

ACTUAL PROBLEMS OF MODERN SCIENCE, EDUCATION AND TRAINING









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MODERN PROBLEMS OF PEDOGOGY AND PSHYCHOLOGY

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PEDAGOGICAL AND PSYCHOLOGICAL ASPECTS OF PROFESSIONAL ADAPTATION OF FUTURE TEACHERS

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Annotatsiya — maqolada bo'lajak o'qituvchilarni kasbiy moslashtirishning pedagogik-psixologik jihatlari haqida ma'lumotlar keltirilgan. Jamiyatdagi o'zgarishlarning mutaxassislarga ta'siri, ularni kasbiy moslashtirishning xususiyatlari haqida ham fikrlar yuritilgan. Shu bilan birga pedagogik va psixologik jihatlar misollar yordamida tahlil qilingan. Bundan tashqari mutaxassislarning kasbiy bilim va shaxsiy sifatlariga qo'yilayotgan zamonaviy talablar haqida ham yoritilgan.

Kalit so'zlar: bo'lajak o'qituvchilar, kasbiy moslashtirish, pedagogik-psixologik jihatlar, mutaxassislar, kasbiy bilim, shaxsiy sifatlar, zamonaviy talablar.

Аннотация - в статье представлена информация о педагогических и психологических аспектах профессиональной адаптации будущих учителей. Обсуждается влияние изменений в обществе на профессионалов, особенности их профессиональной адаптации. Однако педагогический и психологический аспекты анализировались на примерах. Также он охватывает современные требования к профессиональным знаниям и личным качествам профессионалов.

Ключевые слова: будущие учителя, профессиональная адаптация, педагогико-психологические аспекты, специалисты, профессиональные знания, личностные качества, современные требования.

Abstract - the article provides information about the pedagogical and psychological aspects of professional adaptation of future teachers. The impacts of changes in society on professionals, the specifics of their professional adaptation are also discussed. However, the pedagogical and psychological aspects were analyzed using examples. It also covers the modern requirements for the professional knowledge and personal qualities of professionals.

Key words: future teachers, professional adaptation, pedagogical-psychological aspects, specialists, professional knowledge, personal qualities, modern requirements.

Introduction. Changes in society, modern requirements for professional knowledge and personal qualities of specialists have created the need to update the content of education in pedagogical universities, innovative forms and methods of teaching, the widespread introduction of modern information technology in practice. On this basis, a number of measures are being taken today to improve the material and technical support of pedagogical universities, to expand the range of educational and methodological opportunities. However, the current content of professional training of future teachers has not been improved in accordance with the modern requirements for the pedagogical specialist; the results of research in this area are not fully implemented



in practice, opportunities in the training of specialists in pedagogical universities and diagnostics of the current situation. The incomplete introduction of innovative technologies into the educational system of educational institutions requires a conceptual approach to the research problem.

Literature review. Socio-historical foundations of professional education were laid by Eastern thinkers, including Musa Khorezmi, Ahmad al-Fargani, Abu Nasr Farobi, Abu Ali ibn, who worked at the Khorezm Scientific Center (IX-XII centuries) called "Ma'mun Academy". In the works of Sino, Abu Rayhan Beruni, Zamakhshari, Burhaniddin Margilani, the connection of professional education of young people with the interests of the individual, the needs of society and genetic factors is scientifically and theoretically substantiated [1]. Career guidance, career choice, and vocational training have been extensively studied by educators and psychologists, who have developed their own approaches. Including V.A. Slastenin, N.N. Azizxodjaeva, J.G. Yuldashev training through innovative technologies; SH.E. Qurbanov, E.A. Seytkhalilov, F.Yuzlikaev, N.Muslimov, SH.Sharipov, N.Egamberdieva studied the problems of vocational education on the basis of integration between the individual, society and industry [2].

Analysis. Modernization of higher education institutions and their educational process, improving the quality and monitoring of the system of training of pedagogical specialists, equipping future teachers with modern professional knowledge, skills and abilities, the formation of acmeological motivation for professional activity is one of the important tasks in the process of formation of professional training of specialists. The experience of developed countries, in particular, the United Kingdom, Australia, Switzerland, Germany, Malaysia, and Canada in the training of specialists shows that the main task of vocational education is to develop students' intellect and logical thinking based on the specifics of the chosen specialty. The professional training of students is provided on the basis of this task[3]. The main criteria for professional training are the practical training of the future specialist and the acquisition of knowledge, skills and abilities in the field of specialization, the level of adaptation to the requirements of professional activity. Indeed, vocational training represents the level of knowledge, skills and competencies necessary for the further development of the moral and professional qualities of the specialist, the formation of professional competence throughout his career. The practical implementation of these tasks requires the most important of the issues facing pedagogical higher education institutions, namely, innovative approaches to the process of training future teachers. This includes [4]:

- the creation of continuing vocational education programs based on the requirements of the labor market and the latest achievements in science, technology, engineering and economics;
- establishing a strong integration between continuing education, science and industry;
- provision of educational institutions with modern material and technical base and teaching materials [5];
- involvement of highly qualified teachers, methodologists and engineering teachers in the higher education system;



- development of cognitive activity, creative abilities of future teachers, as well as their active professional motivation;
- one of the necessary factors is the widespread introduction of innovative teaching technologies in the educational practice of higher education institutions.

These factors, which determine the effectiveness of the process, create the need for fundamental research to improve the content of vocational training, ensuring the practical implementation of the social requirements for the system of training junior specialists in the context of the National Training Program. It is known that in the pedagogy of the East, where the issues of career choice, career guidance, professional education are combined with mysticism, the "Holy Qur'an", which has been an important source in the formation of the spirituality of our people for thousands of years, is reflected in the scientific heritage of the great thinkers Muhammad Ismail al-Bukhari, Muhammad Isa at-Termizi, Mahmud Qashqari, Abu Nasr Farobi, Yusuf Khas Hajib, Hussein Waz Kashifi, Amir Temur, Alisher Navoi in the form of rare ideas. Evidence of this can be seen in Abu Rayhan Beruni's commentary on teaching. Beruni believed that choosing a teacher to teach young people was the first and foremost task of parents [6]. This requires the teacher to be polite, honest, knowledgeable about his subject and the rules of teaching, clean, exemplary in walking and standing. If, says Beruni, the educator is not an example, if he does not follow what he says, his demands and upbringing will be ineffective1. In the works of Mahmudhoja Behbudi, Abdulla Avloni, Abdurauf Fitrat, who are considered to be the founders of pedagogy of the new period, the role and services of education and the teacher in this process are interpreted in a unique way based on the socio-political life of the period. In particular, Abdullah Avloni focuses on the work of a teacher, entrusting the intellectual development of the child not to the family, but to the school, to teachers: "The education of thought is the most necessary, long-cherished, revered, sacred duty of teachers. Thought makes a person virtuous, zealous. This education needs the help of teachers, and the strength, beauty and breadth of thought depends on the education of the teacher," he said [7].

Discussion. Indeed, Abdullah Avloni gave a broad description of the personal and professional qualities of a teacher: the personal qualities of a teacher, that is, morality, decency, knowledge, intelligence, ingenuity, intelligence, intelligence, are the main basis for the educational process. However, creative research suggests that the search for new forms, methods, and means of reading and teaching is one of the most important professional qualities of a teacher. In this way, Abdullah Avloni promotes an acmeological approach to teaching in the image of his time. Abdurauf Fitrat's works also focus on education [8]. In particular, the scientist stressed the need for new reforms in the educational process, especially in the organization of studentteacher interaction, out of the old stereotypes, and for this, putting an end to the ignorance of teachers (old school teachers), explains the need to radically change the methods of teaching them according to the individual abilities of students. The problem of professional adaptation of future teachers through the modernization of the system of continuing education and content improvement still forms the basis of modern pedagogy. In modern pedagogical and psychological research in recent years, the problem of shaping the professional training of future teachers has been widely studied and its scientific and theoretical basis has been formed [9]. In particular, in the system



of continuing education, organized on the basis of the national model of training, the problems of education quality management, education management SH.E. Qurbonov, Researched by E.X. Seytkhalilovs, a model of education quality management has been developed to solve this problem.

- 1. Management and quality control of education in the system of secondary special and vocational education, which is one of the important links in continuing education, theoretical and organizational-methodological bases are extensively studied by U.I. Inoyatov. In his research, U.I. Inoyatov developed a model for the implementation of quality control in education, forming an effective management structure of the professional college [10].
- 2. In the research of the pedagogical scientist N.A. Muslimov on the basis of the integration of pedagogical and technical knowledge the problems of professional formation of teachers of vocational education working in the system of secondary special, vocational education, modeling of his professional and pedagogical activity, future Methodological bases of standardization of process of training of the teacher of vocational education, a technique of an estimation of level of formation of the future teacher of vocational education and practical possibilities of pedagogical disciplines in the professional formation of the teacher of vocational education focused.
- 3. pedagogue-psychologist researchers M.I. Dyachenko and A.M. Stolyarenko describe the professional training of future teachers in relation to their current levels of adaptation as follows [11]:
- a) The initial potential readiness of the individual for professional activity, i.e., the static components of the mental basis of professional activity, knowledge, skills, abilities, necessary qualities and the level of professional capacity required by the individual.
- b) It is characterized by a person's direct and immediate readiness for professional activity, that is, the agility, flexibility, mental and physical condition of the specialist, his focus on solving specific problems in any situation and situation.

Conclusion. Based on the final analysis of the results and the level of effectiveness of pedagogical and experimental work, the following conclusions were drawn from the research work:

- 1. As a result of the analysis of the theory of professional adaptation of future teachers, its scientific and theoretical foundations were studied.
- 2. The need to improve the content of professional adaptation of future teachers at the level of modern professional requirements and recommendations for the pedagogical specialist.
- 3. The results of the experiment confirmed that the need for an innovative approach to the organization of the educational process in the professional adaptation of future teachers and the existence of the created pedagogical conditions have an effective impact on the formation of professional adaptation of professionals.
- 4. The creation of new teaching materials, the introduction of innovative forms and methods of teaching in the educational process and the establishment of a systematic monitoring process is important in ensuring the cognitive activity of students, developing their professional and creative abilities and the formation of professional training proved to be important.



References:

- [1]. Azizxodjaeva N.N. Pedagogical technologies and pedagogical skills. T .: Finance, 2003. p– 84.
- [2]. History of pedagogy / Compilers: K.Hoshimov, M.Inomova, S.Nishonova, R.Hasanov.— T.: Teacher, 1996. pp—10-12.
- [3]. Abdulla Avloni. Turkish gulistan or morality. T .: Teacher, 1992. pp 16. 2 History of pedagogy / Compilers: K.Hoshimov, M.Inomova, S.Nishonova, R.Hasanov.- T .: Teacher, 1996. pp 36-40.
- [4]. Kurbanov SH., Seytkhalilov E. National training program: problems and directions of pedagogical research. T .: Fan, 1999. 189 p.
- [5]. Inoyatov U.I. Theoretical and organizational-methodical bases of management of quality control of education in professional college: Diss. ... Ph.D. ped. science. T .: 2003. 327 p.
- [6]. Muslimov N.A. Theoretical and methodological bases of professional formation of a teacher of vocational education: Ph.D. ... diss. T .: 2007. 357 p.
- [7]. "Literary Psychology and Style". International Journal of Recent Technology and Engineering. International Journal of Recent Technology and Engineering (IJRTE)ISSN: 2277-3878, Volume-8, Issue-3S, October 2019. ijrte@gmail.com
- [8]. "Психология и символик а цвета". Журнал научных публикаций аспирантов и докторантов. №4 (106), Апрель 2015 г. фактический: 420029, г. Казань, ул. Академика Кирпичникова, д. 25. E-mail: info@moluch.ru; http://www.moluch.ru
- [9]. "Бухара –Жемчужина отечественной культуры". Наука и мысль. №6-2014 System в свободном доступе по адресу: URL: http://wwenews.ru/http://wwenews.esrae.ru
- [10]. «Обрядная одежда узбекских женщин". «Молодой ученый» №3 (137), январь 2017. mail: info@moluch.ru; http://www.moluch.ru
- [11]. Tolipov O.Q. Pedagogical technologies for the development of general labor and professional skills in the system of higher pedagogical education / Monograph. T .: Fan, 2004. pp –73-80.



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PSYCHOLOGICAL CONTENT AND STRUCTURE OF THE EDUCATIONAL PROCESS

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Annotatsiya. Maqolada ta'lim jarayoni alohida tashkil etiladigan hamda boshqariladigan faoliyat ekanligi, u o'quvchilarning o'quv faoliyatlarini tashkil etishi va ularni boshqarishi, ta'lim jarayoni besh elementdan iborat ekanligi haqida ko'plab fikrlar keltirilgan. Bundan tashqari maqolada ta'lim jarayonini tashkil etish: ideal va amaliy faoliyatning u yoki bu turini muvaffaqiyatli tashkil etish uchun zarur bo'lgan tashqi olamning muhim ahamiyatli xossalari xususidagi axborotning o'zlashtirilishi, faoliyatning ana shu barcha turlari tarkib topgan usullari va jarayonlarining o'zlashtirilishiga bog'liqligi haqida ma'lumotlar keltirilgan.

Kalit so'zlar: ta'lim jarayoni, ideal va amaliy faoliyat, axborotning o'zlashtirilishi, ta'limning metodlari, pedagogik muloqot.

Аннотация. В статье содержится множество идей о том, что учебный процесс представляет собой отдельную организованную и управляемую деятельность, он организует и управляет учебной деятельностью студентов, учебный процесс состоит из пяти элементов. Кроме того, в статье рассматривается организация учебного процесса: получение информации об основных свойствах внешнего мира, необходимых для успешной организации того или иного вида идеальной и практической деятельности, овладение методами и процессами. По всем этим видам деятельности дается информация о зависимости.

Ключевые слова: образовательный процесс, идеальная и практическая деятельность, получение информации, методы обучения, педагогическое общение.

Abstract. The article contains a lot of ideas about the fact that the educational process is a separate organized and managed activity, it organizes and manages the learning activities of students, the educational process consists of five elements. In addition, the organization of the educational process in the article: the acquisition of information about the essential properties of the external world, necessary for the successful organization of this or that type of ideal and practical activity, the mastery of methods and processes that include all these activities information about the dependence is given.



Key words: educational process, ideal and practical activities, information acquisition, teaching methods, pedagogical communication.

Introduction. The learning process is a separate, organized and managed activity that organizes and directs students' learning activities. The learning process consists of five elements:

The purpose of education is to teach.

Content of education - what to teach?

Teaching methods, techniques and ways of pedagogical communication.

Educator.

Student.

Organization of the educational process: the acquisition of information about the important features of the external world, which are necessary for the successful organization of this or that type of ideal and practical activity:

- methods that comprise all these types of activities and
- mastery of processes;
- appropriate methods and processes depends on the selection and use.

For a learning process to be successful, the learning process must meet the following requirements:

Motivation means that the teacher is trying to teach better and the student is trying to learn better.

Literature review. Education has a developed and flexible structure.

- 1. Implemented in various forms. It is done in a variety of ways to enable the teacher to realize his or her creative pedagogical potential and to use his or her individual abilities to help students acquire knowledge, skills and competencies [1].
 - 2. Implementation of education with the help of modern technical means.

We will look at the above education and training requirements from two interrelated aspects of individual learning activities [2].

Educational motivation refers to the personal interest of students in better mastering of the learning material. The teacher is motivated to teach only to satisfy their material interests, or not to be unemployed, not to shrink, to avoid failure; at the same time it is impossible to achieve good results in pedagogical activity. The first task in increasing the productivity of education is to turn it into a deep and multi-motivated process. Education becomes effective when the teacher begins to see the main content and purpose of his life in the process of teaching students [3].

Analysis and Results. The problem of child development in the process of teaching and learning is one of the main issues in the science of adolescence and pedagogical psychology. A number of theories have been developed on the problems of education and development, one of which is:

1. The theory of gradual development of mental behavior, knowledge, skills and abilities (P.Y. Galperin) [4].

The process of acquiring knowledge according to P.Y. Galperin's theory goes through six stages, which are:

Motivation.

Explanation.

Performing actions in material form.



Perform actions and tasks aloud [5].

Performing actions without making a sound on the internal plan.

The activity involves mental performance.

This theory distinguishes three main types of education:

- In the first round the acquisition of behavior is accompanied by errors, the material is not sufficiently understood, the student does not understand the essence of education:
- The second type is characterized by a relatively bold and complete understanding of the material and the separation of concepts related to the material;
 - The third type provides fast, effective and error-free learning [6].
- 2. The theory of V.V. Davidov. This theory enables elementary school students to master scientific concepts. At the same time, students need to master the system of theoretical concepts in the educational process, which in turn provides a transition from private to general knowledge.
- 3. A number of theories are related to problem-based learning and research by L.V. Zankov and A.M. Matyushkin focuses on the organization of problem-based learning in education [7].

Discussion. The problem of the psychological basis of education covers many issues. The success of education depends on a number of psychological factors. First of all, let's talk about the student's attitude to reading. This attitude is expressed in attention, emotions, interests and will, as well as in the way a person behaves.

The learning process requires first and foremost student attention. The use of visual aids and information technology tools in the classroom creates an involuntary focus on the learner. In the teaching process, the role of the educator is not only to create a work environment in the classroom, but also to monitor the readiness of students to understand the material covered in the lesson [8]. It is important to keep these laws in mind in the teaching process and to draw students' attention to the main aspects of the material and to repeat them [9].

The effectiveness of the learning process also depends in large part on the guidance given by the teacher. The role of the teacher is to create an appropriate setting for the students, what they need to remember temporarily, what they will remember for a lifetime, what they need to understand only without fully remembering, what they need to remember verbatim, what they need to remember. it should indicate the need to remember in order to express the meaning in their own words. Observations show that when such instructions are not given, students often have misconceptions.

The emotional nature of teaching is one of the keys to successful learning. Teaching is an emotional process. If the information given to the students is not emotional, the students will not remember it well. Of course, it should also be about the mental state of the students, that is, their experiences at a particular time. Their joyful, optimistic mood makes the learning process very productive. Students will be better able to absorb emotional material [10].

Experiments have shown that students are better able to remember emotional material than emotional material. The teacher needs to take care of the emotional side of the learning process.



Conclusion. This problem is very important, because, first of all, the content of education is very complex and the scope is very large. To be successful, students need to be empowered. Positive emotions have a strong impact on the effectiveness of academic work. There is a lot of frustration, there is a lot of frustration. The school should instill in students a positive attitude towards academic work and help them become truly creative and a source of joy.

References:

- [1]. Rajabova M. B. Goethe and the East //International scientific-practical conference" XL international conference dedicated to the problems of social sciences" (March 31, 2016) Moscow-2016. 2016.
- [2]. Rajabova M. B. From the history of the views of the great thinkers of the East on education and upbringing //International scientific and practical conference" Fundamental and applied research: a new word in science", Moscow. 2014. pp. 125-132.
- [3] . Bakaevna R. M. Artistic interpretation of the mythonyms of angel and devil in the works of A //Navoi. Middle European Scientific Bulletin, ISSN. pp. 2694-9970.
- [4] . Bakaevna R. M. Artistic interpretation of the mythonyms of Angel and Devil in the works of A. Navoi //Middle European Scientific Bulletin. 2020. T. 5.
- [5]. Rajabova M. B. EXPRESSION OF IMAGES RELATED TO NATIONAL TRADITIONS IN A. NAVOI'S WORK //Scientific reports of Bukhara State University. -2020. T. 4. No. 5. pp. 141-146.
- [6]. Baqoevna R. M., Oxunjonovna S. H., Qodirovna A. Z. ANALYTICAL AND SYNTHESIZED FOLKLORISM IN NAVOI'S WORK //Journal of Contemporary Issues in Business and Government. -2021. T. 27. No. 2. pp. 1626-1633.
- [7]. Baqoevna R. M. Interpretation Of Navruz In Navoi's Work //International Journal of Progressive Sciences and Technologies. 2021. T. 25. №. 1. pp. 16-23.
- [8]. Rajabova M. B., Akhrorova Z. R. UVAYS QARANIY IN THE INTERPRETATION OF FARIDUDDIN ATTAR AND ALISHER NAVOI //Scientific reports of Bukhara State University. 2020. T. 4. №. 2. pp. 219-223.
- [9]. Rajabova M.B. FROM THE HISTORY OF VIEWS OF THE GREAT THINKERS OF THE EAST ON EDUCATION AND UPBRINGING // Editorial Board. 2014.
- [10] . Rajabova M.B. GOETHE AND VOSTOK // Contact information of the Conference Organizing Committee. p. 54.
 [11] .



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THE ISSUE OF ECONOMIC EDUCATION IN THE INTERPRETATION OF EASTERN THINKERS

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Annotasiya: Ushbu maqolada buyuk adiblar Ibn Xaldun Abduraxmon Abu Zayd, Muhammad Ibn Muso al-Xorazmiy, Abu Nasr al-Farobiy, Ibn Sino, Yusuf Xos Hojib va Alisher Navoiy kabilarning iqtisodiy tafakkurining rivojlanishiga doir qarashlari va madaniyat, iqtisod tushunchalarini pedagogik-psixologik jixatdan olimlarimiz tomonidan talqin qilinishi yoritib oʻtilgan.

Kalit soʻzlar: Qur'oni Karim, hadis, ma'naviy merosi, iqtisod qilish, boj toʻlovlari, sarmoya, hisob-kitob qilishni oʻrganish va ishbilarmonlik, iqtisodiy qarashlar, moddiy ne'matlar, ayriboshlash, tadbirkorlik, mehnat taqsimoti.

Аннотация. В этой статье представлены взгляды великих писателей Ибн Халдуна Абдурахмана Абу Зайда, Мухаммада Ибн Мусы аль-Хорезми, Абу Насра аль-Фараби, Ибн Сины, Юсуфа Хас Хаджиба и Алишера Навои на развитие экономического мышления, культуры,понятие экономики трактуется нашими учеными с педагогической и психологической точки зрения.

Ключевые слова: Коран, хадисы, духовное наследие, экономика, таможенные сборы,, капитал, изучение бухгалтерского учета и бизнеса, экономические взгляды, материальные блага, обмен, предпринимательство, разделение труда.

Annotation: In this article, the views of the great writers Ibn Khaldun Abdurahman Abu Zayd, Muhammad Ibn Musa al-Khwarizmi, Abu Nasr al-Farabi, Ibn Sina, Yusuf Khas Hajib and Alisher Navoi on the development of economic thinking and the concept of culture and economics interpreted by.

Key words: Kuran, hadith, spiritual heritage, economics, customs duties, capital, learning to calculate and do business, economic views, material goods, exchange, entrepreneurship, division of labor.

Introduction. The desire to know the secrets of economic life and to determine the main directions of activity in this direction has existed since time immemorial, and this desire stems from the need to regulate economic activity, to positively influence its direction.

Knowledge of economics was examined in the works of prominent scholars of the ancient world, such as Xenophon, Plato, and Aristotle, as well as in the works of ancient Egypt, China, India, and Central Asia.

Literature review. When we read the Kur'an, the hadiths, the Nightmare, the works of Ibn Khaldun, the works of our ancestors Abu Ali Ibn Sino, Abu Nasr Farabi, Abu Rayhan Beruni, Alisher Navoi, Mirzo Ulugbek, which have come down to us for thousands of years, we are once again convinced that the need to work has been repeatedly emphasized. In particular, the contribution of the Arab thinker Ibn Khaldun Abdurahman Abu Zayd (1332-1406) in the development of economic knowledge is



enormous. In his Kitab-ul-ibar (Book of Examples), written in 1370, he was the first in the world to distinguish between the two characteristics of a commodity - the concepts of consumer value and value, simple and complex labor, necessary and additional labor, and necessary and additional products. . It is also noted that in the process of exchange of goods, they appear in the form of equalization of labor in comparison with each other, that is, taking into account the labor embodied in the commodity and its utility [1; - 42 p].

Research Methodology The issue of economic education has always been considered topical by Eastern thinkers. According to Muhammad Ibn Musa al-Khwarizmi, one should know the science of arithmetic and be diligent in one's work. Then he can determine the results of his labor through measurements.

Abu Nasr al-Farabi emphasizes that a person should know how to spend his money, that jealousy in spending money leads to greed, and that unplanned use of money leads to disobedience.

Ibn Sina emphasizes that the basis of vocational training for children is self-confidence, time, its efficient use, economy, in the process of which the child learns to calculate and forms the characteristics of entrepreneurship, initiative.

Yusuf Khos Hajib's work "Kutadgu bilik" plays an important role in the development of economic thought in the East. In the spiritual heritage of Yusuf Khas Hajib, a great deal of attention is paid to the issues of decent remuneration of labor, proper evaluation of labor, appreciation of every mental and physical labor, material benefits, occupation and strong social protection.

The views of the great commander, statesman Amir Temur on the economy, customs duties, investment are still important in economic policy. He wrote in "Temur's Statutes" that "Professionals and enlighteners should be given a share of the kingdom's enterprises, and the poor who have power in their hands should be guided by their status and profession." "Let the merchant who has lost his capital be given enough gold from the treasury to restore his capital," need "[2; -88 p]. At the heart of Amir Temur's economic views were the interests of the people, the development of material and spiritual life.

Alisher Navoi's ideas on economic issues are expressed in the works "Waqfiya" written in 1482 and "Mahbub-ul-qulub" written in 1500. He divides the product into three parts, calling for the first part to be spent, the second part to be spent on the needs of himself and his family, and the third part to be spent on the social interests of the population. It also pays special attention to the role of labor and the participation of the means of production in the creation of the product. At the same time, it emphasizes the use need to find, accumulate and wealth through honest labor [1; 89-90-p.].

Analysis and results. Economics is derived from the Greek word, "oykos" - house, household, "nomos" - law. That means home or social laws.

The French economist Antoine Moncretin, who lived and worked from 1575 to 1621, first wrote a small scholarly work in 1615, The Treatise on Political Economy, which established the science as the science of managing the economy nationwide. Later classical economists confirmed this view, saying that political economy in the broadest sense is the study of the laws governing the production and exchange of material means of subsistence, [3; -48p] they wrote.



The concept of developing the economic culture of the individual in society has been studied not only in pedagogy but also in philosophy. In the research conducted by B. Tolipov: it is scientifically recognized that the concept of economic culture of society and the individual is covered not only on the philosophy of economics, but also on the basis of the philosophy of culture.

The concept of developing the economic culture of the individual in society has been studied not only in pedagogy but also in philosophy. In the research conducted by B. Tolipov: it is scientifically recognized that the concept of economic culture of society and the individual is covered not only on the philosophy of economics, but also on the basis of the philosophy of culture. [4; -152 p].

The way in which "economics" was formed as a science, and the ideas and currents that emerged in it, are very complex, often contradictory and contradictory. At the same time, we must say that the theories of any school of economics cannot possess a course of absolute and permanent truth. Each school is characterized by a certain one-sided approach to problems or misunderstandings in the coverage of some theoretical questions, because all theoretical currents originate from the point of view of the interests of a particular social group and the real situation of the time. Nevertheless, they complement each other, expressing to some extent the internal contradictions and laws of economic processes and events. This means that society should not be a prisoner of a particular theory, its development should be guided by national interests.

Conclusion. By defining the essence of the concepts of "culture" and "economy", the study defined the concept of "economic - cultural development" from the author's point of view as follows:

Development of economic culture - an important characteristic of personal development, increasing personal activity based on vital needs, expanding opportunities for self-expression, active movement and active lifestyle in accordance with the requirements of society, putting into practice the acquired knowledge, skills and abilities. ability to get.

As one of the most complex systems of social life, the economy embodies the existence of common needs for infinite things, such as food, clothing, housing, tools and means of production, and ways to satisfy them.

As the ancient Greek philosopher Aristotle put it, the exchange of material goods arose because of the division of labor. When people didn't need anything, there would be absolutely no exchange. Without such exchanges, not only people, but also the state cannot survive [5; -141p].

Recommendations Hence, we have considered the pedagogical and psychological interpretation of the concepts of culture and economics by our scientists.

- 1) In short, we live in a time when we want to be in complete harmony with the efforts of economic recovery, economic recovery, economic development, spiritual purification, spiritual upliftment.
- 2)These actions require people working in all spheres of life of the country, including those involved in the education of young people, to have a high level of professional training, ideological and political skills, organization and economic knowledge.

3)These changes encourage every teacher to think anew, to work in the East, to be an entrepreneur, to be an entrepreneur, to be an active participant in spiritual and educational work.

References.

- [1]. Razzokov A., Toshmatov Sh., Ormonov N. History of economic doctrines. –T .: "Finance", 2002. 42, 89, 90 p.
- [2]. Culture and art in the time of Amir Temur and the Temurids.
- T .: "Literature and Art" Publishing House named after G. Gulom, 1996. T .: -88p.
- [3]. Antoine Montreux de Vattevil; Treatise on political economy. M.: Delo, 2000 (series Politicheskaya ekonomiya: stupeni poznaniya). –48 p.
- [4]. Tolipov B.X. The combination of material and spiritual factors in the economic culture of the individual: Falsafa.fan.nom. ... diss. T .: 2009. -152 p.
- [5]. Western philosophy. –T .: "Sharq", 2005. –141p.
- [6]. Grass, TP, Economic Socialization of the Younger Generations in Great Britain and New Zealand: dis. Cand. ped. sciences. / T.P.Grass. Penza, 2008. 158 p.
- [7]. Castells M. Information Age: Economy, Society and Culture / Ed. O.I. Shkaratan M .: State University Higher School of Economics, 2000. 608 p.
- [8]. Innovative development: Economy, intellectual resources, knowledge management / under total. ed. B.Z. Milnera M .: INFRA-M, 2010. -624 p.
- [9]. Kadyrov A.M., Sevlikyants S.G., Otto O.E., Akhmedieva A.T. Information and innovative development of the economy of Uzbekistan. T .: Iktisodiyot, 2011. 136p. [10]. Kuranov M. Scientific and pedagogical foundations of national education in secondary schools of Uzbekistan: Autor.d.d. ... Doctor of Pedagogical Sciences. Tashkent, 1998. –40 p.

