rhythmic and Structural Division, Syntagma, English, Physiological Pause, Intonation.*

### INTRODUCTION

All those expressive means, which are developed in every language, acquire exceptional interest. Those means are also aimed to make language understandable for everybody and served the purpose of mutual communication.

Syntagm is one of the necessary means which is connected with phrasal emphasis using intonation

There is extensive literature on the question of rhythmic division of speech. In most cases, however, the phenomenon of intonation and rhythmic division of speech is considered beyond the syntactic and semantic side of the statement.

The priority in this question belongs to L. V. Shcherba, who first put forward the doctrine of the syntagm as a rhythmic and semantic unit. Each grammatical totality is the sentence, when it sounds during speech, represents a certain rhythmic unity.

A sentence spoken aloud can be rhythmically divided into several parts by a physiological pause, which is always combined with a particular expressive intonation.

L. V. Scherba first pointed to the syntactic nature of individual rhythmic units and the relationship between the physiological pause and intonation and the semantic-syntactic content of the sentence. The term "syntagm", suggested by L. V. Shcherba, stresses the syntactic conditionality of the rhythmic division of speech.

The syntagm's structure, both syntactic and rhythmic-melodic, depends on the language structure. Thus, for example, in English, where there are a lot of all sorts of service words, emphasis, falling on significant words. Here are some examples to illustrate the concept of a rhythmic group in English:

Have you been staying here long? It wasn't a great deal of trouble. We did what we were told.

The rhythmic group may coincide with the syntagm. More often, the syntagma consists of a number of rhythmic groups. Foreexample: Hewastired-one rhythmic group, making up one syntagm equal to the whole sentence. But in another case:

Awellknow-dramatist/wasonceawayinthe -country/...-we have two syntagms consisting of several rhythmic groups.

Syntagm is not a constant value. It can change depending on the pace and style of speech. In this case, it is possible to determine some general dependence of the semantic-syntactic system of speech and its melodies. Thus, the presence of a semantic opposition in the context of a statement necessarily implies the presence of nuclear tones in its basic elements:

What shocks the virtuous phi`losopher,/de`lights the cha`meleon poet//

The melodics of such a fragment of the statement can be mostly characterized as "descending-descending". Correspondingly, a clear line on the ascending-descending melodics is revealed by fragments of the statement, where strict syntactic elements form more semantically independent syntagms and all possible input constructions:

There is `scarcely a poet//

Of the `same `eminence//

Whom I have `found it

So de lightful to read in/

Or so tedious to read through//

Conversational speech is characterized by larger rhythmic divisions. However, the more distinct and slower the speech is, the more tiny the rhythmic division.

### USED LITERATURE:

1. Bushuy, A.M. About functional approach to definition of an actual sentence structure (English language material)// Teaching of language and literature. Tashkent, 2004. - № 1-C. 27-34
2. Gavrilova G.F. Sentence - a statement in the cognitive aspect. // Philological sciences.-M, 2001.- № 6.-P.72-78.
3. Shcherba L.V. Language system and linguistic activity, L.: Science, 1974. 428c.
4. Bach K, Harnish R. M. Linguistic Communication and Speech Acts.-Cambridge, Mass: M I T Press, 2004, 412p.
5. Bushuy Y. Synchronous and diachronic linguistics. Textbook on General Linguistics. SamIFL: samarkand, 2003.-50s.

## THE MAIN INDICATORS OF THE COMMUNICATION CULTURE OF A HEALTH CARE WORKER

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### ABSTRACT

*In the article the author examines the communication of doctor and patient and its actualization in the English language units. The author makes a deep linguistic analysis of the process on the material of English phraseological units and proverbs and also on the dialogue between doctor and patient. Theoretical part of investigation is proved by numerous examples.*

**KEYWORDS:** Doctor, Patient, Health, Analysis, Phraseological Unit, Lingual Culture, Social Culture.

### INTRODUCTION

Expression of formal linguistic units in doctor-patient communication, the socio-cultural determinant of speech activity allows us to identify the communicative-cognitive needs of the individual who constitutes the first stage of speech activity, his speech source, as its purpose, "enters and defines and directs of the internal structure of activity" (Zimnaya I.A., 1985). , P. 47).

Communicative culture, which is a part of culture in general, is the product of social and communicative activities of members of a particular social group. Communicative culture is a set of communicative norms and customs that operate within a particular national culture. The existence of a communicative culture allows for the formation of communicative competence and specific communicative behavior of members of a particular social group. Individual norms of communicative behavior can be considered as communicative experience formed in the process of assimilation of general cultural and situational norms.

In general, the main indicators of the communication culture of a health care worker are: in the emotional sphere, empathy demonstration of understanding);

Once we have a clear idea of how and in what form the health worker's empathy for the patient can be expressed, his or her reflexive attitude toward the patient can be expressed, and we have prepared a number of communicative situations from medical practice. Teach students to use them to introduce empathic and active listening techniques.