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EXPERIMENTAL METHODOLOGY OF PEDAGOGICAL EXPERIMENTAL WORK

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Annotatsiya — maqolada pedagogik tajriba-sinov ishlarining eksperimental metodikasi haqida ma'lumotlar keltirilgan. Turli xil metodlardan foydalanishning usullari va afzalliklari haqida fikr yuritilgan. Shu bilan birga bu usullar misollar orqali tahlil qilingan. Bundan tashqari bu metodlardan foydalanish yoʻllari haqida ham qisqacha yoritilgan.



Kalit so'zlar: pedagogik tajriba-sinov ishlar, eksperimental metodikasi, metodlardan foydalanish yo'llari, ma'naviy-axloqiy sifatlar, professional tayyorgarlik.

Аннотация - в статье представлена информация об экспериментальных методах педагогических экспериментов. Обсуждаются методы и преимущества использования различных методов. Однако эти методы были проанализированы на примерах. Также есть краткий обзор того, как использовать эти методы.

Ключевые слова: педагогические эксперименты, экспериментальные методы, способы использования методов, духовно-нравственные качества, профессиональная подготовка.

Abstract - the article provides information about the experimental methods of pedagogical experiments. The methods and advantages of using different methods are discussed. However, these methods were analyzed through examples. There is also a brief overview of how to use these methods.

Key words: pedagogical experiments, experimental methods, ways of using methods, spiritual and moral qualities, professional training.

Introduction. The result of the reforms carried out in the country during the years of independence in accordance with the principle of "from a strong state to a strong society" is to bring up a well-developed, highly spiritual and moral person, independent and free-thinking person. In the words of our first President I.A.Karimov, "Today, only young people with higher education, modern thinking, intellectual development and professional training can be the most important condition for quality, rapid and innovative development, they are the great future of the country. I don't think there is any need to believe that it can provide!" Therefore, at the same time, special attention is paid to the professional training of future teachers, which determines the level of quality. As a result of studying, analyzing the existing educational and methodological literature on the research and assessing the current state of the problem, under the influence of the necessary pedagogical and psychological conditions of professional adaptation of future teachers to thoroughly master the basics of general, general and special science, under the influence of the created pedagogical conditions. Also, the content of pedagogical activities aimed at the formation of personal and professional goals, positive professional motivation, social and professional responsibility, psychological preparation for practical activities, initiative, creativity, a sense of satisfaction with their actions, professional knowledge, skills and It was observed that the development and activation of skills is one of the leading factors in the process of professional adaptation.

Literature review. Based on these findings of theoretical and empirical analysis, the design of the experimental part of the work focused on the formation of professional knowledge, skills and competencies of students through the professional adaptation of future teachers and a systematic approach to this process. It is known that scientific research in the pedagogical direction, based on its organizational and methodological basis, is designed in the following stages:

1) to correctly understand the socio-pedagogical, psychological nature of the problem selected for research and determine the level of relevance, its conceptual and theoretical and prognostic analysis, organized in order to rationally determine the ways and tasks to find an optimal solution;



- 2) theoretical ideas put forward by the researcher in order to positively, effectively solve the selected problem, based on available resources, practical activities aimed at the formation of a special methodology based on scientific hypotheses;
- 3) the experimental stage related to the application of the former special methodology in the educational practice of the selected educational institutions as the object of research and the determination of its level of effectiveness. The specifics of these technological stages and their impact on the successful organization of pedagogical experiments were studied, and the goals and objectives of the activities related to the experimental phase of the research were defined as follows. The purpose of the study was to substantiate the pedagogical conditions for the professional adaptation of future teachers and to develop forms, methods and tools to ensure the success of the process.

To achieve this goal:

- Analysis of the specifics of the educational process in higher education;
- Identification of objective and subjective factors influencing the professional orientation of future teachers;
- Determination of pedagogical conditions for professional adaptation of future teachers [1];
- Development of a model, technology of the process of professional adaptation on the basis of a systematic approach;
- Development and analysis of criteria for determining the level of professional adaptation of future teachers. The experimental work was designed in the following stages to ensure that the identified tasks are closely related to the requirements of the current activity.

Analysis. In the process of experimental work:

- Socio-pedagogical approach to the research problem;
- Taking into account the age and psychological characteristics of future teachers in the professional orientation;
- Strengthening the motivation of students to pursue pedagogical activities, improving and developing the acquired professional knowledge [2];
- Special attention was paid to the effective use of innovative teaching technologies.

It is known that the organization of the pedagogical process as a interaction between teachers and students, a joint activity, with a focus on "from the teaching activities of the student to the active learning activities of the student" professional development of future professionals is the starting point in the process. Accordingly, the experimental work was carried out in the following areas [3]:

- 1. To determine the current state of professional flexibility in the respondent students.
- 2. Identify and implement pedagogical conditions for the professional adaptation of future teachers. Initially, a questionnaire was developed to determine the level of professional adaptation of future teachers.

The structure of the questionnaire consists of 2 blocks, each of which reflects specific pedagogical tasks and inquiries. During the experimental work, the blocks of



the methodology were adopted as a special criterion that helps to determine the level of professional adaptation of students in specific areas, namely [4]:

- Adaptation to the educational environment, conditions in the higher education institution;
- Motivational orientation to professional activity, the level of aspiration to pedagogical activity;
 - Active participation in the development of professional competencies;
 - Professional self-awareness, adaptation to the requirements of the activity [5].

The current status of these criteria was assessed on the example of low, medium and high levels. High level - a high level of activity of future teachers in the educational environment, conditions, adaptation to the requirements of professional activity, aspiration to pedagogical activity, acquisition of professional competencies, professional formation. Professionally important qualities such as organization, communication, speech, initiative, creativity are formed. Intermediate level intermediate level of activity of future teachers in the educational environment, conditions, adaptation to the requirements of professional activity, aspiration to pedagogical activity, acquisition of professional competencies, professional formation. Students need to acquire professional knowledge, skills and competencies in the field of pedagogical activity, but this need is not permanent, so they do not try to organize practical actions in this direction [6]. At the lower level - in this category of students, professional orientation is mainly based on compulsive motives; adaptation to the educational environment, conditions, and requirements of professional activity is based on stereotypes. Also, these students do not fully understand the socio-pedagogical necessity of mastering professional competencies [7].

Discussion. A total of 200 respondents, including students of 1-4 courses of the Faculty of Pedagogy and Psychology of Tashkent State Pedagogical University, were involved in the experimental work. According to the program of experimental work, in the first stage of the experimental work was studied the educational environment, conditions, the level of adaptation of future teachers to the requirements of professional activity, the motivation to aspire to pedagogical activity, the level of professional competence. Methods such as observation, product study, interview, and questionnaire were used. Based on the analysis of the results obtained in the second stage and the results of the identifying experiment, a development program and action plan was developed to increase the effectiveness of the process of professional adaptation in future teachers.

The following effective forms of work were used [8]:

- 1). Lectures, binary reports, trainings, debate on topics such as "Peculiarities of professional adaptation processes", "Environment and conditions personal opportunities" were organized for the respondents-students involved in the experimental work. There was also a public opinion poll among students on the topic "My expectations". In other words, the opportunities and conditions that students expect from higher education institutions and professors as future professionals were studied [9].
- 2). Training sessions. Based on the model and technology of professional adaptation of future teachers, interactive seminars and trainings were organized among



students. Particular attention was paid to the activity of the participants, understanding the essence of the educational material, a creative approach to the topic, the formation of collaborative dialogue. In the seminar-trainings: "Features and analysis of pedagogical activity"; Innovative Reforms in Education; "Professional and personal qualities of a teacher"; "The image of a modern teacher"; "My professional future"; Topics such as "If I ..." were analyzed. The practical application of these forms of work has a number of positive qualities in future teachers, in particular:

- openness to communication;
- activity;
- creative approach to the organization of educational and other social activities [10];
 - to fully demonstrate their abilities and inner potential;
 - responsible approach to the organization of professional activity;
 - led to the formation of cognitive activity.
- 3). Organize situational assignments and case studies with prospective teachers as part of the research. The purpose of the practical work organized at this stage was to transform students' existing theoretical knowledge into professional skills and competencies [11].
- 4). Diagnostic maps have been developed to determine the level of formation of professional flexibility in future teachers.

Conclusion. At each stage of the experimental work, the results of the respondents were determined through these diagnostic maps, interviews, assays. Thus, the pilot work on the professional adaptation of future teachers was carried out in accordance with a specific program and plan, which allowed achieving the set goal and achieving the expected results. This can be seen from the dynamic growth of the results of experiments organized at different stages. The next part of the work deals with the results of experimental work and their comparative and statistical analysis.

References:

- [1]. Azizxodjaeva N.N. Pedagogical technologies and pedagogical skills. T .: Finance, 2003. p– 84.
- [2]. History of pedagogy / Compilers: K.Hoshimov, M.Inomova, S.Nishonova, R.Hasanov.— T.: Teacher, 1996. pp—10-12.
- [3]. Abdulla Avloni. Turkish gulistan or morality. T .: Teacher, 1992. pp 16. 2 History of pedagogy / Compilers: K.Hoshimov, M.Inomova, S.Nishonova, R.Hasanov. T .: Teacher, 1996. pp 36- 40.
- [4]. Kurbanov SH., Seytkhalilov E. National training program: problems and directions of pedagogical research. T .: Fan, 1999. 189 p.
- [5]. Inoyatov U.I. Theoretical and organizational-methodical bases of management of quality control of education in professional college: Diss. ... Ph.D. ped. science. T .: 2003. 327 p.
- [6]. Muslimov N.A. Theoretical and methodological bases of professional formation of a teacher of vocational education: Ph.D. ... diss. T .: 2007. 357 p.
- [7]. "Literary Psychology and Style". International Journal of Recent Technology and Engineering. International Journal of Recent Technology and Engineering (IJRTE)ISSN: 2277-3878, Volume-8, Issue-3S, October 2019. <u>ijrte@gmail.com</u>

[8]. "Psixologiya i simvolik a sveta". Jurnal nauchnix publikasiy aspirantov i doktorantov. №4 (106), Aprel' 2015 g. fakticheskiy: 420029, g. Kazan', ul. Akademika Kirpichnikova, d. 25. E-mail: info@moluch.ru; http://www.moluch.ru [9]. "Buxara –Jemchujina otechestvennoy kul'turi". Nauka i misl'. №6-2014 System v svobodnom dostupe po adresu: URL: http://wwenews.ru/ http://wwenews.esrae.ru [10]. «Obryadnaya odejda uzbekskix jenshin". «Molodoy ucheniy» №3 (137), yanvar' 2017. mail: info@moluch.ru; http://www.moluch.ru [11]. Tolipov O.Q. Pedagogical technologies for the development of general labor and professional skills in the system of higher pedagogical education / Monograph. - T .: Fan, 2004. pp –73-80.

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USE OF CREATIVE METHODS IN THE TEACHING OF FINE ARTS

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Annotatsiya — Maqola estetik sikliga kiruvchi muhim fanlardan biri bo'lgan tasviriy san'atdan talaba yoshlarga ta'lim berishda ilg'or pedagogik texnologiyalardan foydalanish masalalariga qaratilgan. Shuningdek unda mustaqil bilim olishda axborot texnologiyalarining muhimligi, yoshlarning dunyoqarashiga mos manbalarni zamonaviy ko'rinishdagi, interaktiv va kreativ tarzda axborot texnologiyalarida tayyorlash va uzatishning bugungi kunda dolzarb masalalardan iboratligi haqida munozaralar yuritiladi.

Kalit so'zlar: tasviriy san'at, pedagogika, kreativ, interaktiv, kontent, mustaqil ta'lim, elektron resurs, elektron test.

Аннотация - Статья посвящена использованию передовых педагогических технологий в обучении студентов изобразительному искусству одной из важнейших дисциплин эстетического цикла. Также обсуждается важность информационных технологий в независимом обучении, подготовке и передаче информационных ресурсов современным, интерактивным и творческим способом в соответствии с мировоззрением молодых людей.

Ключевые слова: изобразительное искусство, педагогика, креатив, интерактив, контент, самостоятельное обучение, электронный ресурс, электронный тест.

Abstract - The article focuses on the use of advanced pedagogical technologies in the teaching of fine arts to students, one of the most important disciplines in the aesthetic cycle. It also discusses the importance of information technology in independent learning, the preparation and transmission of information resources in a modern, interactive and creative way in accordance with the worldview of young people.



Key words: fine arts, pedagogy, creative, interactive, content, independent learning, electronic resource, electronic test.

Introduction. One of the most important tasks for any society has been to train qualified personnel with higher education. Especially technology in our developed century, the organization of education of teachers using information technology remains a topical issue.

President Shavkat Mirziyoyev paid special attention to the development of science, education and technology, saying: "In order to achieve progress, we must acquire digital knowledge and modern information technologies. This will allow us to take the shortest path to growth." Indeed, the future of the education system cannot be developed without digital technologies. It is no coincidence that 2020 has been declared the Year of Science, Enlightenment and the Digital Economy [1].

Literature review. Information technology is also used in the teaching of fine arts in some secondary schools. Unfortunately, this process is not for the benefit of the students, but only for the documentation of the teachers and for showing the students video materials during the lesson. Improving the competencies of independent learning, as well as the fact that the lessons in the classroom and in the classroom are not enough for students to grow into mature artists, will allow them to learn more independently, to create independently training is important [2].

It should be noted that today the mechanisms for the proper organization and management of independent learning of students are not fully developed. It is also true to say that information technology is not sufficiently used in the independent learning activities of students. The use of information technology is so important in student learning that today's generations are growing up and living in the world of IT, the age of the Internet. Sources appropriate to their worldview: including the development and transmission of modern-looking interactive and creative information technologies, is a very topical issue. Today's quarantine restrictions have once again demonstrated the urgency of the issue [3].

Analysis. The formation of fine arts lessons and lesson plans for independent learning of students in this subject using various software, animations and educational content remains a requirement of the time. Knowledge of software, modern educational content, the use of information technology should be acquired by future teachers in pedagogical universities.

It is known that the modernization of the educational process in higher education institutions, in particular, the educational process of fine arts, the development of professional competence of teachers in improving the quality of the system of training artists and teachers [4], Equipping them with modern professional knowledge, skills and abilities, independent of scientific and technical innovations, creative use and development of skills to solve promising tasks are important tasks.

At the same time, to ensure the interdependence, continuity and continuity of the stages of art education; Introduction of advanced pedagogical technologies in the organization of the educational process of fine arts in higher education, ensuring the quality of teaching materials in this regard, the use of computers and the Internet by teachers in the introduction of pedagogical technologies continuous increase of literacy; further development of the provision of higher education with information



resources and modern textbooks [5]; The study of advanced foreign experience in the field of fine arts and engineering graphics determines the composition of the activities of artists-teachers in higher education. It is clear from the above that the modernization of the higher education system, in particular, the system of fine arts education (visual modern - updated, modern, rapid growth) requires an innovative approach to the educational process. Therefore, the idea of an innovative approach to the education of fine arts (English innovation - innovation) is the individualization of the content and results of education, the content of education, forms, methods and tools of the latest achievements of science and technology, differs from the traditional approach in that it focuses on harmonizing best practices with modern methods [6].

Any innovation in the education system implies the availability of information and methodological support. Therefore, in the introduction of innovations in the educational process of fine arts, it is important to study, analyze and generalize best pedagogical practices and apply them in practice, to improve the content and methods of educational processes through the use of modern pedagogical and information and communication technologies is one of the complaints [7]. This, in turn, as an effective form of organization of educational classes in fine arts, lectures (problem lectures, lectures-seminars, virtual technology lectures, visual lectures, binary lectures), introductory lecture, lecture-conference, informative lecture, lecture discussion, commentary lecture, on-line lecture) training, video training, webinars, internet conferences, innovative teaching methods There is a need to use problem-based methods, interactive methods, practical games, educational projects, portfolios, graphic organizers, information and communication technologies [8]. The importance of interactive methods in the implementation of innovations in the educational process of fine arts in higher education, in particular, in the basics of academic painting and composition classes in the workshop, is also unique. The word interactive is an English word that means "inter" - to interact and "act" - to act, and their general meaning is interactive - that is, to interact [11]. These types of interactions can include "studentteacher" and "student-student" targeted actions.

In interactive teaching, the teacher is an active organizer of learning activities, and the student is the subject of this activity. Interactive learning is a special organizational form of development of cognitive activity, which is characterized by the active participation of the learner in the learning process, from the object of learning to the subject of interaction [9]. Interactive teaching methods are considered in modeling real-life situations, using role-playing games, and solving problems together. Interactive learning not only develops activity, creativity, independence in the process of learning information from students, but also contributes to the full realization of educational goals [10].

Conclusion. The following concepts of education serve as a fundamental basis:

- Intensive activity of the teacher is manifested as the main form of educational activity, he acts as a subject and organizer of this movement;
- The main basis and result of educational activity, the subject of this activity is the student;



- The main indicator of successful learning activities, the result of which is the formation of students' thinking skills and the ability to creatively solve practical problems, to move freely and independently;
- The main indicator of educational activity is the educational tasks. An important role in this is played by teaching tactics that develop the student's thinking, cognitive behavior, which is the main subject of the educational process;
- The process of implementation of educational activities is to prepare the ground for the student to master his personal knowledge and skills.

References:

- [1]. J. O. Tolipova. "Pedagogical qualimetry". T .: 2015.
- [2]. M.Mirsolieva., G.Ibragimova Educational technologies and pedagogical skills. T .: 2015
- [3]. S.Abdirasilov., N.Tolipov Dasgohli rangtasvir. "Economy and Finance" T .: 2010
- [4]. R. Khasanov, Fundamentals of Fine Arts T .: Gafur Gulom Publishing House 2009.
- [5]. Xonboboev, X. O. Use of interactive methods in teaching fine arts.
- [6]. Rajabboyevna A. N. Individualization in education and methods of improving teaching the english language //International Journal of Psychosocial Rehabilitation. 2020. T. 24. No. 1. pp. 91-96.
- [7]. Alimova N., Radjabova M. THE ROLE AND IMPORTANCE OF INDIVIDUAL EDUCATION IN THE SYSTEM OF ORGANIZATION //Theoretical & Applied Science. − 2020. − №. 4. − pp. 401-404.
- [8]. Alimova N. R. IMPROVING TECHNOLOGY OF INDIVIDUALIZATION ON EDUCATION FOR STUDENTS OF TECHNICAL SPECIALTIES IN TEACHING ENGLISH //Theoretical & Applied Science. -2019. No. 12. pp. 352-355
- [9]. Rajabboyevna A. N. Organization of English Lessons Based on Advanced Pedagogical Techniques //International Journal on Integrated Education. T. 3. N_2 . 3. pp. 41-45.
- [10]. Alimova N. POSSIBILITIES FOR INDIVIDUALIZING TEACHING FOREIGN LANGUAGES IN A NON-LANGUAGE UNIVERSITY //European Journal of Research and Reflection in Educational Sciences Vol. $-2019. -T. 7. -N_{\odot}.$ 12.
- [11]. Nozima A. Content And Methods Of Individualization Of Teaching Activities //International Journal of Progressive Sciences and Technologies. -2021. T. 25. No. 1. pp. 50-53.



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SIGNIFICANCE OF INDIVIDUAL EDUCATION AND INDIVIDUAL APPROACH

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Annotatsiya — Ta'limda moddiy ba'za, standart, o`quv rejalar, dastur va darsliklar qanchalik takomillashtirilmasin, kutilgan asosiy natijaga erishish, chuqur va puxta bilim berish, yuqori sifatdagi o`zlashtirishga erishish bevosita nazariy va amaliy mashg`ulotlarni olib boruvchi o`qituvchining ijodkorligi, izlanuvchanligi, malakasiga, pedagogik mahoratiga bog`lanib qolaveradi, o`quv-biluv markazida esa o`quvchi turmog`ini taqozo etadi.

Kalit so'zlar: moddiy baza, standartlar, o'quv rejalari, dasturlar, darsliklar, ta'lim, bilim, nazariy va amaliy mashg'ulotlar, pedagogik mahorat.

Аннотация - Независимо от того, насколько улучшается материальная база, стандарты, учебные планы, программы и учебники в образовании, достижение ожидаемого основного результата, предоставление глубоких и основательных знаний, достижение высокого качества освоения является прямым теоретическим и практическая подготовка, это зависит от творческих способностей учителя, любознательности, квалификации, педагогических способностей, а в учебном центре требуется место ученика.

Ключевые слова: материальная база, стандарты, учебные планы, программы, учебники, образование, знания, теоретическая и практическая подготовка, педагогические навыки.

Abstract – No matter how much the material base, standards, curricula, programs and textbooks are improved in education, the achievement of the expected main result, deep and thorough knowledge, the achievement of high quality mastery is the responsibility of the teacher who conducts direct theoretical and practical training, creativity, inquisitiveness, qualification, pedagogical skills, and in the educational center requires a student body.

Key words: material base, standards, curricula, programs, textbooks, education, knowledge, theoretical and practical training, pedagogical skills.

Introduction. Any education should be focused on the personality of the student, his interests, desires and needs. That is, it is necessary to focus on the individualization of education.

Now what is the individualization of education? Let's answer the question:

- Individualization of the educational process is a method of teaching that takes into account the fact that each student actively participates in the learning process and makes a personal contribution to the learning process;



- The methodological approach, speed, personal characteristics of the student is taken into account in the organization of the educational process;
- In carrying out educational-methodical, psychological, pedagogical-organizational management work, the student is in the personal educational center.

What is an individual approach?

- 1. When working in groups, when organizing educational work, when working with each student individually, their personal characteristics should always be in the focus of the teacher.
- 2. Even when communicating with a student, his / her peculiarities should be taken into account.
 - 3. His abilities should be taken into account in the educational process as well.
- 4. In carrying out pedagogical psychological processes it is necessary to consider the level of personal development of the student.

Literature review. Principles of personal education:

- Personalization is the main strategy of the educational process.
- Personal development is ensured through the individualization of the learning process.
- Implementation of each topic through individualization of teaching guarantees the expected result [1].

Conditions have been created to combine forms of teaching with individualization.

- Personal training ensures the quality and efficiency of the educational process.
- In personal education, skills, qualifications, knowledge are based on the interests of the student.
 - The ability to work independently develops the student's general reading skills.

Thus, the quality and effectiveness of education depends on the effective involvement of students in independent reading and independent thinking activities aimed at independent learning, mastering the content of education [2].

Analysis. The development of the following characteristics in students during the teaching process can be demonstrated in interactive ways.

- The student is not taught, he is taught to read, study, work independently.
- At the same time, students are taught to master through independent analysis, creative thinking, free thinking based on personal conclusions. We develop the ability to think against foreign ideas, to defend our position [3].
- The ability to acquire knowledge is formed by searching, finding, processing from textbooks, the Internet and various other sources, without imparting knowledge to the student. The knowledge gained provides an opportunity for creative thinking. Students are taught to work independently with textbooks, to have the skills of reading, reading, writing, independent study with the help of additional literature, reference books [4].
- All students in the class are guaranteed to master at the level of their abilities. At the same time, the student has the skills and abilities to apply the knowledge gained in life, in practice.
- If all teachers and students learn to work using interactive methods and incorporate it into teaching activities, all students can achieve the same results.



- When organizing the learning process on an interactive basis:
- 1. The interaction of students is strengthened, the partner develops creative work skills.
- 2. The skills of working with the curriculum, syllabus, textbook, standard norms, manuals, the content of the subject are formed.
- 3. Independent reading, work, mastering the content of education, the text becomes a daily personal work [5].
- 4. The student becomes accustomed to free expression, defense of opinion, proof, affirmation.
- 5. Most importantly, didactic motives are formed in the learning process. That is, the needs, wants, and desires of the student are met. The student's interest in the learning process increases. This situation raises the student to a higher level in achieving learning goals.

Discussion. What are the advantages of interactive lessons?

Teaching content leads to better mastery [6];

In a timely manner, educational links are established between students and teachers;

In the learning process, teaching methods are implemented in different forms (individual, pair, group, large groups).

The learning process is highly motivated based on needs.

- Learning material is well remembered through mutual information, retrieval, processing.
 - The student develops the ability to communicate, express, exchange ideas [7].
 - In the educational process the student develops self-esteem, critical thinking.
- The lesson will be interesting for the student, the content of the topic, a creative approach to the learning process, a positive attitude will be taught.
 - Encourages each student to think, search and observe independently [8].
- In interactive lessons, the student not only masters the content of education, but also develops his critical and logical thinking. Of course, there are drawbacks to organizing interactive lessons.
 - 1. The learning process is time consuming [9].
 - 2. It is not possible to manage all students in interactive classes.
- 3. When studying very complex materials, students are not able to solve the problem completely and clearly, in which case the role of the teacher is low [10].
- 4. Due to the participation of weak students in groups during the learning process, even strong students get low scores or scores. What are the advantages of interactive lessons?

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Conclusion. The conclusion is that in such an environment, the teacher must have a highly developed ability to think, to observe problems, to solve problems in a timely manner.

In the organization of lessons in an interactive way, the development of the student's personality should begin with the creation of a self-ground.

That is, the student:

- To acquire knowledge on the basis of independent reading, reading;
- Self-awareness, conscious upbringing;
- To look at their strengths and capabilities with confidence;
- To look at academic work with a sense of responsibility;
- To be able to organize their activities independently, to take advantage of every minute;
 - To be able to arouse the desire for academic work;
 - Be able to be active in any situation;
- In particular, it is necessary to learn to make effective use of modern sources of information as the main and main goal.

Therefore, today the creation of technology for student self-development is one of the most pressing issues in the field of pedagogy, didactics.

References:

- [1]. Karimov I.A. High spirituality is an invincible force. Tashkent .: Manaviyat, 2008. P. 173.
- [2]. Karimov I.A. Resolution of the President of the Republic of Uzbekistan. On measures to further improve the system of providing qualified pedagogical staff and secondary special, vocational education institutions with such personnel. // Xalq so`zi, $2012.\ 29\ \text{may}$, Nolution 10.
- [3]. Ishmuhamedov R. Ways to increase the effectiveness of education with the help of innovative technologies. T., Nizami Tashkent State Pedagogical University, 2009.
- [4]. Lafasov M. World history. (1918-2008). -T .: Turon-iqbol, 2011.
- [5]. Ochilov M. "New pedagogical technologies" / Manual. -Against: Nasaf, 2000.



- [6]. Fuzailova GS, Rakhmatullayeva OR Methods of teaching history to professional fields. Methodical manual. T., TDPU, 2012. 140 p.
- [7]. Fuzailova GS, Rakhmatullayeva OR Textbook on history. -T.:TDPU, 2012. 200 p.
- [8]. Usmanov K., Sodikov M. History of Uzbekistan (1917-1991). Textbook for academic lyceums and professional colleges. -T .: Sharq, 2002, 2003, 2011.
- [9]. Usmanov K. History of Uzbekistan. The period of national independence. For academic lyceums and vocational colleges. -T .: Teacher, 2003.
- [10]. Xodiyev B.Y., Golish L.V., Rixsimboyev O.K. Case-studio modern educational technology in economic higher education: Scientific-methodical manual / "Modern educational technologies" series. T .: TDIU, 2009.



MODERN PROBLEMS OF PHILOLOGY AND LINGUISTICS

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SEMANTIC AND STYLISTIC CHARACTERISTICS OF LITOTA

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Annotatsiya. Ushbu maqolada litotaning semantik va stilistik xususiyatlari haqida so`z yuritilgan. Shuningdek, jahon tilshunosligida ma'lum bir tilni oʻziga xos milliy, tarixiy xususiyatlaridan kelib chiqib tadqiq etish muhim omillardan biri ekanligi, litota koʻpincha badiiy nasrda, she'riyatda nutqning tasviriy va ekspresiv xususiyatlarini oshirish uchun, nasrda ham, she'riyatda ham obrazlilik, evfonik nutq uchun ishlatilishi va asosiy tushunchalarga urgʻu berishi to`g`risida fikrlar tadqiq qilingan.

Kalit soʻzlar: tilshunoslik, litota, semantika, badiiy matn, she'riyat, nutq, obrazlilik, ekspressivlik, stilistika, giperbola, boʻrttirish, soddalik, fenomen.

Аннотация. В статье рассматриваются смысловые и стилистические особенности литоты. Также одним из важных факторов мировой лингвистики является то, что изучение того или иного языка на основе его специфических национальных, исторических особенностей, литота часто используется в художественной литературе, поэзии для усиления описательных и выразительных характеристик речи, как в прозе. были исследованы как образная, благозвучная речь, так и акцент на ключевых концепциях.

Ключевые слова: лингвистика, литота, семантика, художественный текст, поэзия, речь, образность, выразительность, стилистика, гипербола, преувеличение, простота, феномен.

Annotation. This article discusses the semantic and stylistic features of litota. It is also one of the important factors in world linguistics that the study of a particular language on the basis of its specific national, historical features, litota is often used in fiction, poetry to enhance the descriptive and expressive features of speech, both in prose and poetry. both figurative, euphonic speech, and emphasis on key concepts have been explored.

Key words: linguistics, litota, semantics, literary text, poetry, speech, imagery, expressiveness, stylistics, hyperbole, exaggeration, simplicity, phenomenon.

Introduction. In recent times, world linguistics has paid special attention not only to the structure of language, but also to the study of the internal form of words in the language, i.e. semantics. Anthropocentric paradigm, cognitive linguistics, linguoculturology are developing rapidly, and the trends in the complex study of literary texts are improving. During the years of independence, the revival of our national values has led to the development of our native language, which reflects the spiritual world of our people, and the further expansion of its use in society. In



particular, one of the urgent tasks is to study in depth and comprehensively our native language, which is "the symbol of our national identity and independent statehood, invaluable spiritual wealth, great values ... a solid foundation of the nation's spirituality."

In world linguistics, the main focus is not only on the semantics of the word, but also on the relationship between the word and the speech of a particular subject, its pragmatic content, evaluative attitude, national-cultural aspects.

Thanks to independence, Uzbek linguistics has reached a stage of rapid development, the importance of national and cultural factors has made it a priority to increase the volume of research in various fields of science. The need to understand our national identity, to study the ancient and rich history of our country, to strengthen scientific research in this area, to fully support the work of scientists in the humanities implies the practical results of any theoretical research.

The study of the essence of language provides an opportunity to gain a deeper understanding of the spiritual heritage, rich history, national values, cultural and spiritual riches of any nation. Litota is often used in fiction, poetry to enhance the descriptive and expressive features of speech, and in both prose and poetry it is used for figurative, euphonic speech, and emphasizes basic concepts. Litota serves to downplay the size or importance of someone or something in the literature. **Literature review.** The custom of using lithota dates back to ancient times. Classical examples of the technique are found in the Iliad poem by the ancient Greek poet Homer, in which Zeus describes Achilles as saying, "He is not foolish and invisible," meaning that he is both wise and intelligent. Early literary lithotypes of ancient Rome are found in Ovid's poem Metamorphoses (1st century): "not once," which means "more than once." Some common words are removed from the litot: "none" is taken as "several", "not always" - "sometimes".

The first mention of the word "litota" is given in a letter from Cicero, an ancient Roman philosopher who used the phrase for the simplicity of life. Over time, the meaning of the word has evolved into a lower-level idea that embraces the principle of hesitation over "simplicity". Biblical phrases are also based on litota, for example: "My word ... is not repeated in vain" (Isaiah 55:11), meaning that the word is meaningful and meaningful.

Litota is used in both prose and poetry for expressiveness, imagery, euphonic speech, and emphasizes basic concepts. Types of denial in the literature - discrimination or mitigation - are determined by context, in speech - by intonation and emphasis. For example, depending on pronunciation or context, the word "not bad" can mean ways to both soften and soften. The method of Litota was used by the great Russian masters of words A.S.Pushkin, N.V.Gogol, A.S.Griboyedov, N.A.Nekrasov and others.

Research Methodology. Litota (simplicity), tafrit is a method of miniature depiction in fiction. Litota is a figurative expression, a stylistic form, a twist, which includes the size of the object or event depicted in it, the artistic reduction of its value. Litota is the inverse of a hyperbola in this sense, so it is otherwise called an inverse hyperbola. In lithota, two different phenomena are compared on the basis of some



common feature, but this feature is manifested in the means of comparison phenomena to a lesser extent than in the object of comparison.

Recommends the best and most appropriate means of style speech, as a rule. Defines the means used in different stylistic layers of speech. Accordingly, methodology is a separate discipline of the art of expression. It is the linguist who enriches our understanding of this science the services of our scholars and writers are invaluable. Thanks to their hard work, strict norms have been established in many areas of the Uzbek language, and linguistic examples of language units in the communication process have been recommended. Many issues in language development are based on science. For example: Initially, in the Uzbek language, little attention was paid to the issues of visual aids and migration. It later became one of these areas. A number of works have been written in this field in linguistics and literature.

Analysis and results. Litota is an artistic concept. This method is used when they want to discredit the actual dimensions of the object or event under consideration. When a word that confirms a particular feature of lithota is replaced by a word that denies that feature, the expression can be called a methodological cycle of special softening. Litota is used in the literature to downplay the size or importance of someone or something, the opposite of the hyperbola used to enhance the visual-expressive features of speech, a rare artistic example.

Verbal structure of lithota comparison, metaphor, epithet. Litota is often used in prose and poetry to describe events or characters in a work of art more accurately and colorfully. In the richest Russian language there are many speech twists, phrases that allow to give any dictum the desired emotional color, to make it more or less bright. Among these conditions, litota occupies one of the last places. It is an intentional artistic discrimination that can be applied to a person or object, to the characteristics of a particular event or phenomenon. As a rule, such a distortion of speech is avoided if the narrator doubts that this action has been fully performed, or if the person has this or that feature in maturity.

A litota in Russian is a hyperbole, which in turn is an exaggeration for the properties of an object or some human ability. The path we are considering is formed by applying a two-sided negation in speech if it is to show the negative side of any one, e.g., not without reason. If, on the contrary, it is necessary to emphasize dignity, but not much to praise, then the lithotic path is formed using negatively colored words, for example: not bad, without heat, and so on.

Often in literature and everyday speech, such deviations are used to turn the rejection of something into morality. An example of this is: "You're not sure you can do the task." What this means is that the speaker is convinced: the interlocutor cannot perform the task. However, with the help of rejection, he absolutely reflected this. In this case, litota is a softening used in speech not to openly express your dissatisfaction, but to do it gently.

This misguided and rejected approach is often found in fiction, as well as in articles of a cognitive nature. They make the text more colorful, interesting, and often force the reader to return to the lines read to fully understand their meaning. Lithotes are also used during communication during operation. Often, deliberate discrimination is used in speech to politely point out possible mistakes to a boss or a senior employee.



Hearing this, any person involuntarily thinks about the correctness of their actions. If you tell him openly about the mistake, the dispute will start.

Litota is also a very common style in fairy tales and folk art. Here, misjudgment is achieved not by rejecting an object or event, but by identifying it with a tiny, tiny thing.

Litota improves the meaning of words and phrases as a way of discrimination, focusing on specific events by reducing their signs. In this sense, litota is opposed to hyperbola, which is why it is also called "reverse hyperbola". Litota is often used for ethical reasons: humility and lowering one's achievements allow one to form a positive opinion about it. For example, an experienced driver uses the phrase "This is not my first trip" to gain the confidence of passengers in assessing their professional skills.

Stylistics, a relatively new branch of Uzbek linguistics, deals with the use of linguistic units as a means of communication in various fields and situations, the laws of speech organization, the possibilities of all means in the language system in the speech process and the subtleties of meaning. "Stylistics recommends all the tools available in a language, how to use lexical, grammatical, phonetic tools in speech, which of a certain type of form, word and construction is appropriate, the best and most appropriate tool. Defines as a norm, the means used in different stylistic layers of speech. Therefore, stylistics is the study of the art of expression."

The main task of linguistics is to clearly define language units based on knowledge of language, taking into account changes in their mutual syntagmatic, paradigmatic, form-content and other relations (origin, period, region) and their application in speech. should be about disclosing opportunities. The main task of the methodology is to determine the normality of the possibilities of language units in relation to the laws of manifestation in speech, period, appearance of speech. All research in linguistics and stylistics must be focused on these tasks. This certainly does not negate the other tasks that arise from the relationship of both linguistics and stylistics to other fields. Knowing many writers, being able to read texts, being able to write in many writings, knowing many languages, being able to speak these languages are some of the best qualities of human beings. The level of human perfection is first of all reflected in his speech.

Conclusion. Language is the heart of a nation and it is a changing, ever-moving phenomenon. Language change is seen as a pragmatic opportunity in the process of speech, in use. Language, no matter how big or small, is a stronghold of any nation. National identity is expressed in more languages. After the independence of our country, the development of language and linguistics has become very important. A review of the history of the development of world linguistics, the development of the most valuable linguistic traditions in it, is associated with certain reasons.

- a) the linguistic relationship to linguistic achievements has been abolished;
- (b) a social approach to structuralism and its manifestations has emerged;
- c) it has been practically proved that in order to study many unresolved problems of modern linguistics, it is necessary to critically examine the achievements of linguistics of the past;

The history of linguistics shows that the development of linguistic theories is largely consistent with the development of the most important philosophical currents



from antiquity to the present day. It is no coincidence that in the process of globalization, opinions are expressed about the prospects of national languages, their status in society, their prestige. Because language as a social phenomenon plays an important role in people's activities in various fields.

Our centuries-old history shows that the role of enlightenment, especially the social sciences, in the formation of the human worldview is invaluable. Whether it's linguistics, history, philosophy, political science, psychology or economics in a society, they all have a huge impact on a person's intellectual maturity.

References

- [1] Abdurahmonov X., Mahmudov N. Word aesthetics. –Tashkent: Fan, 1981.
- [2] Abdullaev A. Expression of expressiveness in Uzbek language. –Tashkent: Fan, 1983.- 88-p.
- [3] Kungurov R. Visual aids of the Uzbek language. –Tashkent: Fan, 1977.
- [4] Boboev T., Boboeva Z. Fine arts. –Tashkent: TDPI, 2001.
- [5] Doniyorov X., Mirzaev S. Word art (artistic skills and language considerations). Tashkent: Fan: 1962.
- [6] Jamolkhonov H., Yuldashev M. Linguistic analysis of the literary text (Text of lectures). –Tashkent: TDPU, 2000.
- [7] Karimov S.A. Problems of Uzbek language methodology at the present stage. Text of lectures. Samarkand, 2006.
- [8] Karimov S.A. Functional stylistics of the Uzbek language. Samarkand, 2010.
- [9] Bekiyeva M."Linguculturological research directions and interpretation of language and culture in modern linguistics". Electronic journal of actual problems of modern science, education and training. 2020. 106-117 p
- [10] Shomaksudov A., Rasulov I., Kungurov R., Rustamov H. Stylistics of the Uzbek language. –Tashkent: Teacher, 1983.-247 p.
- [11] Mukarramov M. Classification of similarities // Uzbek language and literature, T.: 1968.



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THE PROJECT METHOD AS ONE OF THE ASPECTS OF THE IMPLEMENTATION OF A PERSONALITY-ORIENTED APPROACH IN TEACHING THE RUSSIAN LANGUAGE

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Annotation: The article is devoted to such an urgent problem as the use of the project method for the implementation of a personality-oriented approach in teaching the Russian language. This topic has been little studied and requires further research. The article reveals the need to implement a personality-oriented approach in teaching the Russian language. The main attention is paid to the disclosure of the concept of the method of projects. Describes the stages and forms of work in the classroom of the Russian language using the project method.

Key words: personality-oriented learning, project method, group work method, project technology.

Аннотация: Статья посвящена такой актуальной проблеме, как использование метода проектов для реализации личностно-ориентированного подхода при обучении русскому языку. Данная тема мало изучена и требует дальнейших исследований. В статье раскрывается необходимость реализации личностно ориентированного подхода при обучении русскому языку. Основное внимание уделяется раскрытию понятия метод проектов. Описываются этапы и формы работы на занятиях русского языка с использованием метода проектов.

Ключевые слова: личностно ориентированное обучение, метод проектов, групповой метод работы, проектная технология.

Annotatsiya: Maqola rus tilini o'qitishda shaxsga yo'naltirilgan yondashuvni amalga oshirish uchun loyiha usulidan foydalanish kabi dolzarb muammolarga bag'ishlangan. Ushbu mavzu kam o'rganilgan va qo'shimcha izlanishlarni talab qiladi. Maqola rus tilini o'qitishda shaxsga yo'naltirilgan yondashuvni amalga oshirish zarurligini ochib beradi. Asosiy e'tibor loyihalar usuli kontseptsiyasini oshkor qilishga qaratiladi. Loyiha usuli yordamida rus tili sinfidagi ishlarning bosqichlari va shakllarini tavsiflaydi.

Kalit so'zlar: shaxsga yo'naltirilgan ta'lim, loyiha usuli, guruhda ishlash usuli, loyiha texnologiyasi.

Introduction. Today, education is aimed at preparing a person for real life and activity, developing his abilities for independent actions, and unleashing his creative



potential. For this, it is necessary to use a system of advanced and developmental education, apply professionally oriented teaching methods, and introduce various technologies into the educational process. Among the new pedagogical technologies, the most adequate to the set goals of teaching the Russian language, from our point of view, is the technology of projects, or the method of projects. The project method, due to its didactic nature, allows solving the problems of the formation and development of intellectual, speech-thinking, communicative skills.

Literature review. Within the framework of a competence-based approach to education in order to effectively form competencies in classrooms at a university, it is becoming increasingly important to use such a method of activity, in which students form not only knowledge and ideas, but also awareness, as well as possession of the necessary skills. The personality-oriented approach to the lessons of the Russian language presupposes: active educational activity, both of the student and the teacher. The teacher engages the student in real language communication. The student develops the skills of independent work and the skills of working in a group, trying to show a creative approach to solving the problem [3].

One of the technologies that provides personality-oriented learning is the project method, since the project method presupposes the presence of a goal, a scientific idea, various assessment criteria and a qualitatively new result.

The purpose of research activity is to form students' main key competencies, functional literacy as a universal way of mastering reality, including the development of research abilities, activation of the student's personal position in the educational process based on the acquisition of subjectively new knowledge.

The project method includes:

- statement of the problem;
- selection of research methods and practical mastery of them;
- collection of own material, its analysis and generalization;
- evaluation of results;
- own conclusions.

The main result of research activity is an intellectual product – the knowledge gained about research technology, intellectual skill, the development of logical thinking.

The project method was developed and actively used in the works of American teachers – methodologists J. Dewey and Kilpatrick. Initially, this teaching method was called the "problematic method". Russian teachers like M.I.Makhmudov and I.Ya.Lerner actively worked and developed design technology, but this technology did not become widespread, since it did not give positive results. However, as experience has shown, achieving a positive result when using the project method is possible with the correct choice of the topic of the project assignment, methods and organizational forms of their implementation, determining the real terms of the project, creating the necessary material and technical base, systematic guidance of the project by the teacher. Nowadays, the project method is used in an updated and improved form [4].

Research methodology. With regard to the lessons of the Russian language, a project is a complex of actions carefully planned by the teacher and independently performed by students, the end result of which is a creative product. The main



distinguishing feature of the project method is the special form of organization. It is important to follow certain rules when planning work on a project:

- The theme should combine the culture of the home country.
- It is necessary that the problem encourages students to attract knowledge, skills and a variety of sources of information.
- The method of projects involves the independent and individual work of students who are both an object and a subject of activity, since the student independently chooses the object of research and decides what sources of information to use [5].

Using the project method in Russian classes, the teacher enables students to use a real language of communication, which contributes to an increase in the level of the Russian language.

The project method in Russian language classes can be used within any topic. The design technology is combined with any educational and methodological complexes and teaching aids, which makes it possible to use it at different stages of work:[6]

- at the stage of speech practice;
- at the stage of development of communication skills;
- at the stage of communication.

It is important to note that the project assignment adapts the textbook materials to the individual characteristics of students and to the peculiarities of the educational situation in general.

At the heart of each project is a problem, for the solution of which, students need to use not only knowledge of the language, but also knowledge from other areas, as well as students must possess creative, communication and intellectual skills.

Working with projects has the following stages:[7]

- Preparatory stage (a research topic is proposed and discussed, project topics should be relevant and interesting to students);
- Organizational stage (at this stage, groups are formed and a detailed plan of work on the project is drawn up, ways of collecting information and ways of finding the necessary information are discussed);
- The final stage (the purpose of this stage is to carry out intermediate control and discuss the possibilities of practical use of the project results).

Analysis and results. It is necessary to methodically correctly organize the activities of project participants in a group. Depending on the number of project participants, pair, individual and group are distinguished. Group projects are most often used in modern practice.

The group method must follow certain rules:[8]

- All team members are equal;
- Teams do not compete;
- All participants should enjoy communicating with each other, because they complete the task together;
 - Everyone should be active and contribute to the common cause;
 - All team members are responsible for the final result.

Each student receives an independent assignment while working on a project, all members of the group should actively seek new information, since the success and final result of the entire project depends on the work of each.



Considering all of the above, the practical organization of training using the project method in the Russian language classes within the framework of a specific topic acquires special relevance.

The use of the project methodology in the Russian language classes at the university proves that students improve their results in learning the language, actively apply the knowledge, skills and abilities acquired in the Russian language classes, and understand the need for interdisciplinary and intercultural ties.[10]

Conclusion.In conclusion, we can say that when performing project tasks, the student gets the opportunity to think creatively, independently plan his steps, predict options for solving problems, and implement the tools and methods of work that he has learned.

Changes and innovations in the content, forms, ways and methods of work, as well as changes in the teacher-student relationship, lead to the improvement and modernization of education, the creation of a creative personality with new qualities and values.

References:

- [1] Polat, ES, Bukharkina, M. Yu., Moiseeva, MV, Petrov, AV New pedagogical and information technologies in the education system: Textbook for students. ped. universities and advanced training systems / E. S. Polat. M., 2000. S. 65–66.
- [2] Kilpatrick, W. H. Method of projects. Application of the target attitude in the pedagogical process / W.H. Kilpatrick // Pedagogical navigation. 2003/04 academic year. School project method. Specialist. app. to the magazine "Lyceum and gymnasium education". 2003. No. 4. P. 62–81.
- [3] Pobokova, OA New technologies in language teaching: project work / OA Pobokova // New opportunities for communication: achievements of linguistics, technologies and methods of teaching languages. Irkutsk: Press, 2003. 140 p.
- [4] Karpova, Yu. A. Introduction to the sociology of innovation / Yu. A. Karpova. SPb.: Peter, 2004.- 185 p.
- [5] Galazhinsky, EV Cross-cultural study of psychological readiness of students for innovative behavior / EV Galazhinsky, VE Klochko, OM Krasnoryadtseva, IA Ageeva // Theoretical and experimental psychology. 2013. T. 6. No. 1. P. 69–78.
- [6] Basyrova A.E. Infographic text as a new means of visualization in the lessons of RFL // Problems of teaching philological disciplines to foreign students. Voronezh, 2016. T. 4. P. 22–26.
- [7] Raputo AG Visualization as an integral part of the teaching process of teachers // International Journal of Experimental Education. 2010. No. 5. S. 138-141.
- [8] Lezhnina L.V. Case-method in teaching educational psychologists: scientific and methodological aspect // Science and school. 2008. No. 5. P. 68–70.
- [9] Oskolskaya I. A. Active introduction of case study technology in the process of teaching a foreign language to students of non-linguistic specialties. Science. 2016. No. 3–2 (15). S. 77–82.
- [10] Shutyak M.A. Case-method at the lessons of Russian as a foreign and non-native language // Fifth floor. 2017. No. 3. P. 25–29.



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INNOVATION IN UZBEK LANGUAGE TEACHING

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Annotatsiya: Maqola ta'lim muassasasida o`zbek tilini o`qitishda innovatsiyaning samaradorlik darajasi, universalligini vaqt sinovidan o'tkazish va takomillashtirish, shuningdek, Innovatsion faoliyatni ommalashtirishga bag`ishlanadi.

Kalit so'zlar: innovatsion faoliyat, innovatsion usul, texnologiya, pedagogik texnologiylar, interfaol usullar, o'zbek tili metodikasi.

Аннотация: Статья посвящена уровню эффективности инноваций в обучении узбекскому языку в образовательных учреждениях, апробации и повышению его универсальности с течением времени, а также продвижению инновационной деятельности.

Ключевые слова: инновационная деятельность, инновационный метод, технология, педагогические технологии, интерактивные методы, методология узбекского языка.

Annotation: The article is devoted to the level of effectiveness of innovation in the teaching of the Uzbek language in educational institutions, the testing and improvement of its universality over time, as well as the promotion of innovative activities.

Key words: innovative activity, innovative method, technology, pedagogical technologies, interactive methods, Uzbek language methodology.

Introduction. The development of society, the formation of a modern economy, the restoration of the spiritual and moral foundations of society, the development of knowledge, intellectual and creative abilities of the general secondary education institutions, which find their place in life, sets the task of forming a spiritually mature person who is profitable, deep and independent thinking.[7] These tasks are achieved through the introduction of innovative technologies in the activities of educational institutions.

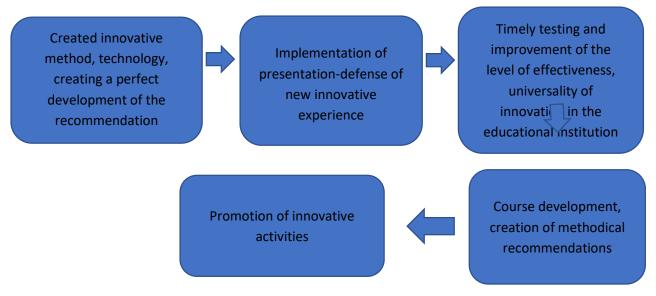
Literature review. Traditional teaching methods have contributed to the development of the nation for many years, and this method is recognized by experts as classical pedagogy. Doctor of Pedagogical Sciences, Professor J. G. Yuldashev: "In general, any pedagogical process is based on the pedagogical system. Improving the quality and efficiency of education can only be associated with the modernization and



improvement of the education system, ensuring continuity and continuity, increasing the activity and responsibility of students in the work of teachers in innovative activities. emphasizes. So, innovative activity is a requirement of the time. Innovative technologies entered the field of education in the early 19th century on the basis of the idea of humanizing the educational process.[8] It focuses on the interests of the student, respect for each child, and the individuality of the student at the center of the educational process. There is a growing interest and focus on improving the effectiveness of education through the use of innovative technologies in education. Teaching using innovative technologies allows students to search for information on the topic on their own, to study independently. Innovation means adding innovation. Innovative technologies in the educational process are innovations in teaching methods in the teacher, and innovations in the student's perception of it. To do this, interactive methods are used.

Innovative pedagogy is a system of scientific theories, the main focus of which is to ensure that educators are active, conscious, equal, self-reliant participants in the educational process. The practical direction of innovative pedagogy is based on the innovative activity of teachers.

Adherence to certain requirements and systems is the most important factor in operating on the basis of innovative technologies. The use of innovations that are not regularly tested in a mass and individual manner and do not provide high efficiency can negatively affect the quality of education. Therefore, it is advisable to take the following steps in the application of innovative technologies in the educational process:[9]



Research methodology. The use of innovative technologies requires a teacher-student interaction, a high level of activity, a creative approach to understanding the information being learned. Innovative pedagogical process in educational institutions leads to the elimination of the following educational problems:

- teacher-student cooperation;
- -increase in the volume and coverage of educational materials;
- stratification of the educational process;
- -increasing the quality and efficiency of education;



-efficient use of time;

- Impartiality and transparency in the assessment of student knowledge.

Given the importance of the use of innovative technologies, a number of teaching methods are discussed in new pedagogical technologies, literature and articles on interactive methods today.

In particular, N. Ahmedova's textbook "Modern technologies of teaching the Uzbek language"[10] includes interactive methods that can be used in mother tongue lessons, technology of working in small groups, didactic games in mother tongue teaching, the importance of the handbook also discusses how to use interactive teaching methods, what methods to use, and their role in the effectiveness of teaching. Teachers will be provided with examples of lesson plans organized using these innovative methods.

In addition, IP Pulatov and S. Adilov's textbook "Modern technologies in the teaching of the Uzbek language", "Innovative games in the native language classes of secondary schools" The manuals are also useful for teachers who want to get acquainted with innovative technologies and apply them in their work.

- R. J. Ishmuhammedov's monograph "Ways to increase the effectiveness of education through innovative technologies" [1] also discusses the role and importance of innovative technologies in improving efficiency. This manual contains recommendations on the use of new pedagogical technologies in the teaching process, trainings and open discussions, organization of individual, pair, small group and team work and preparation of students and listeners for the pedagogical process, pedagogical technologies in the classroom. Samples of lessons, methods of conducting them, feedback on the observation and analysis of such lessons. There are also recommendations for various rituals and educational events in academic lyceums and professional colleges.
- D. Jamoliddinova, O. Tukhtasinova, Z. Abdullayeva's textbook "Methodological features of educational games in primary school lessons" [4] also includes games and their types, information on the technology of organizing games, the methodology of organizing lessons using games.

Analysis and results. The module "Modern approaches and innovations in teaching mother tongue and literature" was created to develop the competencies of teachers of mother tongue and literature in general education schools to apply modern approaches and innovations in the educational process. Educational-methodical complex"[2] deals with the current requirements for the teaching of native language and literature, in this educational-methodical complex about the following types of modern technologies and methods of teaching the native language it goes:

The opinion of B. Tadjibayev, a teacher of native language and literature, about the peculiarities of interactive methods is also noteworthy. Her article, "Using Interactive Methods in Mother Tongue Lessons,"[5] suggests that the following should be considered when choosing teaching methods:

- To combine some methods of reproductive (working with ready-made educational material) and problem-based learning (inquiry-based teaching) to study some topics of the consistent course of the native language;



- The choice of language teaching methods should take into account the natural abilities of students, the level of mastery, the ability to work independently, the characteristics of age. In the independent acquisition of knowledge, it is necessary to pay attention to the specifics of the materials.

Conclusion. In an intellectually developed country, democratic values develop steadily. Because intellectual wealth includes not only knowledge, intellect, and scientific potential, but also high spirituality. In conclusion, we present the following information: "Global Innovation Index 2012" prepared by the prestigious French International Business School "Insead" and the World Intellectual Property Organization and published on July 3, 2012 [3] based on an analytical report by the world's leading media. In other words, Uzbekistan ranks second in the world in terms of innovation in education, the report said. This means that the work on the organization of education in our country on the basis of innovative pedagogical technologies is being effectively organized.

References.

- [1] R.J. Ishmuhammedov. Ways to increase the effectiveness of education through innovative technologies. -T., 2009, 3- p.
- [2] "Educational-methodical complex on the module of modern approaches and innovations in teaching native language and literature". 2017.
- [3] "Rules for the Organization of Small Groups", 2013, No. 2, p.
- [4] Muhamedova S. The use of advanced pedagogical technologies in 6th grade mother tongue lessons. Uzbekistan: language and literature. III series. Tashkent, 2017.
- [5] Tadjibayev B. The use of interactive methods in mother tongue lessons. Uzbekistan: language and literature. III series. Tashkent, 2017.
- [6] Malov S.E. Monuments of ancient Turkic writing. M. 1951. 188 p.
- [7] Malov S.E. On the history of the discovery of ancient Turkish runic inscriptions in Central Asia // "Materials of Uzkomsigaris". Leningrad: 1936. No. 6-7.
- [8] Nurmonov A. Selected works. Volume II. History of Linguistic Doctrines. Tashkent. Akademnashr.-2012. 441 p.
- [9] Educational-methodical complex on the module of modern approaches and innovations in teaching native language and literature. Tashkent, 2017.
- [10] Ramazan Q., Qayyumiy H. Grammar, Sarf. High school textbook. Part I. T.: Oquqpeddavnashr. 1937. 149 p.



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THE USE OF GAMES IN TEACHING A FOREIGN LANGUAGE AT A UNIVERSITY

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Annotatsiya. Maqolada universitetda chet tilini o'qitish jarayonida so'z o'yinlaridan foydalanish imkoniyatlari muhokama qilinadi. O'yinlarning asosiy tasniflari berilgan, asosiy e'tibor leksik xarakterdagi o'yinlarga qaratilgan. Maqolada chet tili darslarida so'zli o'yinlardan eng samarali foydalanishga imkon beradigan shartsharoitlar asoslanadi, shuningdek, talabalar bilan ishlashning turli bosqichlarida o'yinlarga misollar keltirilgan.

Kalit so'zlar: chet tilini o'qitish, chet tilini o'qitishning o'yin texnikasi, til o'yinlari, leksik o'yinlar, kattalarni o'qitish.

Аннотация. В статье рассматриваются возможности применения словесных игр в процессе обучения иностранному языку в вузе. Приводятся основные классификации игр, при этом основное внимание уделяется играм лексического характера. В статье обосновываются условия, позволяющие максимально эффективно использовать словесные игры на занятиях по иностранному языку, а также приводятся примеры игр на разных этапах работы со студентами.

Ключевые слова: обучение иностранному языку, игровая методика обучения иностранному языку, языковые игры, лексические игры, обучение взрослых.

Annotation. The article discusses the possibilities of using word games in the process of teaching a foreign language at a university. The main classifications of games are given, with the main focus on games of a lexical nature. The article substantiates the conditions allowing the most effective use of word games in foreign language classes, and also provides examples of games at different stages of work with students.

Key words: teaching a foreign language, game technique of teaching a foreign language, language games, lexical games, teaching adults.

Introduction. Mastering a foreign language at a university implies the formation of a number of competencies among students. In particular, graduates should be able to communicate verbally and in writing in a foreign language and solve the problems of interpersonal and intercultural interaction. Consequently, students must have certain knowledge (for example, knowledge of linguistic means) and skills (use the formulas of verbal communication, formulating their point of view, etc.), as well as be able to correlate linguistic means with specific situations of intercultural speech communication.



The solution to this complex, "global" problem occurs during the entire period of teaching a foreign language at the university and requires the use of rational and effective approaches and technologies, forms and methods of teaching. In this context, it is customary to talk about the use of new information and communication technologies, active teaching methods, a differentiated approach. However, the "basic element" is the methods and techniques of teaching a foreign language, which the teacher uses in the classroom, directly working with students. Students' knowledge and possession of linguistic means, their use in communication depends on how effectively this material was presented, consolidated, worked out.

Literature review. A method that allows: a) to motivate students to study the subject, b) promotes the development of language and speech competence, c) promotes faster and more durable assimilation of the material, is a game. Is the use of games in a student audience justified? And if so, which games will best promote language development?

In modern science, games are considered as a method that can be effectively used in teaching a foreign language to both children and adults. It would be appropriate to give classifications of games, which will allow you to navigate which games can contribute to the development of certain language skills. So, MF Stronin distinguishes the following types of games: 1. Lexical. 2. Grammar. 3. Phonetic. 4. Spelling. 5. Creative [1].