A set of tasks that language and speech means to convey students' emotional connections, classify emotions, describe states, sense desires, and emotionally-communicative communicative tasks. In order to improve the reflexive ability of medical students in the process of professional communication, we have developed a set of reflective-explanatory tasks aimed at mastering the methods of active listening of students, the competent formation of question:

*Doctor: Mr. Anderson, it's a good thing you came in.*

*Patient: Yeah? I feel pretty awful.*

*Doctor: Well, it seems that you've come down with endocarditis. Do you know what that is?*

*Patient: I have no idea, but it sounds serious.*

*Doctor: it is. Basically, the lining of your heart is inflamed.*

*Patient: Oh, that's bad. Can we treat it?*

*Doctor: Yes. I'll start you on some antibiotics immediately. But this could have been avoided.*

*Patient: Really? How so?*

*Doctor: well, you've had a sore throat for quite some time, haven't you?*

*Patient: Yeah, but I figured it was just a cold.*

*Doctor: Definitely not. It's caused by the strep virus. Normally, that's an acute condition that we can knock out pretty quickly.*

*Patient: Ok, how did that cause my other condition?*

*Doctor: Untreated, the infection moves to your heart which it appears to have done. And now we have to get rid of that infection before it causes lifelong complications.*

In the process of such communication, the patient, naturally, cannot control his thoughts and feelings, but acts naturally. Of course, the patient's medical culture is also important in this regard. Being aware of medicine, or having certain information about your illness, will ensure that the communication between the patient and the doctor goes in the right direction. In this dialogue,

*" Dr. Yes. I'll start you on some antibiotics immediately".* But this could have been avoided speech act can be interpreted as an offer to cooperate with the patient.

This is the right way to establish psychological contact, it can be assessed as a step towards effective management of the patient and the formation of a clear picture. Open communication ensures that the doctor and patient relationship, the interests of the partners. An atmosphere of trust is created between them. In this case, the patient voluntarily entrusts the control of the situation to the doctor.

There are social and linguistic norms that regulate the process of friendly and patient communication, and sometimes they may even have national characteristics. There are also known widely used public speaking units for initiating, continuing, and ending the communication process.

*-What's wrong with you?* (beginning of communication through direct questioning)

*-Does this pain come on after you have been running?* (speech act for verification)

*-Get your shirt on and sit down* (command, start of formal check)

*--I would like you to have an x-ray* (an attempt to add clarity and avoid patient questions)

*-I see. Well, we'd better have a look there as well* (additional suggestion to clarify the situation)

*-I think you ought to take things a little easy for the next month or so. Then perhaps we might be able to do something more positive* (counseling and positive psychological effects)

*-Now then, that all seems to be okay.* (persuasion)

These verbal expressions are common and formal indicators of communication between doctor and patient. In addition, the direction of the communication process depends on the scope of the doctor's psychological influence, national-cultural factors, as well as the psycho-emotional state of the patient. In the communication between doctor and patient, the communicative behavior of the representatives of each community is significantly influenced by the characteristics of the national character.

Excessive formality in the doctor-patient relationship also does not give the expected result. Sometimes, unwanted but situational jokes can penetrate patients' hearts. The doctor's behavior should be that the patient has respect, that the patient knows everything and confidently assures him of his health and life. This requires a unique style of politeness.

Politeness is manifested not only in speech, but also in actions that express not only the communication of the communicator, but also his deep respect for his partner. Accordingly, in similar communicative situations, representatives of different communicative cultures implement different communicative intentions, using different tools, implementing different strategies and tactics. This is due to the difference in pragmatic assumptions between carriers of different communicative cultures.

## REFERENCES

1. Zimnaya I.A. Psychological aspects of foreign language teaching. M., 1985. p.47.
2. Tubbs S.L., Moss S. Human Communication. Random House, N.Y. 1987
3. Dahl, V. I. Explanatory Dictionary of the Living Great Russian Language. In 4 tons. Text. / V.I. Dahl.-M. : Rus. Yaz., 1978. Vol. 1.- 699 e., T. 2. - 779 p.
4. Ozhegov S. I., Shvedova N. Yu. Explanatory dictionary of the Russian language: 72,500 words, 7,500 phraseologist. Expressions Text. / S.I. Ozhegov, N. Yu. Shvedova. ROS. AN Inst. Rus. lang - 2nd ed., Rev. and add. - M.: AZ, 1994. -907 p.
5. OWD Oxford word power dictionary Text. / Ed. By Sally Wehmeier. -Oxford: Oxford University Press, 1998 .-- 746 p.
6. WNWD & T Webster's New World Dictionary & Thesaurus Text. / 1997-98 Accent Software International Ltd. - Accent Software International: Macmillan Publishers. - Version 2.0 - 1998 .