The first four can be attributed to the so-called linguistic, the purpose of which is the formation of relevant skills. Creative games are complex in nature, imply the creative application of the acquired knowledge and skills in a game situation.[7]

There are other classifications of games. A. V. Konysheva divides games according to their goals into linguistic and speech (communicative) games. EV Dushina talks about linguistic games and divides them into non-communicative, precommunicative and communicative, depending on the competencies being formed [2]. Obviously, in all classifications we are talking about 1) games, in the process of which there is the assimilation of material (new lexical units, grammatical structures), the development of individual language skills (phonetic, grammatical) and about 2) games aimed at transferring the studied material and developed skills in non-standard situations, in communication within the framework of the game.

Research methodology. For the games that will be discussed in the article, we suggest the name "word games" – they are all associated with a word, its spelling, meaning, compatibility with other words (in Stronin's terminology, both lexical and spelling games can be referred to here). Word games allow learners to:[7]

- expand vocabulary by getting to know new lexical units;
- to assimilate familiar lexical units more firmly;
- practice the spelling of words;
- to intensify speech-thinking activity;
- gets acquainted with the compatibility of lexical units, set expressions, phraseological units.

Word games include the following:

- 1. Anagrams
- 2. Crosswords



- 3. Search for words among alphabetic chaos (Wordsearch)
- 4. Hangman
- 5. "Balda" (a word game in which it is necessary to form words using letters added in a certain way to a square playing field).
- 6. "Words" (composing shorter words from one long one, often for a while).
- 7. "Unscramble" (composing a word from an existing set of letters).
- 8. Wordchain (compiling a list of words by replacing one letter in each subsequent word, possibly based on definitions).
- 9. Constructor (composing words from morphemes presented on separate cards).
- 10. "One letter many words" (students name words they know by a certain letter of the alphabet).
- 11. "Last letter" (name a word starting with the last letter of the previous one; it is worth noting that in English, taking into account the unpronounceable -e at the end of a word, it may be suggested to start a word with the last sound of the previous one).
- 12. "Missing letters" (guess the word only by vowels / consonants).
- 13. Hot Chair (guess the word by its definition, synonyms, antonyms, etc.) and others. Some of the games involve group work, team competition (for example, Hot Chair, Constructor, etc.), some work in pairs; games such as "Hangman", "Anagrams", "Wordchain" are appropriate to carry out frontally, presenting the material on the board.

As shown by a survey of 1st year students of several faculties of Omsk State University. F.M. Dostoevsky, most students like to play this kind of games; 100% of students solved crosswords in the process of teaching English, with anagrams, "Wordchain" is familiar to a much smaller number of students. In general, students find the use of games in English classes "an interesting, effective method to help them remember the material better."[8]

Analysis and results. Of course, word play in English classes at a university should not be an end in itself, although in some cases it can serve as a kind of "relaxation" after hard work. When organizing a game in a foreign language lesson at a university, the teacher should take into account the general methodological principles, as well as the principles of pedagogy of teaching adults (after all, the student audience often claims to be "adult", and at the same time equally willingly responds to the techniques and methods used with children):[9]

- adults need to know why they are learning this or that material. Therefore, the teacher should be ready to explain how the game will help students in learning a foreign language;
- adults see learning as a solution to problems, they also learn from their own experience, "in practice," and the use of word games can provide more opportunities for this than just doing exercises from a textbook;
- the game should be well thought out, have clear rules and simple conditions, be supervised by the teacher;
- the game should be conducted in a friendly atmosphere, providing the student with opportunities for self-expression, self-development;

Here are examples of the use of various games at different stages of organizing a foreign language lesson. At the warm-up stage, when the teacher's task is to update the



students' knowledge, experience on a particular topic, "attunement" to work, students can be invited to play "Missing Letters", "Unscramble", "Constructor". In this case, the word must either be already familiar to most students, or it can be predicted based on the topic. For example, the word "adventure" in the game "Missing Letters" might appear on the board as ". d v. n t. r. " as part of the discussion of the general topic "adventure holidays".[10]

Conclusion. Word Chain can be played with entry-level students as it often contains short, simple words of 3-4 letters. However, if definitions of mutable words are used, the task becomes more difficult for students. Some games can be used to introduce new words by focusing on their spelling.

The teacher can be advised not to "take the full blow" in composing the game on himself, but to delegate part of the work to students - for example, on the choice of lexical units in the game within the framework of the topic. Thus, they feel involved, responsible for the correct presentation of the material, for the success of the game. And in this case, the use of the game in a foreign language class actually becomes an effective technique.

Reference:

- [1] Stronin M.F. Educational games in the English lesson. Moscow: Education, 1984.112 p.
- [2] Dushina E.V. Linguistic games at the lessons of the Russian and foreign languages in the aspect of the formation of communicative competence of students [Electronic resource]. Access mode: https://cyberleninka.ru/article/n/lingvisticheskie-igry-na-urokah-russkogo-i-inostrannogo-yazyka-v-aspekte-formirovaniya-kommunikativnoy-kompetentnostiuchaschihsya
- [3] Leont'ev A.A. Fundamentals of the theory of speech activity. Moscow: Nauka, 1974.
- [4] Leontiev A.A., Zarubina N.D.: Psycholinguistics and teaching the Russian language to non-Russians. Moscow: Russian language, 1977.
- [5] Kostomarov V.G.: Language and culture. Ed. MU., 1973, p. 29.
- [6] Kulagin P.G.: Interdisciplinary connections in the learning process. Moscow: Education, 1980.
- [7] Vereshchagin E.M., Kostomarov V.G.: Language and culture. Linguistic and cultural teaching of Russian as a foreign language. Moscow, 1983.
- [8] Whitmen Zh.L., Moskovkin L.V.: Modern methods of teaching and learning foreign languages. // Foreign languages at school. No. 3, 1998.
- [9] Belyaev B.V.: Essays on the psychology of teaching foreign languages. Moscow: ed-2, 1965, p. 79.
- [10] Mirolyubov A.A. Natural method.//Foreign languages abroad. No. 6, 2002, p. 15.



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USE OF MODERN INNOVATIVE METHODS IN TEACHING FOREIGN LANGUAGES

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Abstract – the article provides information on what to look for in foreign language teaching, as well as ways to use modern innovative methods. However, a number of new methods have been analyzed. There is a lot of talk about how these methods can make a lesson interesting and useful.

Key words: foreign language teaching, modern innovative methods, learning system, scientific methods, research methods.

Аннотация - в статье представлена информация о том, на что следует обращать внимание при обучении иностранному языку, а также о способах использования современных инновационных методов. Однако был проанализирован ряд новых методов. Много говорят о том, как эти методы могут сделать урок интересным и полезным.

Ключевые слова: обучение иностранному языку, современные инновационные методы, система обучения, научные методы, методы исследования.

Annotatsiya - maqola chet tilini o'qitishda nimalarga e'tibor berish kerakligi, shuningdek zamonaviy innovatsion usullardan foydalanish usullari to'g'risida ma'lumot beradi. Shu bilan birga, bir qator yangi usullar tahlil qilindi. Ushbu usullar qanday qilib darsni qiziqarli va foydali o'tkazishi mumkinligi haqida ko'plab fikrlar keltirilgan.

Kalit so'zlar: chet tillarini o'qitish, zamonaviy innovatsion usullar, o'quv tizimi, ilmiy uslublar, tadqiqot usullari.

Introduction. As a teaching method, research helps students learn to ask questions about human behavior and find answers through serious factual analysis. Research-based teaching involves engaging students in the process of asking questions and finding answers. Research-based teaching allows students to participate directly in the process of applied research. One of the goals of this approach is to form students who think independently and have a clear learning system. In identifying problems and analyzing the information provided, students learn to avoid giving in to emotions and to be objective. They understand that any knowledge is relative, that it changes as new information emerges. Students learn to test their assumptions and apply a variety of information and logic. The research method of teaching allows students to think at a high level in the process of analyzing the data obtained. Students who study in this way will gain in-depth knowledge of the subject, as well as stable skills in the analysis of news. Research-based learning begins with problem-solving, problem-solving, and articulation. Students are introduced to unexpected, unknown events and happenings.



Once they are familiar with the problem or event, they should suggest ways to solve the problem or options to explain the event and ask questions. If the lesson is openended, students will find sources of information, data, and evidence to better understand and solve the problem at hand. Some teachers give students the task of searching for information in a library or computer. In some lessons, the teacher gives the information to the students, and the students study the information and look for the law, and try to test the initial hypotheses they put forward, curious. Finally, students draw conclusions based on the evidence and results. They will be able to reconsider their hypotheses, explain them more convincingly based on the results they have obtained, and be able to pose and discover new problems. This method of teaching has two goals: - to learn to use scientific methods and to help to master the content; - The use of research methods is as important as the collection of information.

The advantages of using modern innovative methods are:

- helps to develop the ability to think honestly and independently;
- cultivates attentive and respectful attitude to the facts;
- helps to understand that all knowledge is relative;
- teaches logical thinking;
- fosters a relationship of superficiality, insecurity;
- promotes high-level thinking;
- not only masters the content, but also develops creative and logical thinking, helps to develop problem-solving skills.

Disadvantages include [1]:

- time consuming;
- requires the student to develop creative thinking in problem-solving and strategic planning skills;
- the teacher is not only an "educator", but also skilled in directing the student to draw logical conclusions.

Analysis and results. Work in groups. Students in the class work in groups (4 to 6 students) or in pairs to complete assignments given by the teacher [2].

Discussion. The study group is divided into two teams. There will be discussions, debates and exchange of views on the relevant topic.

Guest exercises. In this case, the lesson will be conducted with the participation of an expert. All the organizational work, such as inviting an expert, meeting them, organizing and monitoring the lesson process, is done by the students themselves [3].

Conduct a survey. During the teaching of science, each section, after the completion of the chapter, the teacher conducts a survey.

Research. Students will be able to independently complete some research work, ie diploma and course projects, graduation theses on a scientific basis, write them down and analyze the goals and results [4].

Improvisation. Students will be able to solve non-standard situations independently in the classroom.

Tracking and data transmission. Students observe each other and communicate information about the problem [4].

Games. Business or staging is a challenging task. Instead of textual material, a life situation in which students play roles is staged.



Design work. It is a comprehensive learning approach that involves the analysis and assessment of knowledge and skills. In the project method, students are more involved in planning, organizing, reviewing, analyzing, and evaluating the results of the work done [5].

Discussion. Working with books. This method is associated with the ability of students to independently master the material, to improve the skills of self-examination, to be able to fully and consciously describe the content of the given text.

Individual-practical method. Students solve practical problems on the basis of their knowledge, that is, apply their theoretical knowledge in practice [7].

Evaluation. In this case, students determine the extent to which they have achieved the goal. Students evaluate each other through the teacher or each other. There are the following types of assessment: examination, question-answer, selection of different questions, correct and incorrect answers, self-assessment, peer assessment, teachers' opinions, action plan, various recommendations, ratings, surveys, interviews, tests, video or human observation, assessments through micro-assignments, projects, etc [6].

The non-traditional teaching methods listed above will undoubtedly serve to increase the effectiveness of education in educational institutions [8].

Non-traditional models of teaching can be divided into three types:

- modeling;
- model of collaborative learning;
- research model of research.

These models are primarily student-centered and are also referred to as student-centered learning models. Modeling is a method of creating a condensed and simplified model of events and processes in real life and society in the classroom, in which students are personally involved and educated through activities [9].

Collaborative learning is a method in which students learn by working in independent groups. A research model of learning is a method that allows students to conduct independent research aimed at solving a specific problem. Non-traditional teaching methods (with the student at the center of the learning process) have the following advantages and disadvantages [10].

Conclusion. Research shows that while maintaining the traditional form of teaching, enriching it with methods that activate the activities of students in different districts leads to an increase in the level of mastery of students. To do this, the lesson process should be organized rationally; the teacher should constantly stimulate the interest of students and their active participation in the learning process, divide the teaching material into small pieces and discuss their content. , work in small groups, use interactive methods, give various interesting examples, encourage students to perform practical exercises independently, use different assessment methods, use teaching aids on the spot and in a timely manner.

References:

- [1]. Yuldashev U.Y., Bakiev R.R., Zokirova F.M. Methods of teaching computer science. Tashkent, "Talqin", 2005.
- [2]. Saidakhmedov N.S. Pedagogical skills and pedagogical technologies. T., 2003y.



- [3]. Turakulov X.A. Information systems and technologies in pedagogical research. T., "Fan", 2006, 240 p.
- [4]. Isokov I., Kulmamatov S.I. Development of practical training in the field of innovative technologies in the teaching of computer science. Guliston, GulDU, 2013
- [5]. Abdukarimov H., Suvonov O. General pedagogy: Technology and practice. Textbook. T., 2012, 120 p.
- [6]. Ishmuhamedov R., Abdukodirov AA, Pardaev A. Innovative technologies in education (practical recommendations for teachers of educational institutions). Tashkent 2008, 181 p.
- [7]. Gafurova.N.N. "Modern problems of linguistics and methods of teaching English" Proceeding of The ICECRS INDONESIA November, Vol 4 (2019): International onference on World Science and Education. Case of Asia Articles
- [8]. Gafurova.N.N. "General and modern linguistical features and their conditions in application" International Scientific Journal ISJ Theoretical & Applied Science Philadelphia, USA issue 04, volume 84 published April 30, 2020
- [9]. Gafurova.N.N., Rashidov N.N.; "The role of the English language in the education system" "Buxoro islom madaniyatini modernizatsiyalash va turizimni barqaror rivojlantirish istiqbollari"; Xalqaro ilmiy-amaliyanjuman; 24-fevral 2020 yil Buxoro.
- [10]. Dilorom Nematovna Yuldasheva. PROBLEMS OF NATIONAL LANGUAGE EDUCATION AT SCHOOL. Volume 4 Issue 3 BSU 2020 (3) Published by 2030 Uzbekistan Research Online, 2020 https://uzjournals.edu.uz/buxdu/vol4/iss3/15/

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THE ISSUE OF POETIC SYNTAX IN MODERN WESTERN ENGLISH AND UZBEK POETRY. (ON THE EXAMPLE OF WILLIAM BUTLER YEATS AND ASKAR MAHKAM'S POEMS)

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Annotatsiya – maqolada zamonaviy she'riyat, hamda ingliz gʻarb va oʻzbek she'riyatida poetik sintaksis masalalar haqida ma'lumotlar keltirilgan. Bular Uilyam Butler va Asqar Mahkam ijodi orqali chuqur tahlil qilingan. Shu bilan birga ijodkorlarning ijodidan namunalar keltirilib, tahlil qilingan.

Kalit so'zlar: zamonaviy she'riyat, o'zbek she'riyati, poetik sintaksis masalalar, Uilyam Butler, Asqar Mahkam, ingliz she'riyati.

Аннотация - В статье представлена информация о современной поэзии, а также вопросы поэтического синтаксиса в английской, западной и узбекской поэзии. Они были тщательно проанализированы в работах Уильяма Батлера и Аскара Махкама. При этом были предоставлены и проанализированы образцы работ художников.



Ключевые слова: современная поэзия, узбекская поэзия, вопросы поэтического синтаксиса, Уильям Батлер, Аскар Махкам, английская поэзия.

Abstract - The article provides information on contemporary poetry, as well as the issue of poetic syntax in modern western English and Uzbek poetry. These have been deeply analyzed through the work of William Butler and Askar Mahkam. At the same time, samples of the artists' work were given and analyzed.

Key words: modern poetry, Uzbek poetry, poetic syntax issues, William Butler, Askar Mahkam, English poetry.

Introduction. William Butler Yeats was born June 13, 1865, and died January 28, 1939. Today he is the "folk poet" of Ireland (although he did not write in the national language) and was considered one of the oldest figures in English literature in the early twentieth century.

He was also the first Irishman to win the Nobel Prize in Literature (in 1923, later Irish laureates George Bernard Shaw, Samuel Beckett and Seamus Heaney) for the first time. It is "an expression to the spirit of the whole nation" for its very inspiring poetry.

Literature review. W.B. Yeats and literature. Although born and educated in Dublin, William Butler Yeats spent most of his childhood in Sligo County. Appreciating and studying his poetry in his youth, he was an Irish legend and, in general, a "secret" legend from his youth. Other secular themes came to an end at the beginning of the first century, towards the end of the century. Yeats 'first collection of poetry was published in 1889 - slow, lyrical poems that reflected the influence of Elizabeth and Romance, such as Edmund Spencer, Percy Bysshe Shelley, and the Pre-Raphaelite Brotherhood [1].

Analysis and results. Beginning in the 1900s, Yeats' poetry evolved from metaphysics to much more physical and realistic. While officially abolishing many of the transcendental beliefs of his earlier years, he still showed great interest in both physical and spiritual "masks" and periodic theories of life [2].

Yeats was also (if not) one of the most important figures in the Irish literary awakening. Along with celebrities such as Lady Gregory and Edward Martyn, he founded the Abbey Theater in Dublin, the Irish National Theater (1904). He served as Abbey's director for many years. With the first two plays staged at Abbey ("Triple Money" by Lady Gregory), Yeats' On Baile's Strand and Cathleen were Houlihan [3].

Critically speaking, W.B. Yeats is among the few writers who have written and published their most powerful works since winning the Nobel Prize, particularly The Tower (1928) and The Winding Stair and Other Poems (1929) [4].

W.B. Yeats - life and love

William Butler Yeats was born into an Anglo-Irish Dublin family. His father, Johann Yeats, first studied law, which he left to study art in London. Yeats 'mother, Susan Mary Pollexfen, came from a wealthy Sligo trading family. All members of the family chose an artistic career - her brother Jack, as an artist, sisters Elizabeth and Susan Mary, the Arts and Crafts Movement. As members of the rise of Protestants, the Yeats family supports a changing Ireland, although the resurgence of nationalism directly discriminates against them [5].



Political and social development had a profound effect on Yeats' poetry, a study of the Irish personality that reflected his changing times and attitudes. Although he wrote "we are Irish," the inclusive term is usually overshadowed by his privileged fan.

Aside from his next two terms as an Irish senator, and his philosophy, his fascinating feelings with Rosicrucianism and the Golden Dawn, what remains in the minds of many is Yeats' fascinating life [6].

Discussion. The words present in the language can become our prayer of obedience when we do not waste any of its letters. In the Eastern world, calling people to goodness was done through admonition, through conversation (3). Conversations, on the other hand, consist of sentences and their constituent parts - words. In the works of Eastern thinkers such as Hazrat F. Attor, A. Jamiy, J. Rumi and A. Navoi, attention is paid to the "word" and the "term" serves as a means of bringing man closer to Allah [7].

So'zdin o'lukning tanida ruhi pok, Ruh dog'i tan aro so'zdin halok. [The word is pure in the body of the dead, Spirit spot loss of inter-body word]

It can be said that the words in Askar Mahkam's work have a special power and soul. The poet who reads the book "Tabriz Daftari" or "Analhaq" immediately understands this. It contains not words of language, but words of language. The poet, who likens the present state of the word to that of the sick Prophet Ayub (a.s.), says that personal interests are growing stronger and people are forgetting who they are, and the "word" has lost its influence; now that it is becoming a mere means of communication that serves only the interests and needs of the people. And [8]:

Menga gullar shivirlar giryon:

"Bugun she'ring kimga ham kerak!.."

Flowers whisper to me:

"Who needs your poem today?"

Because poetry and prose are becoming an art form, a simple hobby, or a private business that can be enjoyed by some free "creators," the devaluation of the word in the literary world under their influence does not bring positive results for people. Perhaps for this reason, few people pay attention to books, modern poetry and prose. As a result of our support for what is considered normal for literature, and our pity for it, artistic creation is becoming a public free property, an easy task that many can do. However, even in art, such processes as singing, painting, composing music are carried out with divine inspiration [9].

Fans of any move made with superficial and ambitious intentions are temporary. While we wish the average artist a bright future today, no one can guarantee that his works will live long tomorrow. "If you feel sorry for one author in a critique, you have hurt many fans of literature can't write... More than half of the art of writing is not about knowing what to write, but about knowing what not to write" [7]., Asqar Mahkam confirmed Teacher O.Sharafiddinov's formulas on artistic creation in his poems and explained the secret of being human in the following verses:

Osmon o'sha...



Qadimiy osmon...

Yulduzlar ham yonar to'kilmay...

Odam bo'lmas hech kim hech qachon

Buyuk Qur'on so'zin o'qimay!..

Garchi kajdir charx –

Bordir omon

U aylanar azal shu yo'sin...

Odam bo'lmas hech kim hech qachon

Navoiyning o'qimay so'zin!..

Yer aylanib turar har qalay

Ko'targancha inson zotini

Odam bo'lmas hech kim o'qimay

Mavlononing Kulliyotini!..

... So'z o'lmaydi!

O'ldirib bo'lmas!..

So'z joni ham Olloh qo'lida!..

[Sky is that...

Ancient sky...

The stars also burn without falling

No one will ever be human

Without reading the words of the Great Qur'an!..

Although kajdir charx -

There is survival

That's the way it always turns out...

No one will ever be human

Navoi's words without reading!..

The earth revolves anyway

Raising the human race

No one reads without a man

Mevlana's Kulliyot!..

... The word does not die!

You can't kill!

The soul of the word is in the hands of Allah!..]

As the gaze in front of the remarkable words enjoys the pattern of true creation, the heart strives to find the truth of involuntary creation. But, what is the need for a long definition? Creation can be briefly called a "divine prophecy." The patterns in the poem, the silent words, though consistent with the theory, do not enter into the product of creation on their own unless the spirit of divine enlightenment resides in it. The main sign of creation is manifested by the inspiration that lives in it. Inspired creation, on the other hand, is nothing more than dry action. A person who aspires to creativity must first be fortunate enough to understand creativity [10].

This is a very complicated job. The level of the reader is required to have a deep worldview, high enlightenment and purity of heart in order to see the writer's gaze. However, this does not mean that the possibilities of the creator are infinite, in turn,



literature seems like a vast and infinite ocean; in fact it also has criterion points. Because the original meaning of literature is "etiquette." As long as the artist does not move on these criteria, he will not be able to write without a purpose, and his work will not be among the works that will be inherited for generations. Naturally, the answer to the question of why today's Hafiz, Saadi, Navoi and Jami are not coming out can be seen here.

The poet's poems are not simply mystical. If we take a deeper look, we can see a world of wisdom and example at the heart of these poems. After all, Askar Mahkam is one of those people who were able to follow the rules and manners of mysticism in his creative work. Even when he says, "Hoja Hafiz is a poet with a ghazal," he humbly acknowledges that teachers like Hafiz are at the heart of his work. In Navoi's words, to enjoy one's work and life, to be in love with it, is completely alien to the poet (11). In his poems there is a humble philosophical spirit:

Umr kechdi xobu xulyoda o'tdi qancha azizlar yig'lab... Hamma shoshib turgan dunyoda o'tiribman yalpizni hidlab... So'ng yalpiz ham bir-bir to'kildi o'z hukmini aytdi tiriklik... Birov valiy birov shayx bo'ldi menga qoldi tomoshabinlik... [He died in a dream How many saints have passed cry In a world where everyone is in a hurry I sit and smell the mint... Then the mint was also poured one by one Said his verdict of life Someone became a guardian and someone became a sheikh I'm left to watch...]

Conclusion. These lines depict a man observing the world from the outside. It is as if life is passing in sleep and fantasy, people are in a hurry to do something. Someone had become a sheikh in the meantime, and someone had become a governor, but only one person watched them. He did not follow others because he has his own purpose and mission from life. Not only is this poem of the poet Askar, but in his work in general there an image of a man who looked at life from the outside. No matter which verse we are familiar with, it embodies an image that observes the external environment from above. This is not in vain. The reason was that the poet himself was truthful in life. Perhaps this is the reason why the sounds of truth resounded in his work.

References:

- [1]. Karimova Sh.K, Ibragimova D. The Importance of Vocabulary in Language Learning Process. Proceedings of the ICECRCS,2019. Vol 4. International Conference on World Science and Education. Case of Asia Articles.
- [2]. Karimova Sh.K. The Role of Interactive methods in Teaching English Vocabulary. –Актуальные вызовы современной науки, Переяслав Хмельницкий. 2017.Том 2,7(15).Стр.54-56.

- [3]. Karimova Sh.K. Anaphora as an essential type of poetic figures. European Journal of Research Development and Sustainability (EJRDS) Available Online at: https://www.scholarzest.com Vol. 2 No. 3, March 2021, ISSN: 2660-5570.Page.67-68 [4]. Karimova Sh. About poetic syntax. Comparative Literary Studies: past, present, prospects. Collection of articles of the Republican scientific and practical conference. Pharaoh-King Publishing House, Tashkent-2020. 251-253 pp.
- [5]. Akhmedova D.B. Semantic labeling of language units// International Journal on Integrated Education. e-ISSN: 2620 3502 p-ISSN:2615 3785. Volume 3, Issue I, Jan 2020. P. 177-179 // https://www.researchgate.net/publication/339152869
- [6]. Akhmedova D.B. Set of semantic tags for Uzbek language units: constants and operator/classifier. International Scientific Journal Theoretical & Applied Science. Impact Factor, 2409-0085(online) Issue:02 Volume:82 Published 29.02.2020. P.177-179.https://www.elibrary.ru/defaultx.asp?rpage=https://www.elibrary.ru/item.asp?id=42658994
- [7]. Akhmedova D.B., Mengliyev B. Semantic Tag Categories in Corpus Linguistics: Experience and Examination// International Journal Of Recent Technology and Engineering (IJRTE) ISSN:2277-3878, Volume-8, Issue-3S, October-2019// https://uzjournals.edu.uz/buxdu/vol4/iss1/15/
- [8]. Rajabboyevna A. N. Individualization in education and methods of improving teaching the english language //International Journal of Psychosocial Rehabilitation. -2020. T. 24. No. 1. pp. 91-96.
- [9]. Alimova N., Radjabova M. THE ROLE AND IMPORTANCE OF INDIVIDUAL EDUCATION IN THE SYSTEM OF ORGANIZATION //Theoretical & Applied Science. 2020. №. 4. pp. 401-404.
- [10]. Alimova N. R. IMPROVING TECHNOLOGY OF INDIVIDUALIZATION ON EDUCATION FOR STUDENTS OF TECHNICAL SPECIALTIES IN TEACHING ENGLISH //Theoretical & Applied Science. -2019. No. 12. pp. 352-355

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THE PROBLEM OF COGNITIVE DISSONANCE IN TRANSLATION

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Annotasiya — Ushbu maqolada tarjimashunoslikda tarjimaning adekvatlik darajasini aniqlash, tarjimalarni saralash, tarjimon mahoratiga ilmiy-nazariy baho berishga yoʻnaltirilgan bir qancha nazariyalar mavjudligi, nazariya esa vaqt oʻtishi bilan tabiiy ravishda zamonaviy nazariyalar bilan yangilanib, boyitilib borishi xuddi shunday yangi yoʻnalishdagi nazariyalardan biri kognitiv dissonans nazariyasi ekanligi haqida batafsil yoritilgan.

Kalit soʻzlar: kognitiv disonans, kognitiv dissonans nazariyasi, badiiy tarjima, kontekstual tarjima, bilim tizimidagi mutanosiblik, shakl va mazmun mutanosibligi, adib, asar va tarjimon munosabati, tarjimonning fon bilimlari.



Аннотация - Эта статья содержит ряд теорий переводческих исследований, направленных на определение адекватности перевода, сортировку переводов, научную и теоретическую оценку навыков переводчика, а теория со временем обновляется и обогащается современными теориями.

Ключевые слова: когнитивный диссонанс, теория когнитивного диссонанса, художественный перевод, контекстный перевод, соразмерность в системе знаний, соразмерность формы и содержания, отношения писателя, работы и переводчика, фоновые знания переводчика.

Abstract - This article contains a number of theories in translation studies aimed at determining the adequacy of translation, sorting translations, scientific and theoretical assessment of the translator's skills, and the theory is updated and enriched with modern theories over time.

Key words: cognitive dissonance, theory of cognitive dissonance, literary translation, contextual translation, proportionality in the knowledge system, proportionality of form and content, writer, work and translator relationship, background knowledge of the translator.

Introduction. There are a number of theories in translation studies aimed at determining the level of adequacy of translation, sorting translations, scientific and theoretical assessment of the skills of the translator. The theory, on the other hand, is naturally updated and enriched by modern theories over time. One of the theories in a similar new direction is the theory of cognitive dissonance. The essence of this theory is to identify adequate translations, to study the causes of the factors that hinder the achievement of adequate translation, and to find ways to reduce and eliminate them as much as possible in the translation process. Before defining the problem of cognitive dissonance, which forms the basis of this theory, and its place in literary translation, it is necessary to study the essence of this phenomenon.

Initially, several dictionaries were consulted in order to study the lexical meaning of the term cognitive dissonance. Cognitive dissonance in Latin means "cognitio" - "understanding" and "dissonantia" - "inconsistency", "disproportion", "discrepancy" [1]. V.I. Dal's dictionary explains it as follows: "Dissonance-husband., French. The inconsistency of the muses. sounds; discord, dissonance, disagreement, disagreement, difference, discord, counter-sound, agreement, agreement "[2]. In S.I.Ozhegov's explanatory dictionary: "Dissonance, man. 1. Non-hormonal combination of musical sounds, unflattering sounding of tones; against, consonance. (special) D.V. choir. 2. Transferred. That which introduces discord comes into conflict with what n; inconsistency, Submit dv. "[3].

Literature review. The term Konsonance is defined as follows: Konsonance, m. (From Latin consonantia) (music). Consonance, consonant sounding of several sounds in a chord; against. dissonance. Hence, it is clear from the comments that consonance is the opposite of dissonance, which means the resonance, melody, proportion of sounds.