## THE EFFECTIVENESS OF A SCIENTIFIC CONFERENCE AND IMPLEMENTATION OF SCIENTIFIC PROGRAM

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### ABSTRACT

*This article discusses the discourse between the speaker and the listener and the privileges of the effectiveness of a speech act. Generalized characteristics of the official and unofficial types of scientific communication and specific recommendations on the use of adequate language tools. An experienced conference participant always tries to make the title of his report clear and informative. The course of such communication is determined by the most general norms of speech etiquette.*

**KEYWORDS:** Participant, Communication, Report, Speech, Author, Listeners.

### INTRODUCTION

The effectiveness of a scientific conference is determined primarily by the successful implementation of its scientific program. The structure of this program usually provides two types of promises to conference participants, formal and informal.

The first type includes the presentation and discussion of scientific reports to the second, laid-back conversations on scientific topics. For the official promise, rather significant audience is the traditional procedure for organizing meetings conducted under the chairmanship of the chairman and there is a tight time limit for speaking and discussion. All these circumstances ultimately determine the appropriate speech behavior of the participants in such meetings.

An unofficial promise is usually held in the form of a casual conversation, the place of which can be the sidelines of a conference, scientific exhibition, poster meeting, etc.

The form of such communication is determined by the participants themselves. Usually this is a free dialogue exchange of thoughts and scientific ideas. Here everyone alternately talks and serves teaches the other and learns himself. The progress of such a promise is determined by the most general rules of the speech label. This chapter provides generalized characteristics of the official and unofficial types of scientific communication and specific recommendations on the use of adequate language tools.

### Scientific report;

Despite a noticeable tendency to increase the share of informal communication in the structure of a scientific conference, official meetings are still held at its center where scientific reports are presented and discussed.

An experienced conference participant will always try to make the title of his report clear and informative and at the same time concise enough. Clarity is provided by such a construction,



proposals that would exclude its ambiguous interpretation. Information content is achieved by selecting keywords that reflect the specifics of this report.

The brevity of the name is facilitated by the exclusion of unnecessary details from it and also words that do not carry a semantic load. In general, we can say that the choice of a good title for the report is to search for a kind of “*Golden mean*” between two poles on one of which is short but too general and on the other specific title too long. For example, the report refers to a change in vegetation on rocky sales of a certain type under the influence of natural and anthropogenic facts in New Caledonia. His author dwells on the following title: “*Natural and anthropogenic vegetation changes in New Caledonia*”.

A shorter version of the name could have the following form: “*Vegetation changes in New Caledonia*.” Given the specific object of this study, a more complete name could be proposed: “*Natural and anthoropogenic changes in the plant cover on ultabasic rocks and on sedimentary and metamorphic rocks in New Caledonia*.” It is thought that although the first option loses to the latter and is informative, nevertheless it can be chosen as the optimal one.

As for the structure of the name, modern authors prefer simple spoken sentences: “*Urbanism as ecological adaption*”, “*Thenmal, dynamical and chemical power sources from the sea*”.

If the report is of an overview nature, this can be emphasized by the introduction of the words review / overview in the title: “*A review of the first northern hemisphere Pandalit shrimp workshop*”, “*Ocean thermal energy conversion-an overview*”. In the titles of the reports telling about the work of the forecasting plan, combinations such as approaching estimating or towards predicting are often used: Toward estimating the fisheries potential of coral reef environments, Towards predicting el Nino. If the scientific message is clearly problematic, then often its main idea is formulated in the title in the form of a question: “Natural resources of different countries: competitive or complimentary?”.

## REFERENCES

1. Stupin., Lapitsky A.N. “English language at scientific conferences”, St. Petersburg, 1984, pp. 10-11.
2. Jesson J., Matheson L., Lacey F.M. Doing your literature review: traditional and systematic techniques. Los Angeles & London: SAGE Publications; 2011.
3. E.Geiz, M.V. Lyakhovitsky, A.A. Mirolubov. Methods of teaching foreign languages in high school. Moscow 1932.p. 363 – 371
4. Winter I.A., Bodenko B.N., Krivchenko T.A., Morozova N.A. General human culture in the system of requirements of the state educational standard. - M .: Research Center for the Problems of Quality of Training of Specialists, 1999. - p. 67.
5. Lednev V.S. The content of education: essence, structure, prospects. - M.: Higher School, 1991. - p. 224.
6. Sokolova VV The culture of speech and the culture of communication. - M.: Education, 1995 .-- p. 192.
7. <http://moodle.sammi.uz>
8. <https://books.google.co.uz>
9. <http://elib.bsu.by/>

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