A.N. Chudinov's dictionary of foreign words in the Russian language describes this phenomenon as follows: "Dissonance - (new lat. Dissonantia from part dis, and sonore to sound) an inharmonic, unpleasant combination of sounds" [4].



In the encyclopedic dictionary: "Dissonance - French. Dissonance from lat. Dissono is a discordant sound. 1. In music, an unbounded, intense simultaneous sounding of different tones. Dissonance is the opposite of consonance. Large and small seconds and septims, increased and decreased, are referred to dissonance" [5].

In all the dictionaries discussed above, the content and essence of the definitions of the term cognitive dissonance are almost the same, and all interpretations in general mean dissonance - the opposite of consonance, incompatible tone, ambiguity, inconsistency, disproportion.

However, the term is not included in Uzbek linguistic dictionaries. D.Kuronov "Harmony in poetry is dissonance; harmony is rhyme; assonance based on the melody of vowels and dissonance rhymes based on the melody of consonant sounds" [6].

Analysis and results. The phenomenon of dissonance first appeared in France and precisely in the field of music. In 1380, Evert de Conty came across this term in his acquaintance with and translation of Aristotle's works.

This information was identified on the basis of French sources and is recognized for *the first time in Uzbek translation studies*. In music, dissonance is understood in terms of "disproportion in sounds", "noise in music, incomprehensible melody", "inconsistency in syllables, sounds and words" [8]. In the process of listening to music, the words sounded vague, incomprehensible, and in the singing, the melody was incoherent, which led to a state of dissatisfaction (cognitive dissonance) in music lovers.

Later in French literature, the term was adopted as a form of cognitive dissonance. The French poet Paul Verlaine, in his Art Poétique, describes Renaissance poets as emphasizing that their poetry was real chansons and that logic was distorted in other poems. This disproportion and alogism irrationality is interpreted in the literature as a phenomenon of *cognitive dissonance*.

In 1944, the Austrian psychologist Fritz Haider also defined the term. The American psychologist Leon Festinger, in his 1956 book, L'Echec d'une prophétie, co-authored with Henry Riecken and Stanley Schachter, approaches the phenomenon as a social psychological concept.

L. Festing laid the foundation for the theory of cognitive dissonance by studying in depth the impact of this problem on human psychology and the processes by which it occurs [7]. The scientist observes various mental, logical, and illogical states in human psychology and interprets incompatibility in the human knowledge system as a state of cognitive dissonance. For example, a person cites as an example of a state of cognitive dissonance the fact that he cannot stop himself from smoking, knowing that smoking is harmful to health. L. Festinger calls "disproportion" "dissonance" and "disproportion" "consonance". So, the basis of the theory of cognitive dissonance is the imbalance in the knowledge system [8].

It is these latter definitions that are scientifically neutral, which means that cognitive dissonance corresponds to the definition of *asymmetry in the knowledge system*.

The phenomenon of cognitive dissonance later began to occur in the research of many scientists in the field. A number of studies in Western Europe and the United



States have also seriously explored the problem of dissonance in areas such as economics, marketing, commerce, and computer science [9].

So, initially this problem was studied in the fields of music, literature and psychology, and later in Russia and European countries, it also entered the fields of economics, computer science, marketing.

In the field of linguistics, special scientific research has been conducted on this phenomenon. An example of this is G.D. Voskoboynik's research on the linguophilosophical aspect "Linguo-Philosophical Foundations of the General Cognitive Theory of Translation" [10].

Discussion. According to the scientist, the translator's difficulty in translating the implicit information given by the author in the text of the work, that is, in finding or selecting an element corresponding to the text of the original in the translated language [10].

In the process of analyzing the translation of the novel "Panamanian Tailor" by the scientist J. Le Care, he points out five states of dissonance that have arisen in the psychology of the translator. For example, "With Mr. Collier with Eccles (?) I suffered a complete fiasco in the sense that I could not find him anywhere" is one such sentence, and in translating it the translator encounters the riddle of who Sollier is and whether Eccles is a city, a street or a country is coming. It also experiences instances of hesitation as to whether such information should be discarded in the language of translation or whether it is easier to use the replacement method. G.D. Voskoboynik describes this experience, that is, the phenomenon, as a state of dissonance of the translator. Hence, it also indicates that the translator will inevitably fall into a state of dissonance in the process of expressing the information that is not actually given in the translated language.

Y.S. Kimishnikova emphasizes that in order to present the realities encountered in the poetic text in the language of translation, the translator must be thoroughly prepared to study each reality, first study the content of foreign realities independently and then apply it to the creative process [5]. Because in poetic translation, inappropriate and deeply unexplored realities create a state of cognitive dissonance at the receptor.

Conclusion. We also believe that in order to prevent this, the translator must have encyclopedic knowledge and at the same time be aware of the nature of the lyric, and be engaged in artistic creation himself. If a translator, being a writer and a poet, engages in poetic translation, he can achieve a complete re-creation of the original in translation. Translations made by such gifted people are among the original translations; otherwise the poetic translation he creates may become light, illogical, melodic and mediocre. It is inevitable that the reader who reads such non-alternative translations will lose the level of pragmatic sensitivity, and the level of artistic and aesthetic enjoyment of the poem will decrease.

References:

- [1]. Chudinov A.N. Dictionary of foreign words of the Russian language. St. Petersburg, 2nd edition, 1894.
- [2]. Books.ru. Dal V.I. Dictionary. M., 1863.
- [3]. Ozhegov SI, Shvedova.N.Y. Explanatory dictionary of the Russian language. –M .: Publishing house "Az", 1992.



- [4]. Chudinov A.N. Dictionary of foreign words included in the Russian language. St. Petersburg 1910 .-- p. 284.
- [5]. Yuzhakova S.N. Big Encyclopedic Dictionary. 2nd ed., Moscow, 1992.
- [6]. Article dissonance. Le Trésor de la langue française informatisé .[Ressourse internet] :CNRC
- [7]. Jodelle E. Deux effects etrangement divers formes et fonctions de la dissonance dans Les Amours et les Contr' Amours de'Etienne Jodelle. –Université Stendhal (Grenoble3), 2009. P.8.
- [8]. Verlain Paul. L'art poétique. Maynial Eduard. Dir. Antologie de poètes du XIX^{ième} siècle. Paris.: Hachette, 1930. P.369.
- [9]. Heider F. Social perception and phenomenal causality. Psychological Review, 1944.
- [10]. Festinger L.A. Theory of cognitive dissonance, Stanford.: University Press, 1957.

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LINGUOCULTURE OF THE DRESS CULTURE OF THE UZBEK PEOPLE

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Annotatsiya: maqolada "kiyim kechak" lingvokulturemasining ijtimoiy madaniy aspektlari haqida umumiy malumotlar keltirilgan. Shu bilan birga kiyim kechak" lingvokulturemasining ingliz va o'zbek tillarida izohlanishi va qo'llanilishi tahlil qilingan. Bundan tashqari misolllar asosida tahlil qilingan.

Kalit so'zlar: lingvokulturologiya, lingvokulturema, madaniyat, lingvokulturologik tahlil, moddiy va ma'naviy madaniyat.

Аннотация: в статье дается обзор социокультурных аспектов «швейной» лингвокультуры. При этом анализируется трактовка и применение понятия «одежда» в английском и узбекском языках. Это тоже было проанализировано на примерах.

Ключевые слова: лингвокультурология, лингвокультура, культура, лингвокультурологический анализ, парадигма, материальная и духовная культура.

Abstract: the article provides an overview of the socio-cultural aspects of the "clothing" linguoculture. At the same time, the interpretation and application of the concept of "clothing" in English and Uzbek languages are analyzed. It was also analyzed on the basis of examples.

Key words: lingvoculturology, lingvokulturema, culture, lingvoculturological analysis, paradigm, material and spiritual culture.

Language does not exist apart from culture E. Sapir



Introduction. The Soviet government and its predecessor, the Russian colonial government, added lesser-known nations to the ranks of Uzbeks. The government then institutionalized national Uzbek culture based on traps such as language, art, clothing, and food, and incorporated them into closer meanings with communist ideology. Islam was removed from its central place, women were forbidden to cover their veils, and large and small regional and ethnic differences were softened in favor of ideologically acceptable uniformity [1].

Since 1991, the government has maintained the definition of a Soviet nation, as before that there was no meaning or definition of a single Uzbek nation. But this literally takes the Soviet formation of culture out of the history books; one university history test had 850 1 questions from 1924 to 1991 [2].

Literature review. The borders set by the Soviets left Uzbeks, Kyrgyz, Tajiks, and others on both sides of Uzbekistan. Despite the strengthening of border controls since independence and the competition for jobs and resources, despite the warm relations between the countries of the region, it has created difficulties for some of these communities [3].

In June 1989, riots in the Fergana Valley killed thousands of Meskhetian Turks deported there in 1944. Along the border in the Kyrgyz city of Osh, many Uzbeks revolted in the 1990s over land denial [4].

There is official support from minority groups such as Russians, Koreans, and Tatars. These groups have cultural centers, and in 1998 a law was relaxed requiring Uzbek to be the only language of official communication. However, non-Uzbek speakers complained that they had difficulty finding work and entering university [5]. As a result, and due to poor economic conditions, many Russians and others left Uzbekistan.

Analysis and results. Uzbekistan's main trading partners are Russia, South Korea, Germany, the United States, Turkey and Kazakhstan. Prior to independence, mainly equipment, consumer goods and food products were imported [6]. After gaining independence, Uzbekistan was able to suspend oil imports from Kazakhstan and also reduce food imports by filling some cotton fields with grain.

Uzbekistan is the world's third largest exporter of cotton [7].

In 1999, Uzbekistan exported \$ 3 billion (US), mainly cotton, gold, textiles, metals, oil and natural gas. The main markets are Russia, Switzerland, Great Britain, Belgium, Kazakhstan and Tajikistan [8].

Each nation has its own national traditions. That is, every nation has its own national traditions and customs. In this sense, everyone is associated with a particular culture, language, history, literature that reflects that nationality. It is well known that language is not only a social phenomenon, but also an integral part of culture. Today, economic, political, cultural and scientific relations between peoples, nations, countries, international and cultural communicative processes in the field of linguistics, the relationship of languages and language culture, as well as the national identity of language. lingvokulturology, a new field with a special specific direction and subject. As a result, by the end of the twentieth century, a new branch of linguistics, linguoculturology, had developed rapidly, aiming to study the problem of language and culture [9].



Linguocultureme is a basic unit which conveys cultural information.

For example such lexemes as Christmas, pub, lord, lady, Thames, turkey, gentleman contain information about English culture, its holidays, traditions, concepts, etc [10].

Linguocultureme as the basic linguistic unit includes both aspects – the cultural content and the form of its linguistic expression [11].

Phenomena and realia of everyday life are presented by words- realia or non-equivalent linguistic units: (kilt, apron; chopon, do'ppi).

Today, text analysis is based on the achievements of a number of disciplines, including grammar, semantics, cognitology, psycholinguistics, and linguoculturology [12]. The purpose is to determine the role of the factor that creates and perceives speech in linguistic activity, and, on the other hand, to study in more depth the semantic, linguocultural features of the text. As such, the issues of linguoculturology, which are related to the concept of language and culture, which is currently attracting the attention of everyone in linguistics, have been studied by most linguists, but have not been fully resolved [13].

Discussion. The study of national costumes, as well as other areas of public life, is closely linked with the application of the ethnic history and culture of each nation, its interaction with other peoples. Among the material and spiritual monuments, it is also a criterion that reflects the national identity and ethnic characteristics of peoples. In this sense, the study of the history of clothing provides a wealth of information about the rich cultural heritage of the peoples who have lived on the planet for thousands of years, as well as their traditions and lifestyles [14].

Information about the Uzbek people's past clothing is provided by large ancient murals found during archeological excavations, images on various objects, and medieval book miniatures. Medieval miniatures are unique examples of the unique style of Uzbek clothing, which was formed and preserved until later times. Changes in the way people dress are most noticeable in the early twentieth century, and the transformation is most evident in cities. Traditional Uzbek clothing consisted mainly of a shirt, trousers and a coat, a doppia on the head, and a boot or boot [15].

"The culture of dress plays a big role in making our women worthy of life. If a woman likes her clothes, she will be in a good mood. The worldview of women who wear such beautiful and elegant clothes in accordance with our national mentality will also be broadened. We are ready to create all conditions for the development of this area. Because pleasing women is the biggest policy of our state," said President Mirziyoyev.

Clothing is primarily used to cover various parts of the human body and to protect it from various environmental influences.

Clothing not only meets the natural and aesthetic needs of people, but also reflects the traditions of each nation, social relations, some elements of ideology, religious beliefs, elegance and aesthetic norms. In addition, clothes reflect the place and time of a person's life, his life, happy or sad events [16].

For example, the word "white" has a mostly positive connotation in the Uzbek worldview. That is, the word white means purity, cleanliness, peace. For example, the unit "white heart" means the purity of the human heart, while the unit "white dress",



"white blessing", "white way" means purity [17]. The word white is also used to mean "to take care of." We can see this in the popular units "White wash, white comb", "Black and white of my eyes". In some areas, the "white dress" means mourning, while in others the mourning period means the replacement of black clothes with white ones and the removal of mourning clothes.

Conclusion. The mourning dress worn by Uzbeks is mainly for women, and although men do not have special condolences, it is customary to wear a doppi on the head with a belt around the waist.

In general, symbolic words play an important role in expressing emotional and expressive color, reflecting the values and traditions of the people. This feature of signifying lexemes is important in defining a writer's skill in works of art.

From the above we can conclude that in the creation of such linguistic dictionaries it is very important to correctly determine the nature of the relationship between language and culture.

References:

- [1]. Rajabova M. B. Goethe and the East //International scientific-practical conference" XL international conference dedicated to the problems of social sciences" (March 31, 2016) Moscow-2016. 2016.
- [2]. Rajabova M. B. From the history of the views of the great thinkers of the East on education and upbringing //International scientific and practical conference" Fundamental and applied research: a new word in science", Moscow. 2014. pp. 125-132.
- [3]. Bakaevna R. M. Artistic interpretation of the mythonyms of angel and devil in the works of A //Navoi. Middle European Scientific Bulletin, ISSN. pp. 2694-9970.
- [4]. Bakaevna R. M. Artistic interpretation of the mythonyms of Angel and Devil in the works of A. Navoi //Middle European Scientific Bulletin. 2020. T. 5.
- [5]. Rajabova M. B. EXPRESSION OF IMAGES RELATED TO NATIONAL TRADITIONS IN A. NAVOI'S WORK //Scientific reports of Bukhara State University. -2020. T. 4. No. 5. pp. 141-146.
- [6]. Baqoevna R. M., Oxunjonovna S. H., Qodirovna A. Z. ANALYTICAL AND SYNTHESIZED FOLKLORISM IN NAVOI'S WORK //Journal of Contemporary Issues in Business and Government. 2021. T. 27. №. 2. pp. 1626-1633.
- [7]. Baqoevna R. M. Interpretation Of Navruz In Navoi's Work //International Journal of Progressive Sciences and Technologies. 2021. T. 25. №. 1. pp. 16-23.
- [8]. Rajabova M. B., Akhrorova Z. R. UVAYS QARANIY IN THE INTERPRETATION OF FARIDUDDIN ATTAR AND ALISHER NAVOI //Scientific reports of Bukhara State University. 2020. T. 4. №. 2. pp. 219-223.
- [9]. Rajabova M.B. FROM THE HISTORY OF VIEWS OF THE GREAT THINKERS OF THE EAST ON EDUCATION AND UPBRINGING // Editorial Board. 2014.
- [10]. Rajabova M.B. GOETHE AND VOSTOK // Contact information of the Conference Organizing Committee. p. 54.
- [11]. G.U. Akhmedov. Innovative technologies for teaching foreign languages. Problems of Pedagogy, 2018
- [12]. I.O.Shodieva. Some effective techniques for learning French at the beginning. Achievements in science and education, 2017

- [13]. I.O. Shodieva. Methods of teaching a foreign language using new information technologies. Problems of Pedagogy, 2018
- [14]. G.U. Akhmedov, SF Salimov. Reading in a foreign language as a means of developing students' communication experience. Achievements in science and education, 2017
- [15]. Barotova, M., & Quvvatova, D. "Transference of National Peculiarities in the Novel "The Din" by E.A'zam". International Journal of Engineering and Advanced Technology (IJEAT) India, 2019. №8. Pp.383-387.
- [16]. Mubashira Barotova. The Problems of Recreating Writer's Style in Translation. International Scientific Journal: Theoretical & Applied Science. Philadelphia, USA, 2020. №82. Pp.189-192.
- [17]. Akhmedova D.B. Semantic labeling of language units// International Journal on Integrated Education. e-ISSN: 2620 3502 p-ISSN:2615 3785. Volume 3, Issue I, Jan 2020. P. 177-179 // https://www.researchgate.net/publication/339152869

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COLOUR FUNCTIONS IN VERBAL PORTRAITS BY L. TOLSTOY AND J. GALSWORTHY (ON THE EXAMPLE OF "ANNA KARENINA" AND "THE FORSYTE SAGA")

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Annotatsiya: Ushbu maqola portretning L. Tolstoy va D. Golsuorti asarlaridagi rolini o'rganadi. Qahramonlarning ekspresiv va jonli portretlarini yaratish va personajlarning ichki dunyosini ochish uchun rang tafsilotlari funksiyasining o'xshashligiga alohida e'tibor qaratilgan. Rangli tafsilotni takrorlashdan foydalanilganligi kuzatilgan bo'lib, u turli usullar yordamida aniqlanadi. "Anna Karenina" va "Fortsyte Saga" asarlarining qiyosiy tahlilini o'tkazishda ulardagi og'zaki portretning poetikasi o'xshashliklarga ega degan xulosaga kelishdi.

Kalit so'zlar: portret, tafsilot, takrorlash, L. Tolstoy, D. Galsuorti, qiyosiy tahlil. **Аннотация.** В данной статье рассматривается вопрос о роли портрета в произведениях Л. Толстого и Д. Голсуорси. Особое внимание сосредотачивается на сходстве функции цветовой детали для создания выразительных и ярких портретов героев и раскрытия внутреннего мира персонажей. Прослеживается использование повтора цветовой детали, которая раскрывается при помощи различных приёмов. При проведении сравнительного анализа произведений «Анна Каренина» и «Сага о Форсайтах» делается вывод о том, что поэтика словесного портрета в них имеет сходство.



Ключевые слова: портрет, деталь, повтор, Л. Толстой, Д. Голсуорси, сравнительный анализ.

Abstract: This article addresses the issue the role of the portrait in the novels by L. Tolstoy and J. Galsworthy. Particular attention is paid to the similarity of the function of color detail to create expressive and vivid portraits of the characters and to reveal the inner world of the characters. The use of repeat color details is traced, which is presented by various techniques. The comparative analysis of the works "Anna Karenina" and "The Forsyte Saga" allow concluding that their poetics of the verbal portrait has similarities.

Key words: portrait, literary details, repetition, Tolstoy, Galsworthy, comparative analysis.

Introduction. Comparison of the poetics of L. N. Tolstoy and J. Galsworthy has a long tradition. The similarity of the formal aspects (the artistic world, composition, artistic speech) of the works of Russian and English novelists was pointed out by Russian researchers already at the beginning and in the middle of the 20th century. [2; 5]. In the analysis of the artistic world of novels, mainly the main elements were compared: the events from which the plots are composed, and the system of characters, that is, the most obvious similarities were noted.

However, no less meaningful role is played by the visual components, which require closer attention and more detailed study. Thus, the description of the similarities and differences in portrait images can affect, in particular, the determination of the degree of influence of Tolstoy's poetics on the poetics of Galsworthy's works.

Literature review. One of the most important qualities of a realistic portrait is its color scheme. From all the variety of colors inherent in real life, writers choose only those that, in their opinion, most accurately convey, firstly, the mood of the character at each certain moment of his life and, secondly, the very essence of his inner world. In other words, the coloring of a verbal portrait becomes one of the most important means of conveying the psychology of the heroes, the psychology of the work. Researchers from both L. Tolstoy and D. Galsworthy's novels have paid attention to this [3].

However, a comparative analysis of the color element has not yet been carried out. Determination of the similarity in the use of the color gamut and the difference in the content function was the task of this article. Traditionally, in Russian literary criticism, the main function of depicting the appearance of the hero, his portrait is considered the disclosure of the inner world, the expression of the author's position, as well as the reflection of the system of moral assessments.

Analysis and results. A verbal portrait is not only a description of the appearance, but the transfer of the impression of the hero's appearance as a whole, of what is "formed by the social environment, cultural tradition, individual initiation" [8]. Tolstoy's novel presents a variety of portraits: static, dynamic, pictorial, impression portraits. According to researchers, the most important pictorial technique of a writer is underlining and repetition of a detail. As you know, "the image of holistic portraits of the characters is not very characteristic of the creative method of Tolstoy" [7]. Repetition of the same, in particular, the same color, helps to highlight and "accentuate



the most important, especially significant points" [8]. Such repetitions, "returns" as part of the artistic whole play the role of a kind of marker, focusing on individual elements, characters of the work.

R.O. Yakobson noted in his article "Grammatical parallelism and its Russian aspects" that "the essence of the poetic fabric consists in periodic returns" [10]. It should be noted that one of the most important aspects of L. Tolstoy's portrait painting is such "pictorial" techniques as the use of colors, an indication of brightness and fading, the play of light and shadow.

E. Babaev was one of the first to notice the use of such pictorial techniques in Anna Karenina, who noted that Anna and Kitty in the novel are "picturesque" and even "sculptural." The same researcher singled out as a special technique the presence of a frame, a kind of verbal "frame", similar to a picture, in which the face or figure of the heroine is outlined. These artistic principles carry a special meaning.

D.S. Merezhkovsky wrote about the special brilliance of Anna's portrait, which arises from the effect of chiaroscuro inherent in fine art. "Thick eyelashes" of the heroine frame "shine eyes", as the writer conveys "an orgy excess of life" [5]. Agreeing with the researcher, we add that color is of particular importance. In the novel Anna Karenina, the color detail is repeated and becomes an individual characteristic of the heroes. Endowing each character with a specific color scheme, Tolstoy also emphasizes the special relationship between the characters. This is how the opposition of the two heroines involved in a love triangle can be traced. The contrast in the description of Anna and Kitty is based on the antithesis of dark - light, black - pink. Black correlates with Karenina's image. Throughout the entire novel, he prevails in the description of her appearance. At the beginning of the work, the black color of Anna's hair and eyelashes stands out as a realistic pictorial detail. Then Anna appears in a black dress at the ball. This dress is "only a frame" from which "only she was visible, simple, natural, graceful and at the same time cheerful and lively" 1. Like any frame, it is "selected" by the writer in contrast. The scene of the ball is compositionally important; it is in it that we see how feelings arise between Anna and Vronsky, and a love triangle Kitty - Vronsky - Anna. The choice of the color of the dress makes her stand out from the background of all the other guests; it comes as a surprise to Kitty, who was certainly waiting for her in purple. The epithet "black" is repeated several times: "Anna was ... in a black, low-cut velvet dress ... On her head, in her own black hair, she had a small garland of pansies and the same on a black belt". Karenina's black velvet dress is contrasted with Kitty's pink tulle dress.

This difference in the choice of evening dress emphasizes their dissimilarity. Everything about Kitty: her "small blond head", "childish expression of her face", "ruddy lips" - reveals a fragile and tender nature, similar to the image of an angel. Pink fingers, ears, and pens give Kitty a special charm, different from the impression made by Anna, whose skin was ivory. In the scene of the ball, E.G. Etkind notes the sevenfold repetition of the word "beauty". This word seems to be "an assessment of external impressions, synonymous with the adverb" charming". However, it has a deep and ancient meaning, in which this word is also found in the Holy Scriptures: Satan seduces - in that ancient sense, "beauty" is sinful, terrible, destructive" [9]. Kitty senses in this charm "something terrible and cruel," "there is something alien, demonic in her".



Discussion. The mention of black aggravates the reader's impression; it becomes a harbinger of unkindness. The black color, as it were originally inherent in the heroine (eyes, eyelashes, hair), is duplicated by the color of her clothes, enhancing the impression. In the portrait of his wife, Karenin singles out only black lace and black hair, and he feels uneasy: "Looking at the portrait for a minute, Alexey Alexandrovich shuddered so that his lips trembled and made the sound "brr", and turned away" 1. The same black hair color is noted by Levin in the "Italian" portrait of Anna. Drawing a portrait of the heroine, Tolstoy, with the help of repetitions, conveys grace and grace, the beauty of her face and figure, however, these portraits evoke a disturbing gloomy feeling that predicts the unfortunate fate of the heroine. A similar use of the repetition technique in describing the appearance of heroes is observed in The Forsyte Saga by J. Galsworthy. T. L. Motyleva in the book "War and Peace" Abroad "(1978) speaks of" a close successive relationship between the author of the Forsyte Saga and Tolstoy" and psychological details, methods of characterization" [6]. The English writer Pamela Johnson expressed the opinion that when comparing Galsworthy's novel The Owner with Anna Karenina, there is a clear similarity with Tolstoy's plot and heroes. Karenin is Soames, Anna is Irene; June - Kitty; Vronsky.

Conclusion. Summarizing all of the above and taking into account the interest of the English writer in the work of Tolstoy, his good knowledge of the novels of the Russian classic, we can conclude that the poetics of the portrait are similar in the novels of Tolstoy and Galsworthy.

When creating dynamic portraits, Galsworthy, like Tolstoy, focuses on individual features of the characters' appearance, which is repeatedly repeated and reinforced in the narrative. In the novels Anna Karenina and The Forsyte Saga, the artistic detail becomes color, the writers use pictorial techniques.

References:

- [1]. Alieva N.M. Modernism and John Galsworthy // Bulletin of the Kazakh National University. Philological series. 2011. Volume 134. No. 4. Pp. 12–15.
- [2]. Gilenson B.A. Russian classics in the world literary process: XIX early XX centuries. Moscow: INFRA-M, 2014.395 p.
- [3]. Zhantieva D.G. Aesthetic views of English writers of the 19th early 20th centuries and Russian classical literature // From the history of literary ties of the 19th century: collection of articles / ed. U. A. Guralnik et al., Moscow: AN SSSR, 1962, pp. 167–226.
- [4]. Kakzanova E.M. Finds and inaccuracies in the translation of the novel by J. Galsworthy "The Owner" from the series "The Forsyte Saga" // Bulletin of the Peoples' Friendship University of Russia. Series: Theory of language. Semiotics. Semantics. 2015. No. 4. Pp. 34–41.
- [5]. Merezhkovsky D. S. L. Tolstoy and Dostoevsky. Moscow: Nauka, 2000.588 p.
- [6]. Motyleva T. L. "War and peace" abroad: translations, criticism, influence. Moscow: Soviet writer, 1978.486 p.
- [7]. Urtmintseva M.G. Literary portrait in Russian literature of the second half of the XIX century. Genesis, poetics, genre. Nizhny Novgorod: Publishing House of NNSU, 2005.232 p.



- [8]. Khalizev V.E. Theory of literature: studies for university students. M.: Higher school, 2004.404 p.
- [9]. Etkind E.G. Deep truth ("Anna Karenina") // "Inner person" and external speech. Essays on the psychopoetics of Russian literature of the 18th-19th centuries. M .: Languages of Russian culture, 1999. pp. 305-321.
- [10]. Jacobson R. Works on poetics: Translations. Moscow: Progress, 1987.464 p.
- [11]. Yalysheva N. A. The role of coloristic artistic definitions in the creation of the image of Irene in the novels "The Forsyte Saga" by John Galsworthy // Bulletin of the Russian State Pedagogical University named after A. I. Herzen. 2008. No. 74-2. pp. 301-305.



ACTUAL PROBLEMS IN MODERN AGRICULTURE

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WELFARE OF UZBEKISTAN RURAL WOMEN IN THE FOCUS OF SOCIAL POLICY IN AGRICULTURE SECTOR

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Annotatsiya. 2016 yildan boshlab O'zbekiston hukumati siyosati chet hududlarda yashaydigan ayollari farovonligini oshirishga erishish uchun yangi yo'nalishlarni belgilab berdi. Ushbu maqolada qishloq xo'jaligida gender tengligiga erishish va mamlakatda oziq-ovqat xavfsizligini ta'minlash va ularni qishloq xo'jaligi sohasida amalga oshirish borasida so'nggi yillarda qabul qilingan asosiy siyosiy-huquqiy Nizom va hujjatlar tahlil etilgan. Xalqaro konventsiyalarni amalga oshirish va Barqaror rivojlanish maqsadlariga erishish qishloq xo'jaligi sohasida gender tengligi siyosati bilan chambarchas bog'liqdir. Shunga qaramay, qishloq xo'jaligining gender jihatlarini o'rganish shuni ko'rsatadiki, ularning ishsizlik darajasi hali ham erkaklardan yuqori va iqtisodiyotning rasmiy sektoriga kirish O'zbekistonda ta'lim olish va gender stereotiplarining ta'siri salbiyligi tufayli muammodir.

Kalit so'zlar: chet hududlarda yashaydigan ayollar, farovonlik, gender, O'zbekiston.

Абстракт. С 2016 года политика правительства Узбекистана обозначила новые направления на достижение повышения благосостояния сельских женщин. Эта статья анализирует основные политические и юридические нормативные акты и документы, принятые за последние годы в сфере достижения гендерного равенства в области сельского хозяйства и обеспечения продуктовой безопасности в стране и их выполнение в секторе сельского хозяйства. Выполнение международных конвенций и достижения Целей Устойчивого Развития тесно переплетается с политикой гендерного равенства в области сельского хозяйства. Однако изучение гендерных аспектов сельского хозяйства показывает, что несмотря на значительный вклад сельских женщин в области сельского хозяйства и продуктовой безопасности уровень безработицы среди них по-прежнему выше, чем у мужчин, а доступ к формальному сектору экономики в Узбекистане проблематичен из-за плохого доступа к образованию и влиянию гендерных стереотипов

Ключевые слова: сельские женщины, благосостояние, гендер, Узбекистан.



Abstract. Since 2016, the policy of the government of Uzbekistan has outlined new directions for achieving an increase in the well-being of rural women. This article analyzes the main political and legal regulations and documents adopted in recent years in the field of achieving gender equality in agriculture and ensuring food security in the country and their implementation in the agricultural sector. The implementation of international conventions and the achievement of the Sustainable Development Goals is closely intertwined with the policy of gender equality in the field of agriculture. However, the study of the gender aspects of agriculture shows that despite the significant contribution of rural women in the field of agriculture and food security, their unemployment rate is still higher than men and access to formal sector of economy is problematic in Uzbekistan due to poor access to education and impact of gender stereotypes.

Key words: rural women, welfare, gender, Uzbekistan.

Introduction. The Government of the country is considering the provision and expansion of equal opportunities for the inhabitants of our multi-ethnic country, including rural women. This is one of the key factors for the country's sustainable development and the achievement of the Sustainable Development Goals (SDGs), including Goal 5 – achieving gender equality and the empowerment of all women and girls [1]. Achieving this Goal is interlinked with all the other SDGs and is impossible without reducing poverty, ensuring food security, and granting equal rights to women and men in accessing the management of natural and financial resources in rural areas. The "Development Strategies of Uzbekistan for 2017-2021" and a number of Presidential Decrees determine the growth of socio-political activity of women, an increase in their number at the level of decision-making, ensuring a stable income for their families and, in particular, the participation of young girls in small and mediumsized businesses in remote villages and mountain villages of Uzbekistan [2]. The decision of the Government of the country to follow the principles of equality of women and men, democracy, openness, and transparency will ensure the achievement of equal opportunities for rural women [3]. The implementation of this goal and objectives is reflected in the articles on the guarantee of equal rights and equal opportunities for women and men in Uzbekistan. The creation of the Ministry of Mahalla and Family Support was a significant reform in the institutional structure of the country, where the creation of a gender policy and the implementation of the achievement of gender indicators became the main factors [4]. The institutionalization of the new relations also provides for the gender-legal expertise of program documents and projects, as well as the improvement of the collection of gender-disaggregated data in the agricultural sector, which is based on the implementation of 3 stages until 2026 [5].

Literature review. The national and international scholars and leading institutions of the world are conducting large-scale research on structured and socioeconomic opportunities and factors that improve the living standard of rural women and their families. For instance, the following researchers, such as M. H. Ganieva [6], N. L. Pushkareva [7], N. M. Latipova [8], M. Tokhtakhodzhayeva [9], M. Khadzhimukhamedov [10], D. Abdurazzakova [11], G. Khasanova [12], D. Alimdjanova [13], Z. Tursunova [14], devoted their scientific works to the study of



concepts and factors that ensure a women empowerment in the social-economic life in rural areas. These scholars utilized the gender concept for their analysis of the social-economic situation and welfare of rural women. In Uzbekistan, the concept of gender and gender studies began to spread at the end of the 20th century in the implementation of projects funded by international institutions. In the Soviet era, gender issues were understood as women's issues, which is why the direction of Women and Development existed in the international community and institutionally presented as the Women's Committee in the government.

The utilizing of gender research approaches explores the social-economic challenges from different positions by using the intersectional concepts of analysis. The transition to the application of the gender concept provided an opportunity to consider how women and men farmers and dehkans interact with each other. According to the national legislation, " a dehkan farm is a small-scale family farm that produces and sells agricultural products based on the personal labor of family members on a land plot granted to the head of the family in a lifetime inherited possession." In addition to dehkan farms, the structure of agriculture includes large agricultural producers and farms, which are legal entities of entrepreneurship [15]. In 2019, the structure of the agriculture production presents that dehkan (private) farms and commercial farms produce 72% and 26% respectively [16]. According to the information of the State Statistic of Uzbekistan the GDP of agriculture constitutes 32.4%. The gender assessment of the agriculture sector revealed that rural women encounter next challenges in their business and livelihood development: poor access to management of natural and financial resources, as well as impact of gender stereotypes on their income development opportunities [17], [18].

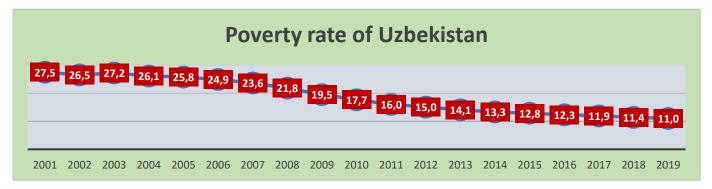
Analysis and Results. This survey highlights important gender aspects of rural development and gender aspects of the agriculture sector in Uzbekistan. The literature review, qualitative surveys and focus group discussions suggest that the recent and ongoing economic reform processes may have resulted that women mostly employed in informal sector in the rural areas. [19]. In addition, gender stereotypes negatively impact on rural women and young girls. A woman plays an important role in ensuring the well-being of her family, where the main priorities are the preservation of national traditions and moral values [20]. In the era of globalization, the involvement of women in the economic life of society affects the distribution of responsibilities between spouses, the structure of the household, the achievement of professional growth, the level of well-being, along with the preservation of the foundations of the national mentality, "with a focus on preserving paternalism" [21].

Since 2016 the Government of Uzbekistan prioritizes the modernization and intensive development of the agriculture sector with a special focus on the stimulation and creation of favorable conditions for the development of farms, especially multidisciplinary ones involved in both agricultural production and processing, procurement, storage, marketing, construction work and the provision of modern market services. The Strategy for the Development of Agriculture of the Republic of Uzbekistan for 2020 - 2030 (hereinafter referred to as the Strategy) is aimed at creating a favorable agribusiness climate and value chains, ensuring food security of the population and rural development. Sustainable development of the agri-food sector of



the Republic of Uzbekistan requires the implementation of state policy in the field on the basis of new approaches and the implementation of indicators of the Strategy Roadmap. The principles of the National Food Security Policy are based on four components such as availability, access, use and stability [22]. Nevertheless, the gender indicators for implementation of these policies were not reflected and budgeted in the state programmes. The exclusion of the gender indicators at the policy level exacerbates existing gender gaps in the agriculture sector. This trend is observed in the significant difference of urban-rural poverty rate. According to ADB, poverty rate decreased from 27.0% in 2000 to 11.0% in 2019. (Graph 1).

Graph 1



Source: https://www.stat.uz/ru/ofitsialnaya-statistika/living-standards

However, the urban–rural disparity of poverty incidence remains significant, with a poverty rate of 14.3 % for rural households and 8.4 % for urban households in 2018. Although, there are no statistic data about the poverty rate as for 2020, the increased Gini coefficient in 2020 is 0,268 shows that the difference of urban and rural poverty rate is growing [23]. In 2021, according to the statistical data, out of total population of more than 34 million, 49.4% resides in rural areas. Growth rate of rural population is twice as much as that in urban areas.

Women's access to employment in agriculture sector

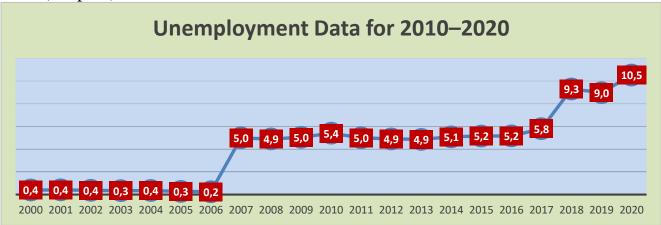
The agriculture is the largest sector for the labor resources in Uzbekistan. In 2020, almost 27% of population have been employed by the agriculture sector, whereas 13% in industry and 11% in trade. Uzbekistan also continues to be the major supplier of fresh and processed fruits and vegetables to the neighboring countries, especially Kazakhstan, the Russian Federation, and 80 other countries around the world. Agriculture production also provides vital livelihood opportunities to majority of rural households. In 2019, the structure of the agriculture production presents that *dehkan* (private) farms and commercial farms produce 72% and 26% respectively.

The majority of the agricultural production is considered as organic production. A centuries-old tradition of vegetables, fruits and grapes production in Uzbekistan is from the outset based on biological crop husbandry principles with application of organic fertilizers only, which allow growing ecologically clean vegetables and fruits with unique gustatory and nutritional qualities without use of genetically modifying technologies. Fruits and vegetables grown in Uzbekistan exceed substantially products from other regions by their main consumer's features, such as content of natural sugar, amino- and organic acids, vitally important trace elements and other biologically



valuable substances irreplaceable in human diet. However, the utilizing of the gender concept for agro sector analysis has revealed that there are specific gender gaps which need to be closed in order to reach the SDGs and sustainable development of the society. Gender stereotypes largely define women's choices in courses and prospects for employment. When selecting a career, girls are motivated less by employment and success, but rather by the desire to obtain a qualification that will be useful in family life (e.g., health worker, teacher, or sewer). Women in rural areas are much less competitive in the labor market, largely because of the limited number of formal jobs available locally and the lack of necessary education, vocational qualifications, and skills. The need to balance work with family and household obligations likely explains why more women work part-time or in the informal sector. Informal work contributes significantly to the family budget, but it often leaves women without social protection. Rural women often work as unpaid workers at family farms and carry the burden of multiple responsibilities at household and community level which are particularly hard and time consuming in view of weak infrastructure in rural (and especially remote) areas. Their labor is often not visible and poorly recognized. Their access to resources, whether material (land, water, livestock, equipment, etc.) or non-material (knowledge, access to technologies or IT, etc.) and ability to exercise control over them, are limited, and as a result, their economic opportunities are limited [24]. Women's greater representation as informal or part-time employees/workers, very often with lower salaries and minimum social protection, makes them more vulnerable and lowers their status in the family because they contribute much less [25].

The number of unemployed people increased from 0.4% in 2000 to 10.5% in 2020. (Graph 2).



Official statistics on employment and unemployment shows that since 2010, economically active population and number of employed people in the economy grew by around 2.3 million people (or 14%–15%), reflecting increase in working-age population. The share of unemployment rate for women and men drastically increased during 2017-2019 years. During 2018-2019 the unemployment rate increased for almost 6% for women, whereas for men it composed almost 2%.

Conclusion. The literature review, qualitative surveys and focus group discussions suggest that the recent and ongoing economic reform processes may have resulted that women mostly employed in informal sector in the rural areas [19]. In addition, gender stereotypes negatively impact on rural women and young girls. A



woman plays an important role in ensuring the well-being of her family, where the main priorities are the preservation of national traditions and moral values [20]. In the era of globalization, the involvement of women in the economic life of society affects the distribution of responsibilities between spouses, the structure of the household, the achievement of professional growth, the level of well-being, along with the preservation of the foundations of the national mentality, "with a focus on preserving paternalism" [21]. To sum up, although women actively contribute to the farming and providing food security at their household and private farms their potential has not been fully realized in the agriculture sector. Rural women mostly involved in the informal sector of the due to low professional, educational skills and negative influence of the gender stereotypes.

References:

[1]. [Electronic resource] URL:

https://www.un.org/sustainabledevelopment/ru/gender-equality/

- [2]. On guarantees of equal rights and opportunities for women and men Law of the Republic of Uzbekistan, No.ZRU-562, Date of adoption 09.02.2019.
- [3]. On measures to further strengthen guarantees of labor rights and support for women's entrepreneurial activity Resolution of the President of the Republic of Uzbekistan, No. PP-4235, Date of adoption 03.07.2019.
- [4]. On measures to radically improve activities in the field of women's support and strengthening the family institution Decree of the President of the Republic of Uzbekistan, No. UP-5325, Date of adoption 02.02.2018.
- [5]. On measures for further improvement and development of the national statistical system of the Republic of Uzbekistan Resolution of the President of the Republic of Uzbekistan, No. PP-4796, Date of adoption 03.08.2020.
- [6]. Ganieva M. H., "Family well-being as one of the main tasks of the state's social policy", "Current issues of teaching sociology and the organization of sociological research "materials of the republican research conference". April 23, 2018.
- [7]. Pushkareva N. L. Gender methodology in history / Gender kaleidoscope. Moscow: Academia, 2001; Pushkareva N. L. The subject and prospects of gender approach in historical sciences / Gender and gender in the sciences of man and society. Materials of the project "Integration of gender studies in the teaching of basic social and humanitarian disciplines of higher education". Ed. V. I. Uspenskaya. Tver: Feminist-Press, 2005.
- [8]. Ganieva M. Kh., Latipova N. M. "Forms of Social Work with Young People on the Prevention of Deviance. "Scientific Journal" Economics. Sociology. Law", 2020, №1 (17).
- [9]. Tokhtakhodzhayeva M, "Between the Slogans of Communism and the Laws of Islam", Vol., 2000, p. 49; Tokhtakhodzhayeva M," Tired of the Past", Vol., 2001.
- [10]. Khadzhimukhamedov M., The relationship of the sexes in Uzbekistan: traditions and modernity. T., 2002. p. 48.
- [11]. Abdurazzakova D., "Women Prop Up Half The Sky. On Reforms And Gender Issues In China"., Asia-Pacific Population Journal. Sep2011, Vol. 26 Issue 3, p29-54. 26p., Social Impact of International Migration and Remittances in Central Asia.
- [12]. Khasanova G., Gender, politics, democracy. Kazakhstan. 2002. p. 8.



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- [13]. Alimdjanova D., Women farmers in Uzbekistan: experience during the period of institutional reforms, Economics and rural development, 2008, vol. 4, no. 2, p. 7-15
- [14]. Women's Lives and Livelihoods in Post-Soviet Uzbekistan: Ceremonies of Empowerment and Peacebuilding, by Zulfiya Tursunova, (Lanham, MA: Lexington Books, 2014, 248pp.)
- [15]. Law of the Republic of Uzbekistan "On Amendments and Additions to the Law of the Republic of Uzbekistan" On Farming", No. 662-II, August 26, 2004
- [16]. Agriculture of Uzbekistan, Statistic Bulletin 2015-2018, Tashkent, 2019
- [17] Gender, Agriculture and Rural Development in Uzbekistan, FAO, Budapest, 2019.
- [18]. Uzbekistan Country Gender Assessment: Update, 2018, Manila, Philippines, ADB.
- [19]. Gender, Agriculture and Rural Development in Uzbekistan, FAO, Budapest, 2019.
- [20]. Tursunova Z, Azizova N., "Gender Issues in Governance: Principles of Participation"., Introduction to the Theory and Practice of Gender Relations, (p. 231-263,) Tashkent 2007.
- [21]. Ganieva M. H., "Family well-being as one of the main tasks of the state's social policy", "Current issues of teaching sociology and the organization of sociological research "materials of the republican research conference". April 23, 2018.
- [22]. Presidential Decree No. 5853 of October 23, 2019, the Strategy for the Development of the Agriculture of the Republic of Uzbekistan for 2020 2030; Presidential Decree No. 5853 of October 23, 2019, the Strategy for the Development of the Agriculture of the Republic of Uzbekistan for 2020 2030.
- [23]. [Electronicresource] URL: https://www.stat.uz/ru/ofitsialnaya-statistika/living-standards
- [24]. JICA, Identification of gender issues in the horticulture sector in Uzbekistan, 2019.
- [25]. Asian Development Bank, Uzbekistan Country Gender Assessment, Updated, 2018.



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DEVELOPMENT OF A DYNAMIC MODEL AND EQUATIONS OF MOTION FOR HYDRAULICS OF MULTIPURPOSE MACHINE MM-1

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Annotatsiya: Ekskavator gidroyuritmasi tizim elementlari orasidagi turli xil ulanishlarni, tashqi muhitning ta'sirini, texnologik ish sharoitlarini va boshqarish moslashuvchanligini hisobga olgan holda mexanizmlar va yuritmalardan tashkil deb murakkab dinamik tizim hisoblanadi. Ekskavator topgan avtomatlashtirilgan bosqichlarini qurishda bir choʻmichli ekskavator gidroyuritmasi tuzilmasi murakkab dinamik tizim sifatida aniqlanib, ularni koʻrsatish imkonini beradi: Ekskavatorning mexanik tizim tuzilishlarini modellashtirish texnikasi bir hil koordinatalar usulidan foydalanishga va oʻzgaruvchan koeffitsiyentli ikkinchi turdagi Lagranj tenglamalari koʻrinishidagi harakat tenglamalarini avtomatik qurishga MATLAB/Simulink Ushbu maqolada dasturida gidroyuritmasining statik, kinematik va dinamik xususiyatlarini tahlil qilish usulini ishlab chiqish bo'yicha hisoblash natijalari taqdim etilgan.

Kalit so'zlar: MATLAB/Simulink, ekskavator, gidroyuritma, dinamik, statik, kinematic, ekskavator modelini modellashtirish.

Аннотация: Гидравлика экскаватора является сложной динамической системой, состоящая из механизмов и приводов, учитывающая различные связи между элементами системы, влияние внешней среды, технологические условия эксплуатации и гибкость управления. При построении автоматизированных ступеней модели экскаватора гидравлическая конструкция одноковшового экскаватора определяется как сложная динамическая система, которая позволяет показать: методики моделирования механических систем экскаваторов основаны на использовании того же координатного метода и автоматическом построении уравнений движения в виде уравнений Лагранжа второго типа с переменными коэффициентами. В данной статье представлены результаты расчетов для разработки метода анализа статических, кинематических и динамических свойств гидравлики экскаватора в программе MATLAB/Simulink.

Ключевые слова: MATLAB/Simulink, экскаватор, гидравлический, динамический, статический, кинематический, моделирование экскаватора.

Abstract: Excavator hydraulics is a complex dynamic system consisting of mechanisms and drives, considering various connections between system elements, the influence of the external environment, technological operating conditions and control flexibility. When constructing automated stages of an excavator model, the hydraulic structure of a single-bucket excavator is defined as a complex dynamic system that



allows one to show that the techniques for modeling mechanical systems of excavators are based on the use of the same coordinate method and the automatic construction of equations of motion in the form of Lagrange equations of the second type with variable coefficients. This article presents the results of calculations for the development of a method for analyzing the static, kinematic and dynamic properties of excavator hydraulics in the MATLAB/Simulink program.

Keywords: MATLAB/Simulink, excavator, hydraulic, dynamic, static, kinematic, excavator simulation.

Introduction. The development of the republic's economy is inextricably linked with the expansion of the road network, the growth of existing capacities, maintenance, repair and reconstruction of roads, maintenance and repair of airfields. The implementation of these tasks on the basis of high-performance road-building machinery and equipment will significantly save material, energy and labor resources. The Republic of Uzbekistan is one of the countries striving to enter the number of developed countries. The Resolution "On the Strategy of Actions for the Further Development of the Republic of Uzbekistan" states that "... the implementation of targeted programs for the development and modernization of road transport, engineering, communication and social infrastructure ..." [1]. These issues will be resolved through the import of modern equipment from abroad, which means that high costs will have to be incurred. Such machines, produced in the USA, Germany, Sweden, Russia, Ukraine, do not fully correspond to the technological process, and their use in Central Asia is very expensive due to the use of expensive materials, including universal machines and mechanisms in our country. Research aimed at the development of the KM-1 machine, the choice of a hydraulic system, and the development of parameters for the hydraulic drive of earth-moving equipment are of great importance.

Decree of the President of the Republic of Uzbekistan dated February 14, 2017 No. PF 4954 "On measures to further improve the management system" [2], the President of the Republic of Uzbekistan dated February 14, 2017 No. PQ 2776 "On measures within the State Committee for Roads and the Cabinet of Ministers Of the Republic of Uzbekistan "Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated March 31, 2017 No. 166" On the organization of the State Inspection for Quality Control of Road Construction under the Government of the Republic of Uzbekistan. Cabinet of Ministers of the Republic of Uzbekistan" [3], and this dissertation, to a certain extent, serves to fulfill the tasks set in other regulations in this area.

The set of issues arising in the development of new equipment covers a number of issues related to the determination of rational parameters of machines and equipment, the design of reliable machine tools that reduce the cost of metal, energy and labor. These requirements are met by a universal machine, which means that theoretical research and practical work in this area are important [4].

Hydraulic drives of modern construction and road machines are very complex, and the calculation of the drive as a whole and in its entirety requires a lot of labor and time. Therefore, one of the main issues in the development of a universal machine is the choice of the hydraulic system.



In this regard, studies aimed at developing the parameters of the hydraulic drive of universal drilling rigs are an urgent problem and are of great importance in the national economy.

Literature rewiev. The study of the process of calculating the static and dynamic phases of the hydraulic systems of various multifunctional machines in the world, as well as the process of calculating the parameters that lead to an increase in the durability of the hydraulics of multifunctional machines and their suspended equipment, an increase in productivity were carried out by Yu.G. Berengard, M.M. Gaitsgori, E.Yu. Malinovsky [26, 27, 28, 29], Prasanna Kumar, V. Matikainen, Javad Tarigi, N.F. Mutlyuk, T. Bashta, D.A. Chudakov, K. Ya. Nekrashevich, V. Popov, A. Altshul, M. Dzhilevich, S. Kobyzev, A.B. Lyure, S.V. Molokonov and others [5, 6, 7, 8, 11, 30].

Uzbek scientists O.V. Lebedev, T. Askarkhodzhaev, A. A. Shermukhamedov, K. Astanakulov, K. A. Sharipov and others have conducted many scientific studies of hydraulic systems of self-propelled multipurpose vehicles [4, 12, 13, 20].

However, the choice of rational parameters of the hydraulic system of a multipurpose machine, proposed in these studies, and the analysis of the selected schemes, the creation of mathematical models for individual parts (digging, drilling, pushing and lifting) and the methodology for their complex calculation using a computer have not been fully developed.

Research Methodology. The theoretical studies used the theory of mechanisms and machines, the science of hydromechanics, as well as the methods of computational mathematics. When conducting research in this area, modern equipment was used, as well as statistical and mathematical methods for planning and processing experimental work. Moreover, there are various types of computational work, as well as the MATLAB programming language. Mathematical modeling allows you to move from a real object to its mathematical model, that is, to idealize the object, to distinguish abstraction from its specific properties and functions, which seem to be the most important for solving problems. The mathematical model can be represented by a system of differential equations for analyzing the dependence of the main design parameters of the EG on the interaction coefficients and time constants.

Direct analytical solution of a system of differential equations is very difficult and cannot be performed efficiently enough. Therefore, a more promising way of studying the kinematic and dynamic properties of the EG is its computer simulation by numerically solving the equations of motion [14, 17]. The mathematical model of the EG, written in the form of a system of equations, can also be used to determine the static properties of the EG if all the products of common coordinates are equal to zero. Theoretical studies were carried out on a 9th generation Intel I5 computer using the Matlab 7.0 software package [9], the visually-oriented Simulink program (creating a model from a ready-made component block in a structured program) and HL and HT modeling [11] (design and computational analysis).

Analysis and results. The dynamic hydraulic system of an excavator is described as a limited set of subsystems that are interconnected and form a single whole (mechanical and hydraulic structures) (Figure 1).

The state of the dynamic system of the excavator hydraulics changes over time: to external disturbances (workloads, the effect of microrelief, etc.), to external control actions (work assignments); effects of internal control (control of EH mechanisms). It is difficult to analyze the dynamic processes in the EH and their mechanisms as a whole, since the oscillatory system of the EH consists of a large number of mass and elastic elements, and the stages of the development of the process also depend on the initial conditions.

For each mathematical model of the subsystem (microrelief, control of hydraulic cylinders, position of the cutting body, etc.), the algorithm of the model is built in the form of Simulink block diagrams included in the main program (Figure 1).

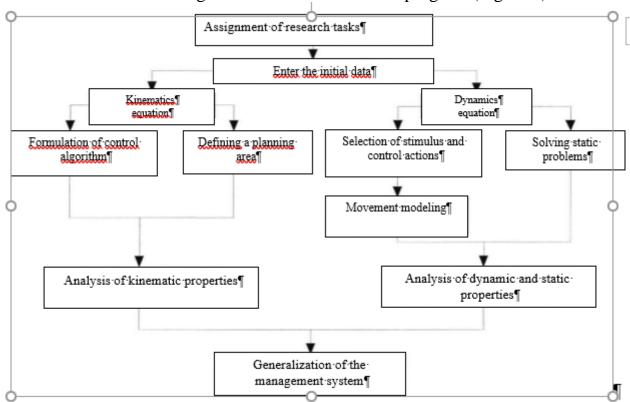


Figure 1- Structural scheme of mathematical modeling of the main features of EG in the computer

Such disadvantages can be avoided. It is necessary to use standard methods of digital integration of systems of differential equations based on digital integration algorithms using methods of automatic selection, prediction and correction of integral steps [21]. Based on the analysis of digital integration methods [21], the Kutta-Merson method with an automatic selection of the differentiation stage was used.

Based on the calculation results obtained, the analysis of the static and dynamic properties of the EG is carried out, as well as the determination of the EG parameters in the form of transfer functions.

The analysis of the kinematic, static and dynamic properties of the EG made it possible to synthesize a control system that allows one to determine the coefficients and time constants of the main design parameters of the EG, the main parameters of electrohydraulic drives, and the parameters of the drive. EG in the form of transfer functions. In this case, synthesis is understood as: the structure of the EG control system and the



values of the parameters of its elements that ensure the fulfillment of its requirements: static accuracy of maintaining the geometric dimensions of the developed ground structure, control stability. system [24]; high-quality work of the management system.

Methods for mathematical modeling of an excavator hydraulic drive.

Despite the variety of EGs, all of them can be presented in the form of multiple connections with the main chassis, turntable, boom, handle, bucket and hinge-connector [16].

In general, when describing the mechanical subsystem of the EG, the following assumptions were made [18]:

- EG spatial hinge-link multi-link connection (metal structural elements are absolutely rigid);
- EG stationary holonomic system;
- absence of hinges in articulated joints;
- External forces acting on the EG are directed;
- Inertial properties of metal structural elements are characterized by masses, coordinates of centers of mass, moments of inertia, centrifugal moments of inertia;
- Excavator bodies have elastic-viscous properties of slewing platforms, booms, buckets and handles, hydraulic cylinders.

To solve the equations of motion of the EG, it is first necessary to indicate the coordinate systems that allow describing the movements in space one after another.

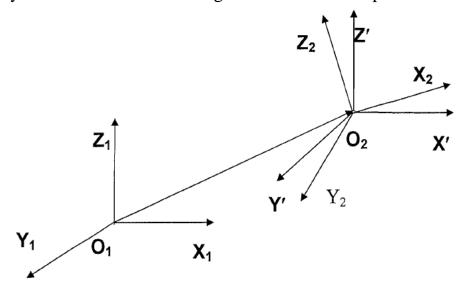


Figure 2. - Three-dimensional change of the spatial coordinate.

Currently, the Cartesian coordinate system is widely used, allowing the most massive and accurate geometric interpretation.

The problem of determining the mutual position of EG bonds is easily solved using the same coordinate method as the problem of transforming one coordinate system into another [22, 23].

$$A_{s} = \begin{bmatrix} E & S \\ 0 & 0 & 1 \end{bmatrix}; A_{\tau} = \begin{bmatrix} 0 & 0 \\ \tau & 0 \\ 0 & 0 & 1 \end{bmatrix}$$
 (1)



Here: E is a 3x3 matrix; $s = [x \ u \ z,]^T$ - vector representing the transition from one local coordinate system to another local coordinate system; τ is a 3x3 directed cosine matrix showing the transformation from one local coordinate system to another.

All variable data in three-dimensional space can be reduced to two different combinations of phases: rotation and transmission along the coordinate axes (Figure 3). They are represented using special 4x4 matrices [22, 23].

The Euler transform uses a one-coordinate system that performs three successive elementary rotations to determine the angular position of $O_2X_2Y_2Z_2$ relative to another $O_2X_1Y_1Z_1$ (Figure 3) [22].

- 1. Rotate the $O_2X_1Y_1Z_1$ coordinate system by the angle around the Z_1 axis (we get the $O_2X'Y'Z$ 'coordinate system, $Z'=Z_1$);
- 2. Rotate the $O_2X'Y'Z$ 'coordinate system by an angle ϕ around the X' axis (we get the $O_2X''Y''Z$ "coordinate system, X'' = X);
- 3. Rotate the $O_2X''Y''Z''$ coordinate system by an angle v around the Y"-axis $(O_2X'''Y'''Z''' = O_2X_2Y_2Z2$ we get the coordinate system, $Y_2 = Y'''$).

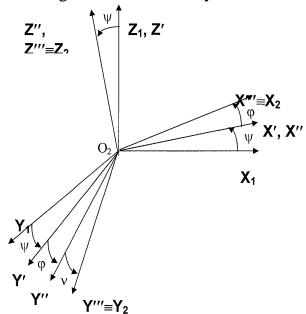


Figure 3. Rotation along the Euler angle of the coordinate system ψ , φ , ν signed angles are taken in the opposite direction to the clockwise direction. Thus, we have a matrix form that determines the transition from one local coordinate system to another [15, 22]:

$$A = A_{s} \cdot A_{\tau} = \begin{bmatrix} \tau & s \\ \hline 0 & 0 & 0 & 1 \end{bmatrix}$$
 (2)

The output of the A_S matrix to the initial coordinate system is obtained by multiplying the matrices along each axis of the coordinate system [15, 22].

$$A_S = A_X \cdot A_V \cdot A_Z \tag{3}$$



$$A_{x} = \begin{bmatrix} 1 & 0 & 0 & x \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}; A_{y} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & y \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}; A_{z} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & z \\ 0 & 0 & 0 & 1 \end{bmatrix}$$
(4)

By rotating each coordinate system around its own axis and multiplying the matrices by each other, we obtain the result by creating a coordinate system with the A_{τ} matrix. [19, 25]:

$$A_{\tau} = A_{\omega} \cdot A_{\nu} \cdot A_{\psi} \tag{3.5}$$

$$A_{\varphi} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & \cos\varphi & \sin\varphi & 0 \\ 0 & -\sin\varphi & \cos\varphi & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}; A_{\psi} = \begin{bmatrix} \cos\nu & \sin\nu & 0 & 0 \\ -\sin\nu & \cos\nu & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}; A_{\psi} = \begin{bmatrix} \cos\psi & 0 & -\sin\psi & 0 \\ 0 & 1 & 0 & 0 \\ \sin\psi & 0 & \cos\psi & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix} (3.6)$$

The use of a homogeneous coordinate system made it possible to determine the transition of one local coordinate system to another matrix A (conversion to a homogeneous matrix):

$$A = \begin{bmatrix} \cos v \cdot \cos \psi & \sin v & -\cos v \cdot \sin \psi & x \\ -\cos \varphi \cdot \sin v \cdot \cos \psi + \sin \varphi \cdot \sin \psi & \cos \varphi \cdot \cos v & \cos \varphi \cdot \sin v \cdot \sin \psi + \sin \varphi \cdot \cos \psi & y \\ \sin \varphi \cdot \sin v \cdot \cos \psi + \cos \varphi \cdot \sin \psi & -\sin \varphi \cdot \cos v & \sin \varphi \cdot \sin \psi + \cos \varphi \cdot \cos \psi & z \\ 0 & 0 & 0 & 1 \end{bmatrix}$$
(7)

If a point in the local coordinate system of the i-joint is represented by a homogeneous coordinate vector $\vec{R} = [x_i \ y_i \ z_i \ 1]^T$, then the vector \vec{R}_{i-1} in the local coordinate system of the series (i-1) [15, 22].

$$\vec{R}_{i-1} = A_i \cdot \vec{R}_i \tag{8}$$

where: A_i - (i-1) is the matrix of conversion of i-degree coordinate systems to the coordinate system of the joint.

Any point of the i-generation indicated by the vector \vec{R}_i in the local coordinate system of this joint is determined in the inertial system of the coordinate vector [87, 109].

$$\vec{R}_{oi} = T_i \cdot \vec{R}_i \tag{9}$$

Here T_i i is the transition matrix from the local coordinate system to the inertial coordinate system:

$$T_i = A_1 \cdot A_2 \cdot \dots \cdot A_i \tag{10}$$

The mathematical model of the mechanical subsystem EG is a system with nonlinear coefficients. The main simplification is to draw the coefficients by the Taylor method. The Taylor method allows the expansion of a weak linear function in small incremental forces obtained around a constant state point of several variables [19, 22].

$$f(q_1, q_2, q_3, ...) = f(q_{01}, q_{02}, q_{03}, ...) + \frac{df}{dq_1} \Delta q_1 + \frac{df}{dq_2} \Delta q_2 +$$



$$+\frac{df}{dq_3}\Delta q_3 + \cdots + \frac{1}{2!} \cdot \frac{d^2f}{dq_1^2} \Delta q_1^2 + \frac{1}{2!} \cdot \frac{d^2f}{dq_1^2} \Delta q_2^2 + \frac{1}{2!} \cdot \frac{d^2f}{dq_3^2} \Delta q_3^2 + \cdots$$
(11)

where f q_1, q_2, q_3 , ... is a constant function of several variables, q_1, q_2, q_3 , are the coordinates of constant points, $\Delta q_1, \Delta q_2, \Delta q_3$, ... values in small increments of variables obtained near them.

When constructing equations, they are limited to the first order of small conditions, which leads to their approximate description by linear differential equations for small deviations. With a small deviation Δf of the function $f q_1, q_2, q_3$, ...will be:

$$\Delta f \approx \sum \frac{df}{dq_j} \cdot \Delta q_j, (j=1, 2, 3, \dots)$$
 (12)

 $\Delta f \approx df$, $\Delta q_i \approx dq_i$ - given that, the linear equation has the following form:

$$df \approx \sum \frac{df}{dq_j} \cdot dq_j, (j=1, 2, 3, \dots)$$
(13)

Defining a small increase in the generalized coordinates as $q_j = dq_j$, we write the formula (3.12) in the following form:

$$df \approx \sum \frac{df}{dq_j} \cdot q_j, (j=1, 2, 3, \dots)$$
 (14)

Point character vectors and velocity vectors are represented in the form of a linear equation as follows:

$$\vec{R}_{oi} = \sum_{j=1}^{l} U_{ij} \cdot q_j \cdot \vec{R}_i$$
 (15)

$$\vec{R}_{oi} = \frac{d\vec{R}_{oi}}{dt} \tag{16}$$

$$\vec{R}_{oi} = \sum_{j=1}^{l} U_{ij} \frac{dq_j}{dt} \cdot \vec{R}_i = V_i \cdot \vec{R}_i$$
 (17)

$$V_i = \sum_{j=1}^l U_{ij} \frac{dq_j}{dt} \tag{18}$$

$$U_{ij} = \frac{dT_i}{dq_j} \tag{19}$$

For differentiation of formula (19) is carried out using the differentiation of matrices [15, 22]



The universal method of constructing motion equations is the second type of Lagrange equations method, which is used to solve many problems of dynamics and allows to obtain digital algorithms for modeling the motion of complex systems and is the most efficient in terms of computer time value:

$$\frac{d}{dt}\left(\frac{dK}{d\dot{q}_j}\right) - \frac{dK}{dq_j} + \frac{dP}{dq_j} + \frac{d\Phi}{d\dot{q}_j} = Q_j, (j = 1, 2, ..., l)$$
(21)

where t is time; - q_j - - generalized j-coordinate; q_j - velocity along the generalized j-coordinate; K - kinetic energy; P - potential energy; F - dissipative function; generalized j is the generalized force Q_j moving along the coordinate.

The system of differential equations (21) can be expressed in the form of a vector-matrix [22].

$$A\ddot{\vec{q}} + B\dot{\vec{q}} + C\vec{q} = \vec{Q} \tag{22}$$

where A, B, C are the coefficients of the differential equations of the matrices;

 \vec{q} , \vec{q} , \vec{q} -vectors represent the values of acceleration, velocity and small deviations of the generalized coordinates, respectively; \vec{Q} is the vector of generalized forces.

Thus, a system of differential equations with variable coefficients was created, which is a mathematical model of the EG mechanical subsystem.

The values obtained by the method of frozen coefficients are determined by the method of sequential approximation [22].

Consider a system of differential equations with variable coefficients:

$$a_{0}(t) \cdot \frac{d^{n}x}{dt^{n}} + a_{1}(t) \cdot \frac{d^{n-1}x}{dt^{n-1}} + \dots + a_{n-1}(t) \cdot \frac{dx}{dt} + a_{n}x =$$

$$= b_{0}(t) \cdot \frac{d^{m}f}{dt^{m}} + \dots + b_{m-1}(t) \cdot \frac{df}{dt} + b_{m}(t) \cdot f(t). \tag{23}$$

All coefficients of equations will be shown following:

$$a_i(t) = a_i^0 + a_i^* = a_i^0(\theta) + a_i^*(t), t \ge 0,$$
(24)

where θ -time site under consideration.

Then equation (22) considering (23) has the form:

$$a_0^0 \frac{d^n x}{dt^n} + a_1^0 \frac{d^{n-1} x}{dt^{n-1}} + \dots + a_{n-1}^0 \frac{dx}{dt} + a_n^0 x =$$

$$= f_1(t) - \left(a_0^* \frac{d^n x}{dt^n} + a_1^* \frac{d^{n-1} x}{dt^{n-1}} + \dots + a_n^* x \right), \tag{25}$$

where

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$$f_1(t) = b_0(t) \frac{d^m f}{dt^m} + b_1(t) \frac{d^{m-1} f}{dt^{m-1}} + \dots + b_m(t) f(t).$$

the solution is sought in the form:

$$x(t) \approx x_1 + x_2 + \dots + x_k$$
. (26)

The first x_1 approximation is found by the method of frozen coefficients, i.e. the equation is solved:

$$a_0^0 = \frac{d^n x_1}{dt^n} + \dots + a_n^0 x_1 = f_1(t)$$
 (26)

The remaining solutions are sought in addition to the previous cases according to the right. To do this, the following equations are solved in series with constant coefficients and a certain function of time, including the previously found equation on the right:

$$a_0^0 \frac{d^n x_2}{dt^n} + \ldots + a_n^0 x_2 = f_2(t),$$

$$a_0^0 \frac{d^n x_k}{dt^n} + \ldots + a_n^0 x_k = f_k(t),$$

$$f_2(t) = \left(a_0^* \frac{d^n x_1}{dt^n} + a_1^* \frac{d^{n-1} x_1}{dt^{n-1}} + \dots + a_n^* x_1\right),$$

 $f_{k}(t) = \left(a_{0}^{*} \frac{d^{n} x_{k-1}}{dt^{n}} + a_{1}^{*} \frac{d^{n-1} x_{k-1}}{dt^{n-1}} + \dots + a_{n}^{*} x_{k-1}\right). \tag{27}$

As a result, we obtain a definite solution of the differential equation with variables over time.

Conclusion. Thus, the following method is proposed to automate the construction of the EG mechanical subsystem model:

- 1. The following connection parameters are set according to the calculation scheme of EG: generalized coordinates, coordinates of centers of local coordinate systems of joints, coordinates of center of mass of joints, joint masses, moments of inertia of joints, moments of centrifugal inertia of joints, constructive parameters of joints, parameters of elastic-adhesive elements.
- 2. Based on this data, the dynamic equations are automatically constructed with variable coefficients in the form of Lagrange equations of the second type, which are solved by the method of frozen coefficients.



REFERENCES:

- [1] Strategy of actions on five priority directions of development of the Republic of Uzbekistan for 2017-2021, approved by the Presidential decree of the Republic of Uzbekistan from February 7, 2017 of No. PF-4947 "About strategy of actions for further development of the Republic of Uzbekistan". WWW.lex.uz.
- [2] Decree of the President of the Republic of Uzbekistan dated February 14, 2017 No. PF 4954 "On measures to further improve the management system of road facilities." WWW.lex.uz.
- [3] Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated March 31, 2017 No 166 "On the organization of the State Inspectorate for Quality Control of Road Construction under the Cabinet of Ministers of the Republic of Uzbekistan." www.lex.uz.
- [4] Askarhodzhaev T.I., Asranov Sh.M. Implementation of innovative methods for evaluating experimental hydraulic situations. Collection of articles of the international conference "Improving the efficiency and reliability of the safety of hydraulic structures" VOL. II., Toshkent-2018, -518-521 p.
- [5] Askarhodzhaev T.I., Rustamov K.Zh. Justification of the choice of working equipment and analysis of the working process of the multipurpose machine MM-1. Avtomobil-yul kompleksida zamonaviy tekhnologiyalar. Conference, 2006, p. 3.
- [6] Augambaev M., Ivanov A.Z., Terekhok Yu.I. Basics of planning a research experiment. –T.: Kituvchi, 2004.-336 p.
- [7] Balovnev V.I., Khmara L.A. Intensification of earthworks in road construction. M.: Transport, -1983. 3-9 p.
- [8] Bashta T.M. Engineering hydraulics. –M.: Mechanical engineering, 1971, 693p.
- [9] Bashta T.M., Rudnev S.S., Nekrasov B.B. and other Hydraulics, hydraulic machines and hydraulic drives. Alliance, 2010, -424p.
- [10] Gavrilov AN, et al. Instrument making and automation equipment. Reference book in 5 volumes, T. I, M.: Mashgiz, 325 p.52,
- [11] Grant A-13-069: "Development of technical documentation for the production and testing of multi-purpose MM-1 machine for the adjustment and repair of engineering structures."
- [12] Donskoy V.M. Mechanization of earthworks of small volumes M.: Stroyizdat. -1976. 159 p.
- [13] Lebedev O.V., Matmurodov F.M. Dynamic research of power mechanisms of ground vehicles. –T.: 2007. 202s
- [14] Lebedev O.V., Matmurodov F.M., Tulanov I.O. Theory, calculation and features of specialized tractors. Tashkent: Fan, 2006. 61s
- [15] Margolis S.Ya. Simonyan Yu.L., Experimental study of the side rolls of vans. Automotive industry. 1977, Sh 2
- [16] Medvedev B.C., Leskov A.G., Yushchenko A.S. Control systems for monipulation robots. M.: Nauka, 1978.- 416 p.
- [17] Nekrashevich K. Ya. Mathematical model of the hydraulic system, implemented using the combined principle of adaptation to the load. Dynamics, strength of machines and structures. 2014. -No. 1 (26). 23-31 p.



- [18] Rannev A.V. The creation of hydraulic excavators is the greatest achievement in the development of earthmoving equipment. Construction and road vehicles. 1981, no. 5, 5 p.
- [19] Rebrov A.S. On the issue of increasing the productivity of single-bucket construction excavators. Proceedings of VNII stroydormash. M.: Mashgiz, 1954, issue. nine
- [20] Ruppel A.A., Shcherbakov I.S. Redefining the geometric parameters of the "Body" block in the modeling system 154 Matlab / Simulink. C6opnik of scientific works, issue 5. Omsk: "Creation" of VOI, 2006. P.107-109
- [21] U. Ikromov, A. Ergashev et al. Basics of operation and maintenance of tractors. Tashkent, "Teacher", 1995. 220.
- [22] Shafransky V.I., Chistyakov A.T. Determination of the need for construction machines. 3rd ed. Revised and add. M.: Stroyizdat, 1983.- 144 p.
- [23] Shcherbakov B.C. Mathematical description of the loosening unit in homogeneous coordinate systems. M., 1980.- 48 p. The manuscript is provided by MADI. Dep. in VINITI, 1980, No. P.
- [24] Shcherbakov B.C. Comparative analysis of control devices for digging depth of a single bucket excavator at the stage of selection.
- [25] Shcherbakov B.C., Ruppel A.A., Knol A.E., Kornyushenko S., Efremov G.A. Analysis of methods for measuring the digging depth of a single-bucket excavator. Omsk, 1965.- 32 p.
- [26] The manuscript is provided by SibADI. Dep. in TsNIITESTroymash, 1985, No. 113sd-85.
- [27] Single-bucket excavator with a bucket of 0.25 m3 on the tractor "Belarus" YUMZ-6AL / 6AM hydraulic EO-2621A. Technical description and operating instructions TO. Saransk excavator plant. Saransk. -1978. -94 p.
- [28] Garkavi, NG Operational studies of the thermal state of the hydraulic system of the E0-4121A excavator at positive ambient temperatures. N. G. Garkavi, V. A. Dmitriev, S. P. Eresko. M.: TsNMMTEstroymash, 1981.- 98 p.
- [29] Calculation and design of construction and road machines on a computer. E. Yu. Malinovsky, LB Zaretskiy, Yu. G. Berengard, MM Gaitsgori and others; ed. E. Yu. Malinovsky. M.: Mashinostroenie, 1980.- 216 p.
- [30] Automated design of mechanical hydraulic drive. I. I. Bazhin, Yu. G. Berengard, M. M. Gaitsgori [and others]; under the general ed. S. A. Ermakova. M.: Mashinostroenie, 1988.- 312 p.
- [31] Kovalsky, VF Dynamic models of a hydraulic drive with closed circulation of a working fluid at temperatures in Vietnam. V.F.Kovalsky, T.Y. Nguyen Dinh. MIIT Bulletin. Issue. 18. M.: MIIT, 2008. pp. 44–48.



ACTUAL PROBLEMS OF HISTORY, PHILOSOPHY AND SOCIOLOGY

UDC: 1:13

THE ROLE OF WOMEN IN THE DEVELOPMENT OF SOCIETY

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Annotatsiya. Ushbu maqolada jamiyatning rivojlanishida xotin-qizlarning ro`li haqida fikrlar bildirilgan. Integratsiyalashuv jamiyatida ayollarga bo'lgan e`tibor, ularning jamiyatning barcha sohalarda ishtiroki muhim hisoblanadi. Hozirgi kunda jamiyat yuksalgan sari tariximizga milliy qadriyatlarimizga e'tibor juda kuchayib bormoqda. Mana shunday milliy qadriyatlarimizdan biri «Ayolga munosabat» masalasidir. Bu masala eng dolzarb masala bo'lib, jamiyatimiz taraqqiyoti bilan bog'liqdir.

Kalit so`zlar: xotin-qizlar, oila, ayol, tarbiya, farzand, huquq, jamiyat, mehrmuhabbat, ma`naviyat, tadbirkorlik, madaniyat,munosabat, teng huquqlilik.

Аннотация. В этой статье обсуждается роль женщины в развитии общества. В интегрированном обществе важен упор на женщин и их участие во всех сферах жизни общества. Сегодня, по мере роста общества, растет и внимание к нашей истории и нашим национальным ценностям. Одна из наших национальных ценностей - это вопрос «отношения к женщинам». Это самый актуальный вопрос, связанный с развитием нашего общества.

Ключевые слова: женщины, семья, женщина, воспитание, дети, закон, общество, любовь, духовность, предпринимательство, культура, отношение, равенство.

Annotation. This article discusses the role of women in the development of society. In an integrated society, the emphasis on women and their participation in all spheres of society is important. Today, as society grows, so does the focus on our history and our national values. One of our national values is the issue of "attitude to women". This is the most pressing issue and is related to the development of our society.

Key words: women, family, woman, upbringing, children, law, society, love, spirituality, entrepreneurship, culture, attitude, equality.

Introduction. Today, it is impossible to imagine any sphere of our society without the activity and participation of women. The role and place of our women in the family, in schools, offices, production facilities, labor unions, educational institutions, and in the community is enormous and commendable. Especially in the Uzbek people, the expression of love and respect for women is unique. It is worthwhile for our young men to honor women and give them their whole lives. Because in life, in 7 climates, in 7 heavens, you can't find a greater person. Therefore, we consider it both a duty and an obligation for our women not to tarnish the name, for men to



understand the greatness of the name of a woman, and for her to cherish the sacred as the apple of her eye. A woman shakes the cradle with one hand and the world with the other. May there be peace, tranquility, tranquility, cleanliness, beauty, and prosperity in the country. Women are the light of the house, the support of the children, the source of our joy and happiness.[5]

Women are becoming a real mirror of society. The activities of women in our country are not limited to the family and upbringing of children, but also provide ample opportunities to demonstrate their abilities and talents in all spheres of social life. In the struggle to strengthen the independence of our country, our women are selfless as active forces of our society.

In an integrated society, the focus is on women and their participation in all areas of society is important. In modern society, the socio-political and spiritual image of women is developing in a unique way.[2]

The main sign of femininity is motherhood. Every woman considers motherly love to be great and sacred. Happiness as a mother is not only a child, but also a country where these children live and a language they speak. That is why there is no powerful force in the world where mothers hate war as much as women, hate filth, value freedom and humiliation, and patronize it. Every living thing is a part of the mother it has created, the mother earth is the nature of the people. Such eternal generosity and great courage of the women of the East, the devotion to the motherland, the motherland and the motherland are among the veins that keep women in this sacred land.[8]

Women of Uzbekistan have fought not only for the well-being of the family, but also for the prosperity and peace of the country. Women are becoming a real mirror of society. The activities of women in our country are not limited to the family and upbringing of children, but also provide ample opportunities to demonstrate their abilities and talents in all spheres of social life. In the struggle to strengthen the independence of our country, our women are selfless as active forces of our society.

Literature review. Today's Uzbek woman always receives spiritual support and strength from the world-famous works of the great women of the East, which have their historical and spiritual roots. They will continue the traditions of wise and noble rulers and courageous, patriotic and enterprising women, such as Tomaris, Nodirabegim, Zebuniso, Uvaysi, Dilshod Barno, Anbar Atin. The place and role of women in society, their socialization issues, especially their theoretical foundations, have been studied in detail in the scientific literature. Foreign scholars on this subject include Brugner, Buhler, Wundt, Durkheim, Cooley, James, Coll, Clapared, Kreyechmer, Mems, Mead, Liaji Stern and others, Russian researchers Afanasev, Buyeva, Batunik, Voyekov, Konstantinov, Gryazhev, Mitin The works of Smirnov, Toshenko, Frolov, Fedoseev, Yadov, Yanovsky and other Uzbek scientists: M.M.Khairullaev, I.Khudoyberdiyev, I.Ergashev, E.Yusupov, Y.Yakhyoyeva can be shown. Russian and former Soviet scientists Alyoshina, Achilova, Beysinova, Boyko, Belkin, Gold, Kovalev, Mukhanov, Golvonova, Rakhimova, Chulponkulov and other Uzbek scientists O.Buriyev, M.Vakhidov, A.Munnavarova, O.Musurmonova spoke about the social and cultural problems of the family. The works of M.Mamatov, K.Nasritdinov, M.Sangilov, U.Toshtemirov, I.Shoymardonov, M.Kholmatova, M.Uzbekov, G.Hamidova can be singled out. The issues of social and political status of women in Uzbekistan are



considered in detail in the works of R.Aminova, V.Karimova, Mukhtorova, F.Olimova, E.Usmanova, R.Ubaydullayeva, H.Shukurova, I.Gafforova. The history of the women's movement is reflected in the research of scholars D.Alimova, R.Aminova, S.Begmatova, G.Musina, K.Nishonbaeva, R.Rajapova and other historians. Most of the above research was written during the reign of ideological dogmas, which show the strong influence of the communist ideology of that period. Nevertheless, they can be used as valuable resources in the study of women's socialization and the study of their place and role in society. The place and role of women in society, their socialization issues, especially their theoretical foundations, have been studied in detail in the scientific literature.[7]

Research Methodology. Today, as society grows, so does the focus on our history and our national values. One of our national values is the issue of "Attitude to women". This is the most pressing issue and is related to the development of our society. Because the family is prosperous, peaceful, strong with the woman. When the family is peaceful, our society, our whole state, our country is peaceful. Our women are more connected to our families than men.

Relevant laws of the Republic of Uzbekistan, Presidential decrees, resolutions, government decisions, state programs are aimed at further improving the political, economic and social status of women.[3]

Analysis and results. It is safe to say that today in Uzbekistan the legal framework for ensuring the rights and freedoms of women has been created and the institutional system of protection of women's rights has been formed. Necessary measures are being taken in the country to eliminate direct and indirect discrimination against women in order to implement the recommendations of the UN Convention on the Elimination of All Forms of Discrimination against Women. National mechanisms for further strengthening the status of women at the legislative and executive levels are being gradually improved, as well as the purposeful reporting and monitoring of targeted public policy in accordance with the provisions of the Convention on the Elimination of All Forms of Discrimination against Women. mechanism is being developed and actively implemented.[9]

The role of the Women's Committee and its branches in Uzbekistan is as follows:

- Cooperate to provide sound advice to the government in formulating, developing and implementing policies that reflect the views and circumstances of women;
- Representing women's diverse perspectives on the advice of women's groups, organizations, associations and women's NGOs;
- act as a mediator in the exchange of information between the government and the women's sector;
- Analyze policies that are relevant to the industry and of interest to the organization;
- Development and support of effective governance mechanisms to ensure the implementation of the tasks and responsibilities of the regional branches of the Women's Committee of Uzbekistan.

The current equality of women and men is ensured through a system of guarantees consisting of political, organizational, material, social, moral and legal means.[4] Political building guarantees are the basic principles and standards of democratic



elections enshrined in the Constitution of the Republic of Uzbekistan. Organizational guarantees are the rules for all candidates, regardless of gender, to cooperate in the election campaign. Socio-ethical guarantees are the correct understanding of rights and freedoms and their exercise by women and men.

No matter how strong the state is, if its spiritual foundations are not strong, without the participation of women, it is impossible to restore unique and ancient values, meet the spiritual needs of our people, build a harmoniously developed society, develop a harmoniously developed generation. The development of a country is determined by the place of women in society. The woman herself, her existence is spiritual, she was created for the universe. The beginning of a nation is from a woman, and the spiritual enlightenment of a nation is from a woman.[10]

For the Republic of Uzbekistan, where more than half of the population is women, the role of women in social life, the level of activity, the role of spiritual values and the formation of new values are one of the most important factors determining the development of society. That is why human interests, women's issues are in the constant focus of the President and the Government of the Republic.

It is important for a state governed by the rule of law that the principles of democracy and the rule of law be observed not only by public authorities but also by individuals. In such a state, respect for human rights and freedoms, humiliation of human dignity, and violence against human beings, especially slavery, human trafficking, and exploitation, are incompatible. It should be noted that one of the most important and urgent problems of the transition period is the problem of domestic violence. In general, domestic violence can be divided into: violence against women, violence against children, and violence against relatives.[1]

Achieving equality in family relations is the result of the formation of a socialdemocratic institution of the human rights system. Its emergence was due to the complex process of finding appropriate norms for gender in state structures, government, and relationships. History has shown that the idea of equality and its implementation is a complex of moral, spiritual, cultural and religious aspects. Women make up more than half of the population in almost all countries, so when the rights of half of the population are violated, it is difficult to talk about a society based on democracy in practice. The problem of violence against women is a sign of the unhealthy socio-emotional environment in the country and the backwardness in creating new social relations. Although all forms of violence and discrimination against human beings are required, violence against women is of particular importance because it affects society as a whole. The relationship between the individual and society, the education of a harmoniously developed person, a perfect person has always attracted the attention of researchers as the most pressing scientific and practical problem at all stages of human development. Society is the material well-being and self-improvement of individuals. In this process, the sexes play specific functions and roles. According to the biophysiological system of the sexes, the main role in the creation of material wealth is played by men, and the main role in the process of self-reproduction is played by women. Accordingly, men are mainly responsible for material and economic development, while women are responsible for its continuous development. Females and males interact during the performance of these medical and biological functions.



The interrelationship of society and the family should be scientifically based on the fact that it determines the level of prestige in the lives of women, the role of women in the formation of family traditions, customs, national values is great.

Conclusion. The process of socialization of women in our region under the influence of natural and social environment is analyzed from the historical and regional point of view, the impact of this environment on the lifestyle of women, their formation as individuals from the earliest times of human life.[6]

Women of Uzbekistan have fought not only for the well-being of the family, but also for the prosperity and peace of the country. Women are becoming a real mirror of society. The activities of women in our country are not limited to the family and upbringing of children, but also provide ample opportunities to demonstrate their abilities and talents in all spheres of social life. In the struggle to strengthen the independence of our country, our women are selfless as active forces of our society.

References

- [1] Uzokov, E. Gaziyev, A. Tojiev "Family ethics and psychology" Tashkent, 1992.
- [2] Turaeva O. "Ethics and psychology of family life." T., The Teacher, 1998.
- [3] Inoyatov M. "Family, creativity, upbringing and spirituality" T., "Sharq" 2000.
- [4] Kholmatova M. "Culture of family relations and upbringing of a healthy generation". T., "Uzbekistan" 2000.
- [5] Inomova M. «Child-sapling, parents-gardener» Tashkent, 1993.
- [6] Ubaydullayeva R.A. Independent Uzbekistan: women, family and society. T .: Fan, 2006.
- [7] Muminova A. "The image of women in the folklore." Risola. T. 1999
- [8] Yakhyoyeva L. "Socio-political activity of women". Risola T. 1995.
- [9] Bekiyeva M."Linguculturological research directions and interpretation of language and culture in modern linguistics". Electronic journal of actual problems of modern science, education and training. 2020. 106-117 pp
- [10] A.Tukhtasinov, N.Rahimov "Marriage, family, society" Tashkent, 1995.



ACTUAL PROBLEMS OF NATURAL SCIENCES

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SYNTHESIS OF COORDINATING COMPOUNDS OF NICKEL (II) FORMIATE WITH ZINC AND CALCIUM ACCETATES

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Annotatsiya. Nikel (II) formiatning rux va kalsiy atsetatlari bilan kompleks birikmalari sintez qilindi. Sintez qilingan birikmalarning tarkibi element analizi usulida aniqlandi. Reagentlarning koordinatsiyalanishi IQ- va UB-soxalaridagi spektrlarining o'zgarishi asosida tahlil qilindi. Sintez qilingan birikmalarning fazoviy tuzilishi va energiya parametrlarini aniqlash uchun kvant-kimyoviy hisoblash amalga oshirildi.

Kalit so'zlar: koordinatsion birikma, biyadroli kompleks, element analiz, IQ-spektr, kvant-kimyoviy hisoblash, UB-spektr.

Аннотация. Проведен синтез координационных соединений формиата никеля (II) с ацетатами цинка и кальция. Состав синтезированных соединений изучен методами элементного анализа. На основании изменения спектров поглощения в ИК-области и УФ-области установлены методы координации реагентов. Произведен квантово-химический расчет для определения пространственного строения и энергетических параметров синтезированных соединений.

Ключевые слова: координационное соединение, биядерный комплекс, элементный анализ, ИК-спектр, квантово-химический расчет, УФ-спектр.

Annotation. Complex compounds of nickel (II) format with zinc and calcium acetates were synthesized. The composition of the synthesized compounds was determined by elemental analysis. The coordination of the reagents was analyzed on the basis of changes in the spectra in the IR and UV fields. Quantum chemical calculations were performed to determine the spatial structure and energy parameters of the synthesized compounds.



Keywords: coordination compound, bi hydrate complex, element analysis, IR spectrum, quantum chemical calculation, UV spectrum.

Introduction. The biological activity of chelated compounds of biogenic elements with organic ligands has been established. Of these complexes, mixed-lignade compounds of metals with vitamins, which represent a new class of biologically active compounds, are attracting special attention. A special role in coordination chemistry is played by metal complexes containing different donor centers in the ligand environment. They are good models for studying the problem of competitive coordination in the chemistry of complex compounds due to the specific effect of their environment on the stereochemistry of poly hedra. Therefore, the search for ways of directed synthesis of poly dentate ligands and, on their basis, metal complexes of a certain composition and structure for solving theoretical and practical problems of creating new generation materials with predetermined properties [1] is of great and urgent importance.

Literature review. Determination of formation conditions, development of synthesis methods, determination of the composition and structure of coordination compounds of formats of transition elements with acetate metal salt; the study of the effect of their composition on the structure and determination of the dependence of the properties of complexes on the composition and structure are presented in [2-6]. Quantitative data on the solubility isotherms of acetate-containing transition metals can be used as a reference material for the synthesis of these compounds.

Materials and method. Nickel (II) format, zinc and calcium acetates, analytical grade used in this work. An analysis of the synthesized complex compounds for metal content was carried out on a Novaa300 device from Analyticyena (Germany), and elemental analysis on the content of carbon, hydrogen, nitrogen and sulfur was carried out on an EA 1108 device from Carlo-Erba (Italy). IR absorption spectra of compounds were recorded in the range 400-4000 cm $^{-1}$ on an IRAffinity-1S spectrophotometer (Shimadzu, Japan) using samples in the form of KBr pellets with a resolution of 2 sm $^{-1}$

Procedure for the synthesis of bimetallic format acetate complexes of cobalt (II). The following procedure was used to synthesize complex compounds: 0.01 mol of nickel (II) format in a beaker was dissolved in 15 ml water. In another glass, 0.02 mol of zinc acetate was dissolved in 20 ml of water by heating in a hot water bath (at a temperature of 70-80 ° C). Then a hot barium acetate solution was added to the nickel (II) format solution and the mixture was heated for 1.5 hours until the volume decreased by 4 times. And the resulting solution was left for re crystallization for two days. The result is a light green sticky substance. 2 ml of distilled water and 2 ml of alcohol, the resulting substance was dissolved in the mixture. The solution was left for 24 hours and crystals of the complex of light green color were obtained.

The following procedure was used to synthesize a complex compound of nickel (II) format with calcium acetate [7]: 0.01 mol of nickel (II) format in a beaker was dissolved in 15 ml water. 0.02 mol of calcium acetate in another glass was dissolved in 20 ml of water by heating in a hot water bath (at a temperature of 50-60 ° C). Then a hot solution of calcium acetate was added to the solution of nickel (II) format and the mixture was heated for 1.5 hours until the volume decreased by 4 times. For re

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crystallization, the resulting solution was left for 2 days. And thus a green powder is obtained. The resulting substance was dissolved in a mixture of 2 ml of distilled water and 2 ml of alcohol. The solution was left for 1 day. In this case, crystals of the complex of dark green color were obtained.

Elemental analysis was carried out to determine the composition of the obtained compounds (table 1).

Table 1
Results of elemental analysis of complex compounds of nickel (II) format with zinc acetate and calcium acetate

	Co, %		Me, %		C, %		Н, %		
Compound	found	Calculate d	found	Calculate d	punoj	Calculate d	punoj	Calculate	Gross formula
Ni(HCOO) ₂ ·2Zn(CH ₃ COO) ₂	8,7 5	8,9 5	41, 44	41, 57	17, 96	18, 2	2,1	2,1	$\begin{array}{c} NiZn_2C_{10}H_1 \\ {}_4O_{12} \end{array}$
Ni(HCOO) ₂ ·2Ca(CH ₃ COO) ₂	12, 21	12, 36	19, 09	19, 28	25, 04	25. 15	2,7 8	2,9 3	NiCa ₂ C ₁₀ H ₁ ₄ O ₁₂

Results and its discussion. The IR spectra of the starting salts and the obtained complex compounds were studied to determine the method of coordination of the starting components. At 1556 and 1348 cm⁻¹ in the IR spectra of cobalt (II) formate, there are absorption spectra corresponding to asymmetric and symmetric vibrations of the carboxyl group of the anion format[8]. In the range of 1567-1588 cm⁻¹ and 1416-1423 cm⁻¹, acetate ions appear in the spectra of sodium and barium acetates. The spectra of the synthesized compounds showed bands at 1510-1558 cm⁻¹ with asymmetric vibrations and at 1365-1384 cm⁻¹ corresponding to symmetric vibrations of the acetate group. The difference between the values of the spectra of asymmetric and symmetric vibrations is 123-197 cm⁻¹ and corresponds to the bidentate-bridging coordination of the acetate group. At 1134 cm⁻¹ in the spectra of nickel (II) format, the Ni-O bond has a band that decreases to 1122-1128 cm⁻¹ in the case of complexes. The absorption band corresponding to the Me-O bond in acetates appears in the region of 638-648 cm⁻¹, which is observed in the complexes at 651-688 cm⁻¹ (Table 2) [8].

Table 2 Characteristic frequencies and their assignments in the IR spectra of the ligand and complexes based on it, sm⁻¹

Assignment	Ni(HCOO) ₂ ·Zn(CH ₃ COO) ₂	Ni(HCOO) ₂ ·2Ca(CH ₃ COO) ₂
$v_{as}(COO^{-})$	1510	1558
(1567-1597)		
ν _s (COO ⁻)	1365	1384
(1416-1423)		
ν(Ni— O)	1122	1128
ν(Me — O)	688	651



In the synthesized coordination compounds, in order to determine the coordination number and geometry of the nuclear polyhedron of the cobalt (II) cation, the diffuse reflectance spectra (DRS) were studied. In the studied frequency range, three transitions were revealed in the LMS of cobalt (II) compounds: $3A2g \rightarrow 3T1g$ (F) (8000-13000 cm⁻¹), $3A2g \rightarrow 3T1g$ (P) (15000-19000 cm⁻¹), and $3A2g \rightarrow 3T2g$ (25000-29000 cm⁻¹). A similar form of electronic spectra is characteristic of six coordinated cobalt (II) cations with a pseudo-octahedral geometry of coordination polyhedra [9, 10].

The electronic spectrum of the compound $[NiZn_2C_{10}H_{14}O_{12}]$ has inflections and maxima at 28748, 25024, and 12647 cm⁻¹.

The coordination compound $[NiCa_2C_{10}H_{14}O_{12}]$ has bands with bends and maxima at 22575 and 19997 cm $^{-1}.$

The observed electronic transitions in the electronic spectra of the synthesized compounds correspond to six-coordination nickel (II) (Fig. 1).

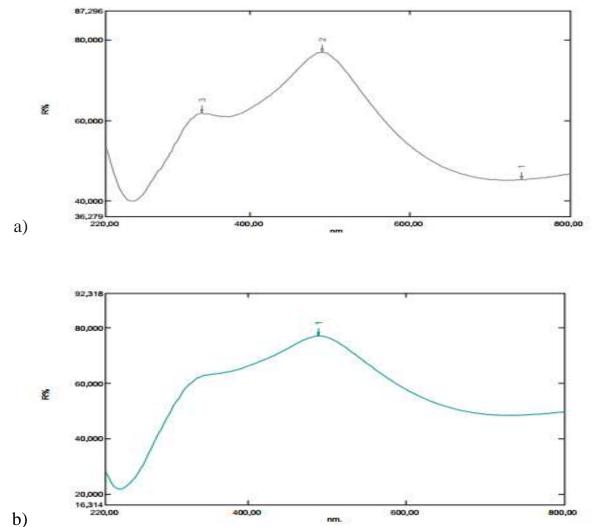


Fig.1. Electronic spectra of the coordination compounds of nickel (II): a - [NiZn₂C₁₀H₁₄O₁₂]; b - [NiCa₂C₁₀H₁₄O₁₂]

Based on the data obtained, the following structures have been proposed for the synthesized compounds: the complex of nickel (II) format with zinc acetate has an



octahedral structure. The nickel (II) ion, which combines with the oxygen atoms of the carboxyl group, acts as a central complex agent.

Complexes of nickel (II) are with a coordination number equal to 6, combines with four molecules of zinc acetate through the oxygen atom of the acetate group by a bridge bond.

In the complex of nickel (II) format with calcium acetate, the nickel (II) ion exhibits a coordination number of 6, while one nickel (II) format molecule attaches two calcium acetate molecules to form a complex compound of the following structure.

Conclusion. The quantitative and qualitative composition of the synthesized coordination compounds of nickel (II) formatwith zinc and calcium acetates has been established. The coordination centers and the type of coordination of acetate groups were determined on the basis of the IR spectra of the obtained compounds. In the synthesized compounds, the coordination numbers of the central atom were determined.

References:

- [1].Parpiev N.A., Matkarimova N.O., Khasanov Sh.B. IR spectroscopic study of the coordination compound 2-mercaptothiazoline with divalent cobalt, nickel and copper salts // Universum: chemistry and biology. 2019. No. 10 (64).
- [2].Brandon R.W., Claridge D.V. Heteronuciear Acetate-bridged Complexes; Reaction of Palladium(II) Acetate with Bivalent Metal Acetates. Chem. Commun. 1968. P. 677–678.
- [3].Adam S., Bauer A., Timpe O., Wild U., Mestl G., Bensch W., Schlögl R. The Origin of the Positive Effect of Cadmium Acetate on the Action of Supported Palladium Catalysts. // Chem. Eur. J. 1998. V. 4. P. 1458–1469.
- [4].Balch A.L., Davis B.J., Fung E.Y., Olmstead M.M. Palladium-thallium interactions in dinuclear complexes with structural components that place the two metal centers in close proximity. // Inorg. Chim. Acta. 1993. V. 212, P. 149–156.
- [5].(a) Pandey R.J., Henry P.M. Interaction of Palladium(II) Acetate with Sodium and Lithium Acetate in Acetic Acid. // Canad. J. Chem. 1974. V. 52. P. 1241–1247; (b) Pandey R.J., Henry P.M. Equilibria between Palladium(II) Acetate and Olefins in Acetic Acid containing Sodium Acetate. // Canad. J. Chem. 1975. V. 53. P. 1833–1841. [6].Kozitsyna N.Yu., Bukharkina A.A., Martens M.V., Vargaftik M.N., Moiseev I.I.
- Oxidative esterification of alkenes via π and σ -organopalladium complexes: new pathways for the reaction. // J. Organometal. Chem. 2001. V. 636. P. 69–75.
- [7]. Yakushev I.A. Synthesis and physicochemical properties of heterometallic carboxylate complexes of palladium (II) with n- and o-bases: Author's abstract. dis. ... Cand. chem. sciences. M., 2013 .-- 21 p.
- [8]. Ibragimova Mavluda R., Abdullaeva Fazilat A., Khasanov Shadlik B., Azizov Tokhir A. Acid amide coordination compounds of magnesium nicotinate // Journal of Chemical Technology & Metallurgy. 2016. Vol. 51 Issue 1. P. 47-52.
- [9]. Glinina A.G., Tuleshkalieva A.K., Glinina E.G. Investigation of the complexation of cobalt ions in an aqueous solution // Bulletin of the Moscow State Regional University, pp. 16-17.
- [10]. Azizzhanov Kh.M. Some mixed-ligand coordination compounds of oblates of the 3d-metal series dis. ... Cand. chem. Sciences Toshkent, 2010 112 p.

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GEOGRAPHICAL FEATURES OF TOURISM AND ITS DEVELOPMENT IN KHOREZM REGION

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Annotatsiya. Islohotlarni chuqurlashtirish, axoli daromadlarni va ish bilan bandligini ko'paytirish va mamlakatimizning iqtisodiy rivojlanishida turizmning rolini oshirish - bu hukumatning "Turizm asri" deb nomlangan 21-asrdagi asosiy maqsadlaridan biridir.

Kalit so'zlar: turizm, ichki turizm, iqtisodiy mikrorayon, Balon, Gujum (sada) dizayni, Ichan qal'a, pandemiya, turizm sohasi

Аннотация. Повышение роли туризма в экономическом развитии нашей страны в контексте является углубления реформ, увеличения доходов и занятости является одной из основных задач правительства в 21 веке, в так называемую «эпоха туризма».

Ключевые слова: туризм, внутренний туризм, экономический микрорайон, воздушный шар, дизайн Гуджума (сада), Ичан-Кала, пандемия, туристическая индустрия.

Annotation. Increasing the role of tourism in the economic development of our country in the context of deepening reforms, increasing its revenues and employment, is one of the main objectives of the government in the 21st century, the so-called "Tourism Age".

Key words: tourism, domestic tourism, economic micro district, Balloon, Gujum (sada) design, Ichan Kala, pandemic, tourism industry

Introduction: The global tourism industry has been plagued by various problems over the past half-century, including natural disasters, epidemics, serious social explosions and wars, as well as hostilities, economic crises and terrorism. However, the increasing focus on tourism in the world in recent years has had a significant impact on the economic development of many developed countries. For example, according to data provided by the UNWTO (World Tourism Organization), the growth rate of tourism in new and fast-growing markets has been 6-8% in the last decade. In 2019, worldwide tourist visits increased by 4% to 1.5 billion. In 2019, this figure increased by 7% compared to 2017 and by 6% compared to 2018. Such growth rates are particularly pronounced in developed countries. However, the occurrence of pandemic processes on an international scale in 2020 has put the tourism industry, as well as all sectors of the economy, in a difficult socio-economic situation. Due to the pandemic, tourism in the world will shrink by an average of 72% in 2020. According to UNWTO experts, the most significant declines occurred in the eastern direction. In other words, the decline in the Asian region was 82%, or 30 years ago.



This crisis has also had a significant negative impact on the tourism sector of our country. However, there was some growth in the third and fourth quarters. However, in most developing countries, the decline is still ongoing. This situation has had a significant negative impact on the tourism infrastructure of our country. However, since the second half of 2020, a number of practical measures are being taken to further develop domestic tourism and the development of this lagging sector. In particular, in order to develop domestic tourism, "Travel around Uzbekistan!" A number of positive steps are being taken as part of practical measures to implement the domestic tourism development program.

Research methodology: It is known that during the years of independence in Uzbekistan there have been significant positive changes in the tourism industry and tourism. The number of modern hotels in the regions of the country is growing every year. In order to develop tourism, a number of decisions and decrees are being adopted within the government, and programs are being developed and implemented. On the basis of tourism development, the country is gradually implementing comprehensive measures to diversify the national economy, accelerate the development of regions, create new jobs, increase incomes and living standards, increase the country's investment attractiveness as one of the strategic sectors.

In particular, in order to develop the tourism industry in our country, the main purpose of the Decree No. PF-5611 of January 5, 2019 "On additional measures for the accelerated development of tourism in the Republic of Uzbekistan" is to create opportunities for full use of tourism in our country. As the President said ... "Tourism is one of the most important sectors of the economy. It is necessary to further improve this sector, making effective use of existing opportunities, as the time demands."

Analysis and results. The first aspect that attracts tourists to the region is its nature, the second is its historical monuments, and the third is the handicraft that has been developed and passed down from ancestors to generations. With this in mind, a number of proposals and recommendations have been developed to develop tourism in the region and attract more tourists. They can be carried in several directions and its approximate plan is shown below. For example:

- use of balloons for tourism purposes;
- -helicopter sightseeing of the region;
- -setting up a gujum (sada) design;
- -Establishment of artificial mountains along the Shovot canal to attract tourists;
- -Organization of various events in economic districts every year in order to further develop domestic tourism, etc.

Here are a few recommendations that can be made based on the suggestions above. Such recommendations, along with laying the groundwork for further improvement of the tourism infrastructure, will have a positive impact on increasing the number of tourists, creating additional jobs, in short, increasing foreign exchange earnings. Such recommendations are shown in the table below.

Approximate plan for improving the infrastructure for further development of tourism in Khorezm region:



Suggestions	Recommendations
Use of balloons for tourism:	determine the location of the balloons. (for example, in two or three places of the Shovot canal, in the area of Ichan fortress, etc.); to invite every visitor to see the sights of the city from a height of 100-120 meters;
	to advertise the inclusion of the flag of their country in the balloon at the arrival of each tourist;
Helicopter view of the region's attractions from above:	inviting foreign tourists to tour for at least an hour. (Amudarya banks, regional center, Ichan fortress, etc.);
Setting up a gujum (sada) design:	organization of crowded designs in district centers and cities; surrounding Ichan Castle in Khiva with full gujum;
	it is necessary to establish special areas where tourists can plant, and to divide these areas into small areas and name each area after the country where the tourists come from. Invite each visiting tourist to plant seedlings in an area named after their country. (seedlings at the beginning are free, then buy and plant);
	Establishment of a botanical garden in Urgench. The difference from other botanical gardens is that every visitor is allowed to plant a tree or plant species brought from their country. (after inspection);
	arranging for shapes to form in different shapes (e.g., spherical, triangular, buildings, etc.);
	planting two rows of checkers around the railways passing through the territory of the region (especially in the newly built Urgench- Khiva and Shovot-Gurlan-Jumurtov routes under construction);
Establishment of artificial mountains along the Shovot canal to attract tourists:	stones of different colors should be collected by color, divided by color, equal to the number of foreign and domestic tourists visiting the territory of the region in the next five years;
	each assembled organization shall be given the names of states or regions and districts, and at the foot of it a large stone shall be engraved with the name of the country in the mother tongue of each state;
	if each visiting tourist buys one of the painted stones for the (symbolic) height of his mountain for a cheap price and gives the other as a bonus (in this case, the tourist contributes to the "own territory" by adding that stone (advertising is required);
In order to further develop domestic tourism, to organize various events in economic	Organization of a music festival with the participation of young people of different nationalities in the North-West economic district (Shovot district, Gurlan district);
districts every year:	Organization of a fish festival or fishing competition in the south- western economic district (Khiva district, Yangiarik district);
	Organization of a flower and herbarium festival in the Central Economic Microdistrict (Urgench city, Urgench district);
	gradual organization of complex sports competitions among young people in economic micro-districts (some sports depending on the capabilities of the districts), etc.

The table was developed on the basis of the author's suggestions and recommendations.

Conclusions. Some of the above suggestions and recommendations will only have a significant impact on the increase in the number of tourists visiting the region. This is also an important factor in increasing employment.

The proposed recommendations are a tentative plan for further development of domestic tourism and attraction of tourists. It is necessary to invest in the implementation of such proposals, so to develop it, it is necessary to find entrepreneurs,



provide them with loans, develop an insurance system to protect their risks from risks. Events like this are a guarantee that they will work to grow their business without fear. At the same time, there are opportunities to increase employment.

References

- [1]. Decree No. PF-5611 of January 5, 2019 "On additional measures for the accelerated development of tourism in the Republic of Uzbekistan"
- [2]. Resolution of the President of the Republic of Uzbekistan No. PP-3514 "On measures to ensure the accelerated development of domestic tourism" (February 7, 2018)
- [3]. Goldman Sachs (2020) data.
- [4]. Barometer of world tourism and Statistical application of UNVTO, January 2020
- [5]. Barometer of world tourism and statistical application of UNVTO, December 2020
- [6]. Meeting dedicated to the development of tourism., Tashkent, October 2017.
- [7]. Nurmatov M.Sh. "Geographical features of the development of national crafts and tourism in the Fergana Valley"

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SPECIES SPREAD OF ORDER LEPTOSPHAERIA Ces. & De Not. IN KASHKADARYA OASIS

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Annotasiya. Ushbu maqolada Qashqadaryo vohasida zamburugʻlarning Leptosphaeria Ces. & De Not. turkumiga mansub Leptosphaeria baggei (Auersw. & Niessl) Sacc., Leptosphaeria sp., Leptosphaeria pini (Cruchet) E. Müll kabi turlari uchrashi bayon etilgan. Tadqiqot natijalariga koʻra aniqlangan turlari orasida Leptosphaeria pini (Cruchet) E. Müll. Oʻzbekiston mikobiotasi uchun yangi tur ekanligi yoritib berilgan.

Kalit soʻzlar: psevdotesiylar, spora, saprofit, parazit, Leptosphaeria



Аннотация. В этой статье описывается грибы Leptosphaeria baggei (Auersw. &Niessl) Sacc., Leptosphaeria sp., Leptosphaeria pini (Cruchet) E. Müll. Leptosphaeria Ces. & De Not. Из рода Leptosphaeria Ces. & De Not.в Кашкадарьинского оазиса. В результате исследования выявлена Leptosphaeria pini как новый вид для микобиоты Узбекистана.

Ключевые слова: псевдотеций, спора, сапрофит, паразитирующих, Leptosphaeria

Abstract. The article studies species spreading of order Leptosphaeria Ces. & De Not., ecology and founding of plant species *Salix alba* L., *Tilia cordata* Mill. and *Picea pungens* Engelm. in Kashkadarya oasis. It is defined that 3 species of fungi such as *Leptosphaeria baggei* (Auersw. & Niessl) Sacc., *Leptosphaeria* sp., *Leptosphaeria pini* (Cruchet) E. Müll. belonging to the genus *Leptosphaeria* Ces. & De Not. are found. It was observed that *Leptosphaeria pini* (Cruchet) E. Mull. which among the identified species are a new species for the mycobiota of Uzbekistan.

Key words: psevdotsiyum, spore, saprophyte, parasitic, Leptosphaeria

Introduction. The genus *Leptosphaeria* is a branch of Ascomycota, class Dothideomycetes, saprophytes and facultative parasites belonging to the order Leptosphaeriaceae, which are grown on the leaves, twigs and woody parts of plants and cause various diseases.

Some species of the leptospheric family have shown new signs of disease in the leaves of sugar cane (*Saccharum oficinarum*) in western Kenya. The leaves of the plant are in the form of various spots resembling burns, which eventually enlarge and coalesce, causing burns on the leaves [2].

More than 500 species of fungi of the genus *Leptosphaeria* are found, their representatives live in different climatic conditions in all climatic zones, and some species are at a conidial stage of development [3]. Most species develop in the dried surface organs of herbaceous plants and are pathogenic to these fungal plants in the conidial stage [2]. The sacs and spores of the genus *Leptosphaeria* are often formed during the teleomorphic phase in the dried parts of plants [1].

The *Leptosphaeria* order includes a number of species whose parasitism in cultivated plants has a significant effect on the decline in plant productivity. This type of fungus causes morphological and anatomical changes in the structure of the plant as a result of the disease. Under the influence of all the changes caused by the disease, the plants grow slowly, the yield decreases, and the landscape status of ornamental plants is lost, and often the plant dies completely [2].

In Uzbekistan, the species of the genus Leptosphaeria were originally studied by N. G. Zaprometov (1926, 1928) [7], [8], Ya. S. Solieva (1989) [9], Gulyamova et al., (1990) [10], Sh. G. Kamilov (1991) [11], H. H. Nuraliev (1998) [12], Sh. Yu. Gafforov (2017) [13], Mustafaev (2018) [14], and others. However, species of the genus Leptosphaeria have not been studied in introduced ornamental trees distributed in the territory of Southern Uzbekistan.

Research methods. Scientific research was conducted in some cities of the Kashkadarya oasis, namely Karshi and Shakhrisabz. Herbarium samples from affected plants in these areas were collected and mycologically analyzed. Microscopes such as MBS-9 binocular, MBI-3, Motic B1, and B-380ALC were used [6]. Determination of



the species composition of micromycetes was carried out on the basis of a number of methodological programs, identifiers and scientific literature [3], [4], [5]. The modern nomenclature of micromycetes is given as Mycobank (http://www.mycobank.org/quicksearch.aspx), and the names of the host plants are http://www.theplantlist.org/tpl/search?q and the order of herbariums JPQ i.e. Jamila Payanovna Karshi and JPSh Jamila Payanovna Shahrisabz.

Analysis and results. In a result of study, 3 species of *Leptosphaeria baggei* (Auersw. & Niessl) Sacc., *Leptosphaeria* sp. and *Leptosphaeria pini* (Cruchet) E. Müll. the occurrence of fungal species was observed. Of these, *Leptosphaeria pini* (Cruchet) E. Müll. It has been identified as a new species for the mycobiota of Uzbekistan.

The following is a list of species in this category.

Leptosphaeria baggei (Auersw. & Niessl) Sacc., Sylloge Fungorum 2:35 (1883) [MB # 212264]. It was observed that this fungus is found in the woody part of the plant. The host plant is Salix alba L. Karshi, 28.07.2017, JPQ149.

Leptosphaeria sp. This fungus is a facultative saprophytic parasite, and it was observed that the pseudocysts that grow on the stem of the plant are spherical black. The host plant - Tilia cordata Mill. Shahrisabz city, 8.07.2017, JPSh 155.

Leptosphaeria pini (Cruchet) E. Müll., Sydowia 4 (1-6): 277 (1950) [MB # 299630]. The host plant - *Picea pungens* Engelm. This fungus is saprotrophic and is mainly found in the stems of the plant. Herbarium specimens Shahrisabz, (8.07.2017, JPSh116) (Fig. 1).

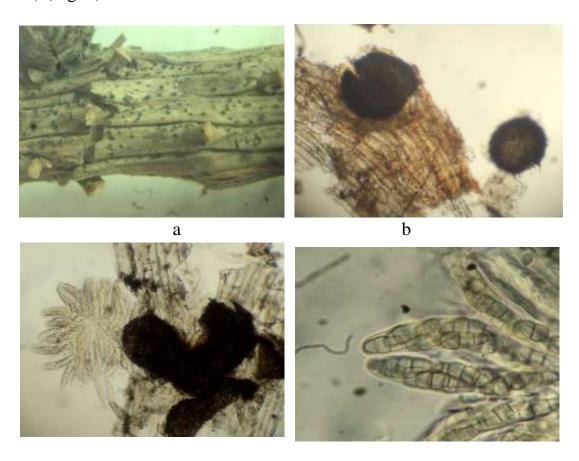


Figure 1. *Leptosphaeria pini* (Cruchet) E. Müll .: a - substrate; b - psevdotsiyum; v, g - ackspores



The pseudotheciums of the fungus *Leptosphaeria pini* spend the winter dormancy period, swelling on the stem and branch of the plant. Pseudocysts - spherical, round, black, 350-400 microns in diameter. On the inside of the pseudocysts are bags, which are thickened at the tip in a cylindrical shape. the spores in the sacs are mostly surrounded by a large number of pseudo-paraphyses. Spores are 4-8 in a bag. Spores are cylindrical, oval or elliptical in shape, yellowish in color. The spores are divided transversely by three barriers, the spores are arranged in rows 1 and 2 in the ackspores

Conclusion. Thus, the study clarified that Leptosphaeria Ces. & De Not. 3 species of fungi belonging to the genus *Leptosphaeria baggei* (Auersw. & Niessl) Sacc., *Leptosphaeria* sp., *Leptosphaeria pini* (Cruchet) E. Mull. were observed, which were found in *Salix alba* L., *Tilia cordata* Mill. and *Picea pungens* have been found to occur in plants such as Engelm. Among the identified species, Leptosphaeria pin (Cruchet) E. Mull. was observed to be a new species for the mycobiota of Uzbekistan.

References.

- [1]. Ove E., David L. Hawksworth. Saccharicola, a new genus for two Leptosphaeria species on sugar cane. Mycologia, 95(3), 2003, pp. 426–433.
- [2]. Peresypkin V.F. Agricultural phytopathology, 4th ed., Rev. and add. Moscow: Agropromizdat, 1989 .-- 480 p.
- [3]. Pidoplichko N.M. Fungi are parasites of cultivated plants. Determinant. Volume
- [4]. Perfect mushrooms, K .: "Naukova Dumka" 1977. 296 p.
- [5]. Morochkovskiy S.F., Zerova M.Ya. Mushroom business card of Ukraine. T. II., Askomitseti. Kiev, 1969 .-- 303. p.
- [6]. Zhuravlev I.I., Selivanova T.N., Cheremisinov N.A. Keys to fungal diseases of trees and shrubs. M .: Lesnaya promyshlennost, 1979. p. 5-246.
- [7]. Roskin G.I. Microscopic technique. M .: Sov. Science, 967 .-- 447 p.
- [8]. Zaprometov NG Materials on the microflora of Central Asia. Issue 10. Tashkent .: Publishing house. ANUzSSR, 1926 .-- 36 p.
- [9]. Zaprometov NG Materials on the microflora of Central Asia. Issue 11. Tashkent .: Publishing house. ANUzSSR, 1928 .-- 71p.
- [10]. Solieva Ya.S. Micromycetes of vascular plants of the Surkhandarya region .: Author's abstract. dis. Cand. biol. sciences. Tashkent, 1989 .-- 21 p.
- [11]. Gulyamova M.G., Kuchmi N.P., Sagdullaeva M.Sh., Kirgizbaeva H.M., Ramazanova S.S., Flora of mushrooms of Uzbekistan T. VII. Marsupial mushrooms. Tashkent: Fan, 1990. 192 p.
- [12]. Kamilov Sh.G. Micromycetes of vascular plants of the Botanical Garden of the Academy of Sciences of Uzbekistan named after FN Rusanova: Author's abstract. dis. Cand. biol. sciences. Tashkent, 1991 .-- 22 p.
- [13]. Nuraliev X.X. Micromycetes of vascular plants of Kashkadarya region. Abstract of thesis. dis. ... Cand. biol. sciences. Tashkent, 1998 .-- 18.p.
- [14]. Gafforov Y.S. A preliminary checklist of Ascomycetous microfungi from Southern Uzbekistan // Mycosphere. Guiyang, 2017. №8(4). P. 660-696.
- [15]. I. M. Mustafaev, N. Yu. Beshko, M. M. Iminova (2019) Checklist of Ascomycetous microfungi of the Nuratau Nature Reserve (Uzbekistan). Systematized Plants News, 53(2): 115–132.